OECD Economic Surveys

Austria

ECONOMICS

OECD

Volume 2003/16 – December

OECD ECONOMIC SURVEYS

2002-2003

Austria

OECD

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

Pursuant to Article 1 of the Convention signed in Paris on 14th December 1960, and which came into force on 30th September 1961, the Organisation for Economic Co-operation and Development (OECD) shall promote policies designed:

– to achieve the highest sustainable economic growth and employment and a rising standard of living in member countries, while maintaining financial stability, and thus to contribute to the development of the world economy;

– to contribute to sound economic expansion in member as well as non-member countries in the process of economic development; and

– to contribute to the expansion of world trade on a multilateral, non-discriminatory basis in accordance with international obligations.

The original member countries of the OECD are Austria, Belgium, Canada, Denmark, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The following countries became members subsequently through accession at the dates indicated hereafter: Japan (28th April 1964), Finland (28th January 1969), Australia (7th June 1971), New Zealand (29th May 1973), Mexico (18th May 1994), the Czech Republic (21st December 1995), Hungary (7th May 1996), Poland (22nd November 1996), Korea (12th December 1996) and the Slovak Republic (14th December 2000). The Commission of the European Communities takes part in the work of the OECD (Article 13 of the OECD Convention).

Publié également en français.

Table of contents

Assessment and recommendations 9

I. Recent macroeconomic developments and medium-term issues 21

Recent macroeconomic performance and the short-term outlook 24
Medium-term challenges 29
Improving economic performance requires fiscal consolidation 41

II. Fiscal policy: sustaining consolidation via public sector reform 43

Fiscal policy under heterogeneous priorities 43
Issues in public sector reform 50

III. Issues in fostering labour force participation and employment 61

Reducing hurdles to labour force participation 61
Reducing the costs of employment 70
Strengthening education 74

IV. Product market competition and macroeconomic performance 83

The scope for competition enhancing policies 83
Policies and other forces acting on competition *via* international trade 84
Competition law and enforcement 88
Regulatory policies 94
Overall assessment and scope for further action 108

V. Some aspects of sustainable development 119

Climate change 119
Improving the management of household waste 126
Helping developing countries to move to a sustainable development path 131

Notes 138

Bibliography 147

Boxes

1. The impact of EU enlargement on Austria 23
2. Privatisation in Austria 59

3. Pension reform 2003 63
4. Labour and product market reform – an overview of progress 78
5. Definition of market dominance in Austria 91
6. Electricity market fact sheet 99
7. Economy wide effects of sectoral reforms 110
8. Potential effects of sectoral reforms 112
9. Summary of recommendations 115
10. Policy integration across sustainable development areas 120

Tables

1. Output, employment and productivity, 1990-2002 22
2. Demand and output 25
3. Current account of the balance of payments 26
4. Trade by region 28
5. Labour market development 29
6. Net lending of the general government 44
7. Medium-term objectives for the general government 48
8. The scope of the public enterprise sector in EU countries, end-1998 58
9. Public enterprises with central-government shareholdings, 2002 59
10. Taxes and benefits for couples with children 69
11. Specialisation patterns and indicators of innovation in selected countries 86
12. Competition law enforcement: the institutional settings 89
13. Indicators of regulation and competition in the electricity market in EU countries, 2002 97
14. Key structural features of the retail distribution sector, 2000 102
15. Opening hours in retail distribution in the EU, 1999 104
16. Assumptions and effects of pro-competitive regulatory reform in selected countries 111
17. Main indicators: climate change 121
18. GHG emissions and sectoral indicators 122
19. GHG emissions by sector: trends and targeted reductions 124
20. Performance indicators: waste 128
21. Comparison of "Green Dot" fees for various packaging types in 2000 130
22. OECD imports from least-developed and low-income countries 132
23. Producer support estimates and their components: 2000 and 1987 135

Figures

1. External competitiveness and export market share 27
2. Inflation developments 30
3. Growth developments 31
4. Employment by type 33
5. Development of unemployment to vacancies ratio 33
6. Participation and employment rates for 55-64 year olds, 2002 35
7. The demographic impact on labour force participation rates, 2000-2030 35
8. Inflow into early retirement and the subsidised old-age part-time scheme 37
9. Marginal tax wedge on labour 38

10. ICT investment and R&D spending 40
11. Venture capital investment by stages, 1998-2001 41
12. Adults in formal education, 2001 42
13. Trends in general government spending 47
14. General government balances 49
15. Wage-age profiles for men, 2001 71
16. Educational performance of 15 year olds and spending on education 75
17. Industry-level mark-ups in Austria and other OECD countries 85
18. Indicators of market openess 87
19. Staff resources of competition authorities in OECD countries 93
20. Electricity prices in Austria and selected OECD countries 98
21. Five-firm market concentration in grocery and daily goods retailing in EU countries 101
22. Firm turnover and survival rates in Austria 107
23. Regulations of professions: restrictiveness indices for OECD countries 109
24. Composite basket of telephone charges, August 2002 113
25. Recycling and treatment of municipal waste 129
26. Net ODA relative to GDP and by managing institution 133

BASIC STATISTICS OF AUSTRIA, 2002

LAND

Area (1 000 km^2)	84	Major cities (1 000 inhabitants):	
Agriculture (%)	31	Vienna	1 550
Forest (%)	43	Graz	
		Linz	226
		Salzburg	143
		Innsbruk	113

PEOPLE

Population (1 000)	8 033	Labour force[1] (1 000)	4 302
Inhabitants per km^2	96	Employment[1] (1 000)	4 067
Natural increase in population, 2000 (1 000)	1	Agriculture (%)	13
Net immigration, 2000 (1 000)	17	Industry (%)	24
		Services (%)	63

PRODUCTION

GDP, current prices (billion euros)	218	Origin of value added (%)	
GDP per capita (1 000 USD in current prices)	26	Agriculture	2
Gross fixed investment per capita (1 000 euros)	6	Industry	30
		Services	67

GOVERNMENT

Public consumption (% of GDP)	19	Composition of Federal Parliament:	Seats
General government total revenue (% of GDP)	51	Socialist Party	65
Public debt (% of GDP)	67	Austrian People's Party	52
		Freedom Union	52
		Greens	14
		Last general election: December 1999	

FOREIGN TRADE

Exports of goods and services (% of GDP)	53	Imports of goods and services (% of GDP)	51
Main exports (% of total merchandise exports):		Main imports (% of total merchandise imports):	
Machinery and transport equipment	43	Machinery and transport equipment	39
Manufactured goods	35	Manufactured goods	32
Chemicals and related products	10	Chemicals and related products	11

CURRENCY

Irrevocable conversion rate (1 euro)	13.7603	Euros per USD:	
		Year 2002	1.06
		September 2003	0.89

1. Domestic concept.

Note: An international comparison of certain basic statistics is given in an Annex table.

This Survey is published on the responsibility of the Economic *and* Development Review Committee *of the* OECD, *which is charged with the examination of the economic situation of member countries.*

•

The economic situation and policies of Austria *were reviewed by the* Committee *on* 8 September 2003. *The draft report was then revised in the light of the discussions and given final approval as the agreed report by the whole* Committee *on* 3 October 2003.

•

The Secretariat's draft report was prepared for the Committee *by* Eckhard Wurzel, Friedrich Fritzer, Steen Daugaard, Richard Herd *and* Boris Cournede *under the supervision of* Andreas Wörgötter.

•

The previous Survey of Austria *was issued in* December 2001.

Assessment and recommendations

Austria has been a well-performing economy but less so in recent years.

Austria has established a reputation as a well performing economy. Among the European countries, Austria belongs to the group of five with the highest GDP per capita since the end of the 1980s. Unemployment in Austria has been consistently at the lower end within the EU and the OECD. Yet, in recent years the Austrian growth performance has weakened relative to the other high-income countries and unemployment, while still being relatively low, has increased to levels hardly known in the past. The weakening of Austria's growth performance is largely reflected in weaker employment generation whose adverse effects were not offset by higher productivity growth.

Austria needs to embrace structural reform to maintain budget consolidation and boost economic growth…

Moreover, the country is facing challenges, some of which bring to the surface the need to renovate its hitherto successful institutional framework. While social partnership and a high degree of state intervention was beneficial during a protracted post-war period of structural stability and a high degree of state trade with non-market economies, this institutional set-up subsequently came under stress in the course of the appearance of supply shocks associated with globalisation and accelerating technological change. Within a more or less unchanged institutional framework, characterised by a large government sector and legally binding collective wage bargaining, important policy responses became more defensive during the 1990s: budget consolidation was achieved by an increase in the government revenue share of GDP to record levels; attempts were made to keep unemployment low by taking older workers out of the labour force; and enterprises producing for the domestic market were sheltered by some sophisticated entry barriers, even after EU accession in 1995. While in recent years these problems have begun to be addressed, it is clear that Austria cannot continue along these lines and remain a prospering economy. Indeed, over the next years and decades the old age dependency ratio will substantially increase, with potentially adverse implications for growth and living standards. Also, while Austria has benefited from the opening of the eastern European Markets, reaping the full benefits of further integration requires that institutions and production processes are able to adjust rapidly. The priority targets for structural reform taken up in this *Survey* are to consolidate the general government budget, increase labour force participation and employment, and encourage higher productivity growth. The government is aware of these issues and has embarked on major reform efforts in order to reverse the slippage of Austrian economic performance.

Fiscal consolidation needs to be reinforced by public sector reform.

The target of balancing the general government budget was reached in 2001, one year earlier than originally scheduled. This was achieved mainly via revenue increases, without much spending restraint. In 2002 a small deficit re-emerged, totalling 0.2 per cent of GDP on account of slower growth. Other factors affecting the outturn were largely offsetting. Expenditures were driven up by extra spending on account of the 2002 summer flooding and new demands, notably a substantial increase in family benefits, rising outlays on account of subsidised part-time employment for older people, and an investment stimulus package. On the other hand, ongoing administrative reform curbed spending. This is mainly reflected in flat outlays for active personnel. Largely reflecting the impact of past decisions, the deficit is set to rise in 2003. Public sector reform, including further reform of the social security system, continues to rank high on the government's policy agenda and will be needed to move on to a sustainable path of fiscal consolidation.

Tax cuts will have to be financed by lasting expenditure cuts.

The new government, which came into office in March 2003, has widened priorities to include substantial income tax reductions that are planned to be phased in from 2004 onwards. As the tax cuts are not scheduled to be balanced soon by corresponding reductions in spending, they would entail higher deficit levels for some years, before fiscal consolidation would resume. Austria's tax-to-

GDP ratio is high by international comparison, and so are tax wedges on labour. While this reinforces the case for tax reductions, policies need to take into consideration the trade off between the beneficial effects of lower taxes on the one hand and maintaining the momentum of fiscal consolidation on the other hand. With a number of risks surrounding the evolution of the general government balance in the medium term, adverse shocks might easily push the deficit to much higher levels than foreseen in Austria's Stability Programme. Moreover, future spending pressure is looming, notably on account of the rapidly ageing population. Hence, cuts in government expenditure are necessary to create room for the planned tax reductions.

Public sector employment rules need to be made more flexible.

Reductions in personnel play a large role in the government's fiscal consolidation policies, and have been significant over the last couple of years. But a large share of the cuts has been introduced by an early retirement package under very generous conditions. This is costly and at variance with the need to raise labour force participation. Instead, public sector employment rules should be made more flexible so as to support the reallocation of staff. This entails in particular:

- Current definitions of admissible reassignments of civil servants with respect to their function and pay should be revisited to assess whether they are broad enough.
- Abolishing special tenure for civil servants and associated rigid pay schemes should be considered.
- Full harmonisation of the pension schemes for civil servants with the general public scheme is necessary to abolish a significant hurdle to mobility between the two sectors. This would be facilitated by establishing individual pension accounts that are governed by the same standards across the different schemes.

Administrative reform needs to be followed up by more fundamental reform of federal fiscal relations.

The authorities have made progress with respect to aligning the provision of certain administrative and judicial services at the regional level. To fully reap the benefits of this reform it should be followed up within the states by concentrating related tasks in the hands of one and the same regional administration so as to further promote the implementation of the one-stop-shop principle for regional services as well as administrative permissions necessary for the establishment and operation of industrial plants. This requires adjusting the allocation of funds in accordance with the redistribution of tasks. However, more fundamental reform of federal fiscal relations is necessary. The following areas deserve particular attention:

- While the intergovernmental revenue redistribution system has succeeded in achieving a high degree of income equalization across regions, it appears complex and opaque. Redistribution mechanisms were found to produce effective tax rates for marginal revenues generated at the level of the communities of close to or above 100 per cent, providing disincentives for local policies designed to enhance growth.
- Spending and financing responsibilities in several areas are mixed between the federal government and the states or between various authorities. Examples are, *inter alia*, the provision of means-tested income replacement benefits for the unemployed, the funding of teachers and the financing of waste water purification facilities and networks. This can cause significant inefficiency in resource allocation, making fiscal consolidation policies more difficult and reducing policy effectiveness in areas such as labour market or educational reform.
- Reform of the federal fiscal system should therefore strengthen the congruence between spending and revenue responsibilities. To this end, choices need to be made both in terms of what services can be better provided by the private sector rather than the government, and which level of government is best suited to deliver public sector services. Local governments could be given more scope to generate own tax revenues, and the volume of co-funding should be scaled back correspondingly to reduce the adverse incentives generated by the present system. In addition, efforts should be made to internalise spill-over effects of local services to other localities via co-operation of local governments or public institutions or by merging local utilities.

Pension reform is progressing…

Earlier pension reform has not secured the sustainability of Austria's pension system. In the OECD, Austria stands almost at the top with respect to the size of public pension outlays relative to GDP. These outlays were projected to continue increasing at an unsustainable pace, with adverse implications for social charges, employment and growth. The government has, therefore, undertaken an ambitious programme aimed at significantly slowing the trend rise in pension spending. The reform measures thus far legislated mark substantial progress in securing the sustainability of general government finances. This is notably the case for the extension of the accounting period on which pension claims are based, which increases incentives for full-time labour force participation over the life cycle, and the abolition of early retirement on account of unemployment. Some important elements are still missing, however, and the following points are important to make the reform a lasting success:

– The accumulation of pension rights should be made actuarially fair so as to allow employees to determine the length of their working life taking into consideration the trade-off between shorter life-time employment and lower pensions, while ensuring that early retirement would not raise the fiscal burden for the pension system. This would be facilitated by appropriately designed individual retirement accounts. The actual and desired redistributive elements within the pension system should be clearly identified, with desired redistribution tax financed to the extent it is not yet covered by transfers out of the federal budget.

– Efforts need to be made to ensure that efficient instruments are available to support private retirement savings as a supplement to the pay-as-you-go part. The revised system of severance pay is a considerable step in this direction. Certification of retirement savings instruments needs to proceed so as to secure a high degree of competition between eligible funds. The provision that tax-preferred pension instruments can only be invested in thin markets should be dropped.

… and needs to be supplemented by reducing other barriers to labour force participation.

Simulations by the OECD indicate that, without change in framework conditions, population ageing will substantially reduce labour force participation in Austria over the next decades. Austria's transfer system contains barriers to labour force participation, in particular for older people.

These need to be ended, while other channels into effective early retirement outside the old age pension system need to be closed for pension reform to be successful. The scheme that subsidises part-time employment for older employees has been revised so as to reduce adverse implication for labour supply. However, the government should consider abolishing the scheme entirely. Further important issues are:

– Preferential conditions for older people to receive unemployment benefits should be phased out.
– Abolishing incentives for early retirement requires that eligibility conditions for invalidity pensions are strictly conditional on health reasons and are tightly controlled.
– The early empirical evidence on the new system of child benefits (*Kinderbetreuungsgeld*) suggests that on balance it might diminish female labour supply and the tax and benefit system overall can produce sizeable effective tax rates for secondary earnings. The structure of family support policies should therefore be revisited so as to reduce unwanted reductions in female labour supply. One way to improve the compatibility of work and family obligations would be to devote a larger share of total family benefits to child-care facilities so as to increase the numbers and ease of access, thereby cutting the time spent in transporting children to and from the premises. Extending the supply of full-day schooling could also help.

… while incentives to hire and accept employment need to be strengthened.

Real wage flexibility at the macro level has been found to be high in Austria, and this has helped the economy to avoid large fluctuations in unemployment. However, supporting the adaptability of the economy to supply shocks and the employability of certain groups of employees, such as older people, suggest that the flexibility of relative wages needs to be improved and remaining distortive features of dismissal protection for older employees revisited.

– Wages rise significantly with age for both salaried employees and civil servants. To support the firms' labour demand for older workers, policies should aim at abolishing the factors that hold seniority wages artificially high, *i.e.* out of line with productivity. Several recent policy initiatives, such as the extension of the wage base for pension claims, already go some way in providing incentives for changes in this direction. But further reform is necessary, such as revisiting remuneration schemes in the public sector. Moreover, the social partners should make further efforts to rebalance wage schedules in favour of higher employment for older people.

– The distribution of relative wages across sectors and firms appears to have rigid elements. To foster adjustment of wages in accordance with differential developments in employment conditions and productivity, the present "Distribution Options" at the firm level should be developed into opening clauses that allow deviations from collectively bargained outcomes if a plant level agreement comes about between the management and the labour force.

– Currently, age is one of the social considerations which employers need to take into account in their dismissal decisions. This provision has contributed to the high utilisation of effective early retirement programmes and the low employment rates of older employees. While the waiting period for application of the special dismissal protection was recently extended, a more stringent revision of age-related employment protection should be considered so as to improve the incentives to keep productivity and remuneration of older workers in line with each other and thereby increase firms' incentives to employ older people.

… and the efficiency of the education system needs to be improved

To ensure skills consistent with high levels and growth of productivity improving the efficiency of schooling and encouraging life-long learning is of particular importance. In the Austrian context, the potentially beneficial role of life-long learning is reinforced by the prospect of a rapidly ageing society and the desire to increase employment opportunities for both women and older persons.

– According to the OECD's PISA study, student performance in Austria ranks in the upper middle range of OECD countries, though schools vary considerably in the quality of educational outcomes. The fact that Austria has the highest accumulated expenditure on primary and secondary schooling per student relative to GDP per capita indicates that there is considerable scope for efficiency improvements. In particular, although some progress is being made in developing quality standards for educational attainment in some areas, mandatory country-wide educational targets against which the performance of schools can be assessed on a regular basis have not been established. A commission was recently set up for the purpose of making suggestions on how to shift the system from input orientation toward focusing on learning outcomes. Reform along these lines should be implemented.

– As is apparent from the recent introduction of the general tax allowance for training, improving the skills of the workforce ranks high on the government's agenda. The system of adult learning can be improved on several scores. Programme evaluation needs to become more common. It should become a regular tool on which the policy makers' decisions on the use of resources for the various target groups and the design of programmes can be based. Using vouchers more widely would help in this respect by strengthening the scope for a market mechanism. Different paths of training and education should be better integrated. In particular, better links should be established that provide an option for the unemployed to develop further the skills obtained in labour market programmes by participating in education programmes. While responsibility for funding and designing adult learning is dispersed across several authorities, there is often little co-ordination between them. More co-ordinated programme design is likely to raise the effectiveness of adult training and generate savings in the general government budget.

Lowering legal barriers to product market competition would foster productivity growth and increase consumer welfare.

The OECD growth study has provided evidence that competition-enhancing policies can foster the growth of productivity and employment. While some reforms of competition-related policies have been implemented in recent years, legal restrictions continue to impair competition in many product markets. Moreover, unduly restrictive regulations are particularly widespread in the services sector. This is manifest in comparatively weak productivity growth in this sector over the past decade, while manufacturing performed well by international comparison. In-depth analysis suggests that comprehensive reforms of the domestically oriented industries and of public procurement policies could substantially boost consumer welfare.

General competition legislation was improved, but further reform is necessary.

Last year's reform of competition law took important steps towards aligning the Austrian framework with the mainstream. In particular, the reduction of the social partners' direct influence and the creation of an independent competition authority were commendable, albeit overdue. Yet the institutional set-up now in place and procedures for enforcement are overly complex. These shortcomings should be remedied. Most importantly, the currently inadequate capacity of the competition authority should be considerably increased. A leniency programme should be introduced and the introduction of criminal sanctions for hard-core cartels considered.

Regulatory reform is required in the services sector…

Weak performance is widespread in the services sector, owing in large part to regulations that thwart competition.

– Productivity in retail distribution in general is lower than in many comparable countries. This reflects the fact that regulations of large stores and opening hours are stricter than elsewhere. For example, up to now average shop opening hours were the shortest in the European Union. Besides limiting consumer choice, these regulations prevent taking advantage of economies of scale. The federal government has widened the legal scope for extended shop opening hours. The *Länder* should make full use of this option; and broader liberalisation of the retail sector should be considered.

– Trades and professions are subject to a complex set of regulations, comprising both statutory provisions and significant elements of self-regulation. There is evidence that this contributes to higher prices and the observed low firm turnover rates might also be related to restrictive regulations. There is considerable scope for discontinuing some existing provisions or reforming them so as to minimize their distorting effects on competition. For example, for those activities where certification is warranted in order to safeguard certain levels of quality, it should pertain to employees rather than owners. In professional services, recommended fee schedules, issued by the relevant associations, effectively prevent price competition and should be prohibited.

… and in the electricity sector.

While Austria has been early to liberalize electricity demand, it is imperative that the structure of the industry becomes more competitive. At present, production and distribution remain characterized by extensive vertical integration and government ownership. The latter follows directly from legal regulations of ownership and restrictions of voting rights. The government is actively encouraging further consolidation, while the competition authorities did not publicly advocate competitive solutions in the recent prominent merger case. Further domestic consolidation is considered necessary by the authorities for safeguarding the international competitiveness of Austrian producers after the imminent opening of the European electricity market. This is a misguided aim if it leads to higher prices for consumers, and it would impair the competitiveness of Austrian producers in other industries. Moreover, the consolidation might permanently prevent Austrian consumers from gaining the benefits of the larger European market.

Targets regarding sustainable development are ambitious, but more integrated use of economic instruments could yield considerable cost savings.

Sustainability issues rank high on the government agenda in Austria and the population is ready to accept the costs associated with ambitious targets. The Austrian government has embarked on a far-reaching programme to reduce greenhouse gas emissions. Under the EU burden sharing agreement it accepted a cut in emissions of twice that of the rest of the EU. With emissions still above their 1990 level, a reduction of 20 per cent is now needed to achieve compliance. Realising such a cut in emissions is likely to be costly. While the target itself could be justified in light of the high public support for environmental issues, cost effectiveness can be improved by using more economic instruments, notably by widening the coverage of emitters subject to a tax of some sort. However, domestic abatement should only be promoted up to the point where marginal costs are equal to the price of emission permits in the EU market once it is operational, which would entail scaling back programmes where such costs are clearly excessive. If mishandled, the disposal of waste can cause long-lasting damage to ecosystems and to human health. Due to stringent governmental regulations and incentives, hierarchical waste management policies achieve very high recycling rates, in most cases mandated by EU legislation, but are associated with high costs for consumers and producers. These are in part induced by taxes aimed at minimising waste generation. Some parts of the programme may absorb more resources than are saved by recycling. More systematic use of the results of cost-benefit analysis in policy formulation would help to improve the cost-effectiveness of policies aiming at improving the sustainability of economic development.

Development aid is required to follow too many goals with too little money.

The volume of the Austrian aid programme increased markedly in 2001 and is now very close to the OECD median effort. Also, the government aims at raising assistance further to the level of the Barcelona target of the EU (0.33 per cent of GDP). Until recently, a considerable part of it was oriented towards other European countries. This was a strategic objective for Austria but meant that less than one-quarter of aid went to least-developed countries. However, new legislation, effective from January 2004 onwards, provides for the creation of an Austrian Development Agency designed to enhance the efficiency of aid delivered. The lessons learned from assessing previous projects have encouraged a shift in priorities for aid to South East Europe away from physical infrastructure towards social services, mainly education and health, which now represent about half of Austria's bilateral ODA. At the same time, an effort is being made to improve the capacity for foreign trade of developing countries. Such initiatives represent a modest share of Austrian aid but the authorities intend to expand them. To achieve maximum impact, these measures require multilateral action to further open trade for products from these countries including for agriculture.

To sum up.

To raise Austria's growth potential, significant changes in the institutional set-up will be necessary in order to achieve sound public finances, higher labour force participation – in particular among older workers – and to open up the sheltered sectors of the economy to healthy competition. Although the government's emphasis on structural spending reductions to achieve eventual budget balance while also creating room for tax cuts is appropriate, earlier fiscal easing means that under current plans budget balance will be restored only after 2007. Such a deficit path is not appropriate given Austria's high debt-to-GDP ratio. Stronger spending restraint will be necessary in order to create room for the major tax reform that the authorities are committed to. Public expenditure reform is focused on reducing public sector employment, but the cost savings are eroded by the generous early retirement programmes used to achieve these employment reductions. Comprehensive public sector reform has to address the complicated federal fiscal relationships and make sure that tasks are allocated to the most appropriate private or public agent. More cost-benefit analysis and output performance budgeting would help to improve the efficiency with which public resources are used. The pension reform undertaken by the government marks considerable progress in moving to sustainable old-age income replacement through measures designed to increase further the labour force participation rate of older workers and women and lengthen working lives considerably. Further necessary action includes measures to improve the employability of older workers, in particular the elimination of excessive seniority wage components, and a more stringent revision of the remaining age-specific employment protection regulation. The large differences in economic performance between manufacturing, which is fully exposed to international competition, and services points to considerable scope for increasing competition by reducing entry barriers and facilitating the operations of the newly established competition authority. Proceeding along these lines will help Austria to realise the positive potential associated with Eastern enlargement of the EU while at the same time becoming more resilient to adverse supply side shocks.

I. Recent macroeconomic developments and medium-term issues

Austria has established a reputation as a well performing economy within the OECD. Living standards, as measured by GDP per capita, are in the upper quintile amongst European countries. In the same vein, unemployment has been consistently at the lower end within both the EU and the OECD.[1] Also, the rate of growth over the past decade or so has been above the EU average (Table 1). But since the middle of the 1990s, Austrian growth performance has weakened relative to that of fast growing smaller European countries and the economy has not proved resilient to the current global slowdown. Unemployment – while still relatively low – has increased to levels hardly known in the past. Moreover, new challenges arise. Within the next two decades Austria's old age dependency ratio will increase steeply, burdening the social system and potentially reducing future economic growth. Equally important, rapid technological change and the accession to the EU of Austria's eastern European neighbours will further raise international competition on both product and labour markets (Box 1). Maintaining strong economic performance in the face of these structural changes requires giving market forces more scope to operate than has been the case in the past.

This chapter starts with an overview of the current macroeconomic situation and the Secretariat's assessment of the short-term outlook. It then highlights a number of areas where structural reform is needed so as to cope with the longer-term challenges the Austrian economy is facing. For high economic performance to continue it is necessary to reduce barriers to labour force participation. This is a major issue addressed in this survey, involving removing incentives for early retirement and revisiting the incentives implied by family support policies. In the same vein, in some fields regulation can be improved so as to reduce the cost of labour and support higher labour demand. Austria's growth performance would be supported by stepping up productivity. Various factors come into play that are important in this respect, such as raising the efficiency of the education system and fostering life-long learning. Further strengthening of product market competition will be helpful, and possibly necessary, for maintaining high productivity growth. A major part of this *Survey* is devoted to this issue. Moreover, improving economic performance and coping with the fiscal pressure arising from rapid

Table 1. **Output, employment and productivity, 1990-2002**

	Austria	Denmark	EU	France	Germany	Netherlands	Sweden	United Kingdom	United States
Decomposition of growth[1, 2]									
Average GDP growth	2.3	2.1	2.0	1.9	1.4	2.7	1.8	2.1	2.8
of which:									
Productivity	1.9	1.8	1.4	1.2	1.3	0.7	2.2	1.9	1.6
Employment	0.4	0.3	0.6	0.7	0.1	2.0	–0.4	0.3	1.2
of which:									
Unemployment	–0.2	0.2	–0.1	0.0	–0.3	0.3	–0.2	0.0	–0.1
Work force	0.6	0.1	0.7	0.8	0.4	1.7	–0.2	0.2	1.3
Labour productivity growth in selected industries									
Manufacturing	4.2	2.2	–	3.5	2.8	3.0	4.7	2.4	3.8
Electricity, gas and water	2.9	2.8	–	3.9	5.2	2.9	1.2	8.5	2.5
Construction	2.3	–0.3	–	–0.4	0.1	0.4	1.7	2.5	0.1
Distribution, hotels and restaurants	1.1	2.0	–	0.7	–0.6	2.7	–	1.4	3.2
Transport and communication	2.1	4.1	–	3.0	7.7	6.1	–	4.3	2.8

1. 1989/90 to 2001/2002 (or 1999/2000) except for Germany and EU which begin 1991/1992. Where 2002 data is not yet available, previous year's data is used. EU growth is a weighted average of country member growth using weights as in the OECD *Economic Outlook*.
2. Growth in real GDP (gdpv) is decomposed into growth in labour productivity and growth in employment (et) using the identity $gdpv = [gdpv/et][et]$ in logarithmic differences. Growth in employment is decomposed into growth in unemployment (un) and growth in labour force (lf) using the identity $et = lf - un$. Computing the growth rates requires *et* and *un* to be weighted by their shares in *lf*. A positive sign indicates that unemployment has declined and contributed to boost output growth (minus the growth rate is included in the table).

Source: OECD, Eurostat.

Box 1. The impact of EU enlargement on Austria

EU eastern enlargement is important for Austria in many respects. Austria has the largest number of neighbouring accession countries with a sizeable population living within commuting distance from its highly populated and industrial agglomerations. Accession countries are catching up and provide a rapidly growing market for Austrian goods and services. Also Austrian companies have become important investors in the region. At the same time enlargement will increase the openness of the Austrian economy and expose domestic suppliers to more competition.

Eastern enlargement of the EU can be seen as the final step to reverse Europe's artificial separation during the rule of communist regimes. Austria was affected very negatively by closed borders while trade integration with the successor states of the former Austro-Hungarian Empire declined dramatically. Since the removal of the "Iron Curtain" Austria has benefited in turn in many ways from the transition to market economy and democracy in its neighbouring countries. While at the beginning of the process demand effects and accumulated trade surpluses dominated, accession will generate better supply conditions and allow for cost-saving restructuring of resources in the region. The joint legal framework and the implementation of a single market will facilitate specialisation and division of labour in the region.

Recent estimates have confirmed this positive assessment. Breuss (2001)[1] distinguishes between trade and Single Market effects, factor mobility effects and the budgetary costs of accession. The trade effect comes from the elimination of the remaining trade barriers between accession countries and the EU. The Single Market effect allows productivity gains through a better utilisation of existing capacities. Eliminating barriers to factor mobility makes it possible to optimise location decisions and reduce labour market bottlenecks. Finally, the author takes into account the budgetary costs of enlargement, which are assumed to be financed out of lower expenditures for the common agricultural policy and structural funds.

According to the finding of this study Austria does not have to fear much from cuts of EU spending on common policies, but might experience a boost of nearly 1 percentage point of GDP in the long term through the other channels – about double the impact on EU GDP on average. The larger part of this positive effect is due to Single Market effects and immigration, while the impact of higher external demand will diminish over time to not much more than a tenth of a percentage point of GDP.

These estimates appear relatively robust and are confirmed by other studies.[2] The potential for a positive impact of EU enlargement is also evident from recent economic developments. Austria is able to make full use of the more accessible eastern export markets. The disadvantaged regions along Austria's long borders with former communist countries are progressively catching up and Burgenland – Austria's only region eligible for EU structural funds – is likely to lose this status because its GDP per capita has risen above the respective threshold.

Box 1. **The impact of EU enlargement on Austria** (*cont.*)

Nevertheless, public debate in Austria is also shaped by concerns about excessive immigration lowering wages and intensified price competition from lower-cost suppliers, which might drive local suppliers into bankruptcy. Other concerns refer to fears of an excessive increase of transit traffic and an excess demand for social services, which might lead to a deterioration in the quality and quantity of health and education expenditures for the incumbent population. Appropriate policy measures are necessary to address these concerns so that Austria can reap the full benefits of enlargement.

1. Breuss, Fritz (2001), Makroökonomische Auswirkungen der EU-Erweiterung auf alte und neue Mitglieder, Wifo-Monatsberichte 11/2001.
2. Kohler, Wilhelm and Christian Keuschnigg (2001), An Incumbent Country View on Eastern Enlargement of the EU. Part II: The Austrian Case, Empirica 28, 159-185, 2001, also find an estimated impact of Eastern Enlargement on Austrian GDP of 1 percentage point using a computable general equilibrium model with a sectoral disaggregation. Bank Austria Creditanstalt (*http://wko.at/eu/eu/erw/oesterreich/auswirkungen.htm*) estimates an average annual income gain for Austria of about euro 100 and more than 1 per cent of additional employment.

population ageing requires reinforcing fiscal consolidation, linked to public sector reform. There appears to be considerable scope to further enhance the efficiency of the public sector, various aspects of which are considered in the fiscal part of the *Survey*. Finally, the *Survey* is dealing with further selected sustainability issues, namely climate change waste management and development aid to other countries.

Recent macroeconomic performance and the short-term outlook

Real GDP growth increased to 1.4 per cent for 2002 as a whole but the recovery was interrupted in the course of the year, as in other European countries, and growth declined to 0.6 per cent year-on-year in the first six months of 2003. Slowing activity in Germany, Austria's main trading partner, and a high degree of uncertainty surrounding the situation in the Middle East both weakened business confidence and weighed on activity. The growth contribution of total domestic demand remained negative in 2002, on account of a further marked fall-off in investment (Table 2) and decelerating private consumption. While consumption spending remained moderate in the first two quarters of 2003, as relatively high levels of unemployment continued to affect consumer confidence, fixed investment in the second quarter recorded its first year on year growth since the beginning of 2001, boosted by tax expenditures for accelerated investment in machinery and equipment as well as reconstruction work in the wake of the floods in autumn 2002.

Table 2. **Demand and output**

Percentage change from previous year, 1995 prices[1]

	1999	2000	2001	2002	2003[2]	2004[2]	2005[2]
Private consumption	2.4	3.3	1.4	0.8	1.3	1.6	2.1
Government consumption	3.0	–0.1	–1.4	0.1	–0.4	–0.3	–0.2
Gross fixed investment	2.1	6.2	–2.3	–2.8	2.8	3.6	5.1
Construction	0.3	1.9	–2.5	–0.7	2.0	3.4	4.4
Changes in stocks	0.6	–0.7	–0.1	–0.1	0.0	–0.1	0.0
Total domestic demand	3.1	2.7	–0.1	–0.3	1.3	1.6	2.4
Foreign balance	–0.2	0.8	0.9	1.4	–0.5	0.0	0.1
Exports of goods and services	8.5	13.4	7.5	3.7	–0.2	4.0	6.8
Imports of goods and services	9.0	11.6	5.9	1.2	0.8	4.2	7.0
Gross domestic product	2.7	3.4	0.8	1.4	0.8	1.6	2.4
Memorandum items:							
Private consumption deflator	0.8	1.4	2.2	1.1	1.3	0.8	1.3
GDP deflator	0.7	1.4	2.1	1.4	1.8	0.7	1.4
Total employment[3, 4]	1.4	0.8	0.6	–0.2	0.0	0.3	0.8
Unemployment[3]	5.3	4.7	4.8	5.5	5.6	5.5	5.2
Household saving ratio	8.5	8.3	7.4	7.6	7.7	7.7	8.5
Short-term interest rate	3.0	4.4	4.2	3.4	2.3	1.8	2.2
Long-term interest rate	4.7	5.6	5.1	5.0	4.1	4.3	4.7
General government budget balance, % GDP	–2.4	–1.6	0.1	–0.4	–1.2	–1.1	–1.8
Current account balance, % GDP	–3.2	–2.6	–1.9	0.5	0.0	–0.2	–0.2

1. Growth for all variables except change in stocks and foreign balance which are contributions to change in GDP (calculated as % of real GDP in previous period) and memorandum items beginning with unemployment rate.
2. Preliminary OECD projections.
3. Employment and unemployment are according to national accounts concepts.
4. Including self-employment.

Source: OECD.

Although export growth slowed substantially in 2002, net exports stabilised economic growth. Indeed, the trade balance swung to a substantial surplus for the first time for decades (Table 3). To some extent this reflects the secular improvement in the country's international competitiveness that coincided with a gain in export market share (Figure 1). Eastern European countries accounted for some 60 per cent of the trade surplus, reflecting their evolution as major trading partners for Austria (Table 4). Mirroring this development, about 60 per cent of Austria's foreign direct investment abroad is directed toward eastern Europe, with a substantial part of it stemming from Austrian banks. Nevertheless, a large part of the high growth contribution of net exports is attributable to the fact that imports grew little in 2002, decelerating strongly from their peak in 2000. This, in turn, reflects the marked weakness in domestic demand. Exports have weakened further in 2003 owing to the appreciation of the Euro, deteriorated business expectations in the European Union and the prolonged slack in world trade.

Table 3. **Current account of the balance of payments**
€ billion

	2000	2001	2002
Goods and services, net	–1.2	0.6	4.8
Goods, net	–3.0	–1.4	3.7
Exports	70.2	74.7	78.0
Imports	73.2	76.1	74.3
Services, net	1.7	2.0	1.1
Exports	34.0	37.2	37.5
Imports	32.3	35.2	36.4
Investment income, net	–3.2	–4.0	–2.7
Transfers, net	–1.4	–1.4	–1.7
Government, net	–1.1	–1.2	–0.9
Others transfers, net	–0.3	–0.2	–0.9
Current account	–5.4	–4.1	0.9

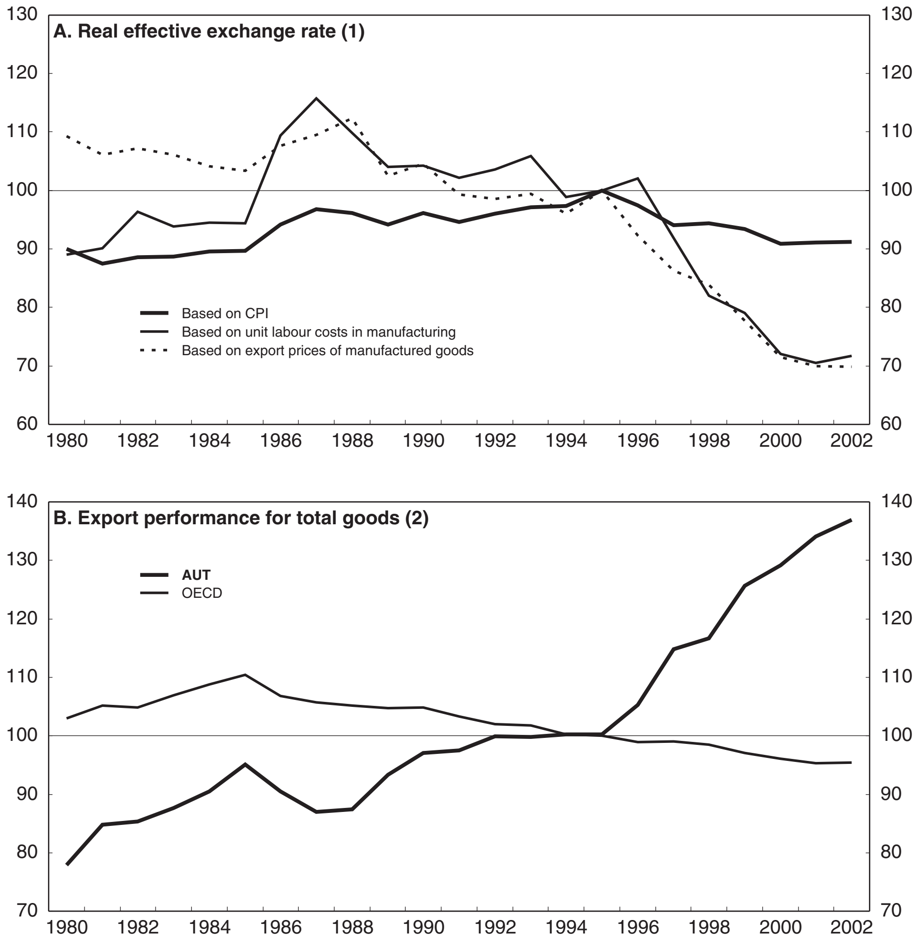
Source: OeNB (Oesterreichchische Nationalbank), Statistics Austria.

With activity slowing in the course of 2002, dependent civilian employment – (netting out persons on maternity leave) declined from the second half of 2001 onwards and in 2002. Slight employment growth has re-emerged in 2003. Labour shedding was significant in manufacturing and construction, while employment in the service sector continued to grow. In the process, the registered unemployment rate increased to 6.9 per cent in 2002, 1.1 percentage points higher than two years earlier. The unemployment rate continued to edge up in 2003, albeit at a much slower pace. While inflows of immigrant workers and tightened eligibility conditions for early retirement added to labour supply, this was roughly balanced by an accelerating supply of training courses for the unemployed and a strong increase of persons on maternity leave. Unemployment rose faster among young people aged below 25, despite an acceleration in job promotion schemes for the youth funded by the federal labour office (*Arbeitsmarktservice*). Youth unemployment remains very low by international standards, however. Already in 2001 a gap had opened between apprenticeships being sought by young people and offered by firms. The government responded to this development by stepping up financial aid to promote the creation of apprenticeship places. However, this programme could not prevent excess demand for apprenticeships from increasing further (Table 5).

Weakening activity has been reflected in sluggish credit demand. Lending to private households has grown at a subdued rate, while lending to non-financial enterprises has been contracting since the end of 2001 and into 2003. Banks are tightening their assessment of credit risks in anticipation of more stringent crediting standards (Basle II accord), and this has contributed to the reduction of bank lending to enterprises. Inflation has eased significantly, with the Harmonised

Figure 1. **External competitiveness and export market share**

1995 = 100



1. Calculated using competitiveness weights which take into account the structure of trade competition. A decrease in the index indicates an improvement of the competitive position.
2. Export performance of country X is export volumes of X divided by potential export volumes of X, *i.e.* divided by a weighted sum of imports of the countries to whom X exports. Estimates for 2000 to 2002.

Source: OECD Economic Outlook Database and Sources and Methods.

Table 4. **Trade by region**

	1991	1995	2001	2002	2001-02
	Share in per cent				Export growth
Exports to:					
Europe	87	87	85	85	10
EU	68	66	61	60	9
Germany	39	38	33	32	8
France	4	4	5	4	5
United Kingdom	4	3	5	5	10
Switzerland	6	5	5	5	11
Eastern Europe[1]	7	13	15	15	11
NAFTA	4	4	6	6	6
Japan	2	1	1	1	6
Far east	3	3	3	4	25
Total	100	100	100	100	10
	Share in per cent				Import growth
Imports from:					
Europe	82	86	83	84	4
EU	70	72	65	66	4
Germany	43	44	41	40	2
France	4	5	4	4	–2
United Kingdom	3	3	3	3	3
Switzerland	4	4	3	3	5
Eastern Europe[1]	5	9	12	13	6
NAFTA	5	5	6	5	–8
Japan	5	2	2	2	–1
Far east	4	4	5	5	–9
Total	100	100	100	100	3

1. Bulgaria, Estonia, Latvia, Lithuania, Romania, Russia, Slovakia, Slovenia, Ukraine, Czech Republic, Hungary and Poland.

Source: OECD, *International Trade Statistics.*

Consumer Price Index (HICP) declining from its peak of 2.9 per cent in May 2001 to 0.9 per cent in August 2003. Falling prices for raw materials, fuel and imports as well as weak demand are the main elements in this decline. Headline disinflation was reinforced by both the appreciation of the euro and falling unit labour costs in the first half of 2003. Core inflation – net of prices for energy and unprocessed food – is tracing the decline in headline inflation with some delay (Figure 2).

The OECD projects that economic activity will gain momentum in 2004, as growth will pick up in the EU and world trade will strengthen. Income tax reductions in 2005 will boost domestic demand. On the back of the moderately paced recovery, the unemployment rate will fall in 2005, by about 0.3 percentage points. Inflation will remain low, edging up in 2005, reflecting accelerating domestic demand (Table 2).

Table 5. **Labour market development**

	2000	2001	2002
	Annual growth, per cent		
Labour force[1]	0.2	0.7	1.2
Dependent employed	0.8	0.5	0.2
Natives	0.4	0.2	0.1
Foreigners	4.4	3.0	1.6
Parental leave/military service[2]	–4.3	1.2	26.9
Self employed	2.0	0.9	2.2
Memorandum items:			
Small jobs	3.9	4.3	3.3
Males	4.3	4.5	4.9
Females	3.8	4.2	2.6
Freelancers	15.5	6.1	3.9
People in PES training courses	7.4	10.6	12.1
Apprenticeship market			
Job seekers	–0.6	11.2	12.8
Job offers	18.7	11.0	–5.9
	Per cent		
Standardised unemployment rate[3]	3.7	3.6	4.3
Registered unemployment rate	5.8	6.1	6.9
Males	5.8	6.2	7.2
Females	5.9	5.9	6.4
Natives	5.7	5.8	6.5
Foreigners	7.5	8.5	9.8
Aged 25-54	5.6	5.8	6.5
Aged above 55	10.8	10.5	11.3

1. Dependent employees plus registered unemployed plus self employed.
2. Persons on parental leave, military service or alternative military service.
3. According to European Union concept.

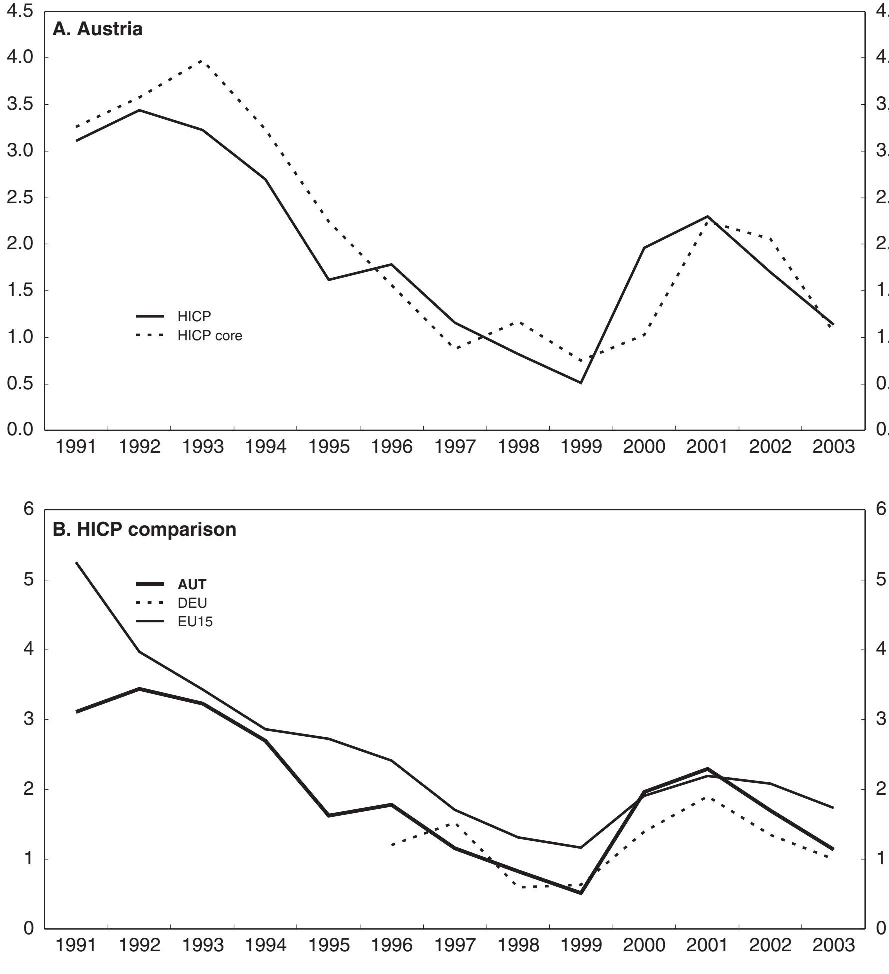
Source: *Arbeitsmarktservice* (Public Employment Service, PES), Eurostat.

Medium-term challenges

Relative growth has slowed since the middle of the 1990s

Over the 1980s Austrian average per capita growth of real GDP roughly equalled that of the smaller European Union countries with the highest per capita income, averaging some 2 per cent per year (Figure 3, Panel A). While a positive growth differential in favour of Austria opened up at the end of the decade and into the 1990s, since the middle of the 1990s Austrian growth per capita has on average been somewhat below that of the other high-income countries (Figure 3, Panel A). To some extent the impetus to activity at the beginning of the last decade was driven by the German reunification boom, which temporarily boosted

Figure 2. **Inflation developments**[1]
Per cent

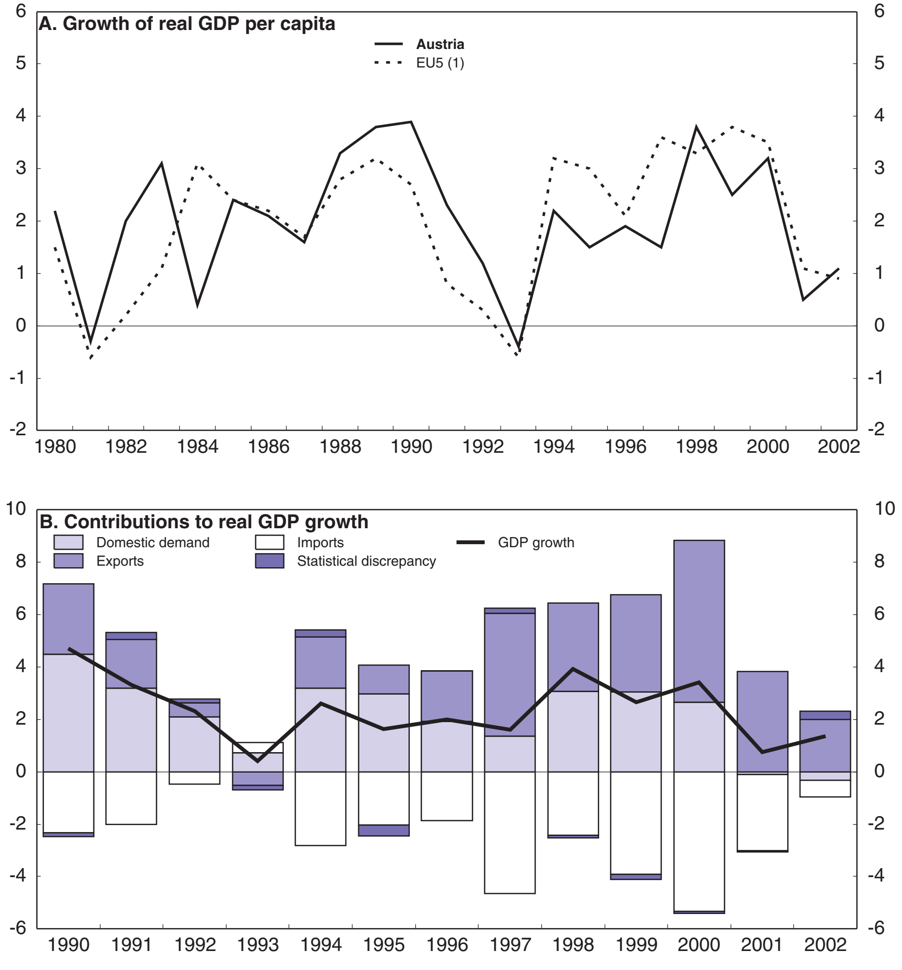


1. Data for 2003 is for January to June. HICP is the Eurostat harmonised index of consumer prices. HICP core is all items except food, alcohol, beverages, tobacco and energy. EU15 includes al member countries except Ireland and Luxembourg from 1993 on. Before 1993 EU15 includes a minimum 66% of the country weight. Germany is included in the total throughout.

Source: Eurostat; OECD, *Main Economic Indicators*.

Austrian exports to its main trading partner.[2] Thereafter, fading exports to Germany were largely compensated by accelerating Austrian exports to other countries, notably outside the European Union, and this has continued to stabilise

Figure 3. **Growth developments**
Per cent



1. DNK, BEL, NLD, SWE, IRL selected from the EU (excluding AUT, LUX, DEU, FRA) on the basis of the highest average GDP per capita level in 1995 prices and PPP, 1991-2002. The EU5 growth rates are weighted averages of country growth rates, weights as in the *OECD Economic Outlook.*

Source: OECD, Economic Outlook Database and Annual National Accounts.

Austrian economic activity in the present phase of the business cycle, as highlighted above. The opening of the Eastern European economies, followed by high growth in the area, has been particularly important for Austrian exports, supported by the improvements in Austria's international competitiveness. The share of exports directed to non-EU countries increased from 32 per cent in 1991 to 40 per cent in 2002, with the share directed to eastern European countries doubling from 7 to 15 per cent. In the second half of the 1990s exports – as opposed to domestic demand – became the main contributor to Austrian GDP growth (Figure 3, Panel B). Indeed, the weakening of Austria's relative growth performance *vis-à-vis* other smaller EU countries since the second half of the 1990s is driven more by weaker domestic demand rather than by subdued exports. Reduced resilience of domestic demand increases the vulnerability of the economy to external shocks such as the recent appreciation of the euro, and reinforces the need for structural reform so as to raise growth potential.

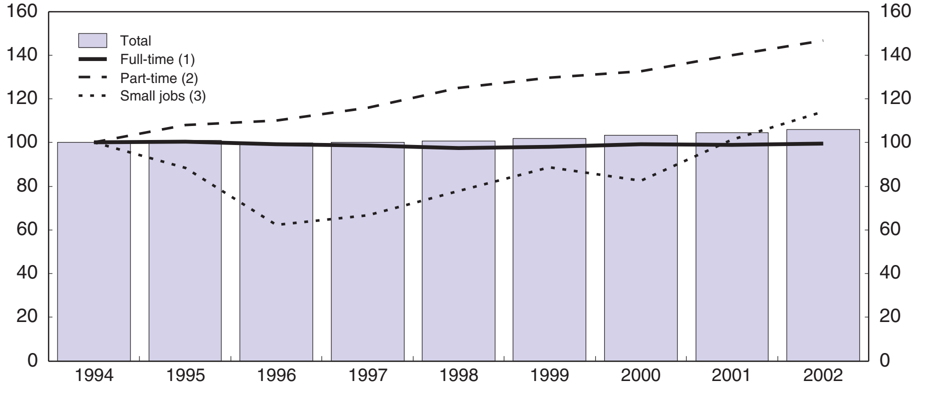
A decomposition of real per capita growth into the growth contributions of labour – in terms of total hours worked per inhabitant – and labour productivity – in terms of real GDP per hours worked – indicates that the weaker growth performance in the second half of the 1990s relative to other high-income countries is accounted for by more subdued employment growth. Since 1995, total hours worked per inhabitant did not contribute to real GDP growth per capita, while it contributed 0.7 per cent to growth in the high-income EU counties and 0.2 per cent in the United States, respectively.[3] At the same time labour productivity on an hourly basis grew faster than in some EU countries, but not fast enough to compensate for the adverse impact on growth of the weaker labour input.

Employment generation is below its potential

Over the last several years Austria experienced a significant increase in the share of part-time employment, as did other OECD countries, although the share is still below the OECD average. To a large degree, this reflects a secular increase in female labour force participation and the growing share of the service sector in total value added, which accounts for the largest part of part-time jobs. In particular, small jobs with only very few hours worked per week – being subject to a more favourable tax regime – have been growing at an increasing rate.[4] Consequently, average hours worked per employee have dropped. However, full-time employment has hardly maintained the level that prevailed in the middle of the 1990s (Figure 4). Moreover, the ratio of job vacancies to unemployment (Beveridge curve) has risen since the 1980s, although more recently some bounce back appears to have occurred (Figure 5). Compared with the beginning of the 1980s, this indicates a secular increase in the mismatch between job slots and labour supply in a period with increasing market pressure for structural change. A number of adverse factors are likely to have contributed to these developments, notably barriers to labour force participation, disincentives for labour demand and low competition in some areas of the economy.

Figure 4. **Employment by type**

1994 = 100

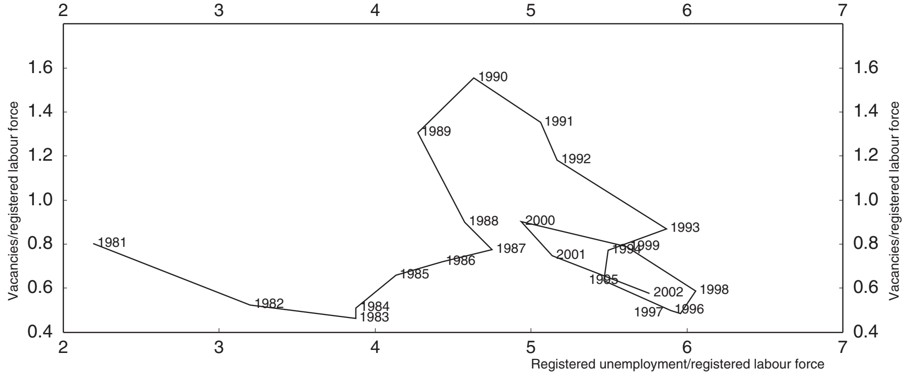


1. Full-time is 37 to 40 hours inclusive per week.
2. Part-time is 12 to 36 hours inclusive per week.
3. Small jobs, comprising only primary jobs, are less than 12 hours per week.

Source: Statistics Austria, Microcensus; OECD.

Figure 5. **Development of unemployment to vacancies ratio**[1]

%



1. Registered labour force is civilian employment plus registered unemployment.

Note: Series breaks in labour force data (due to employment component) at 1981/82, 1983/84, 1993/94.

Source: OECD, *Labour Force Statistics* and *Main Economic Indicators.*

... with labour force participation of the older people being very low

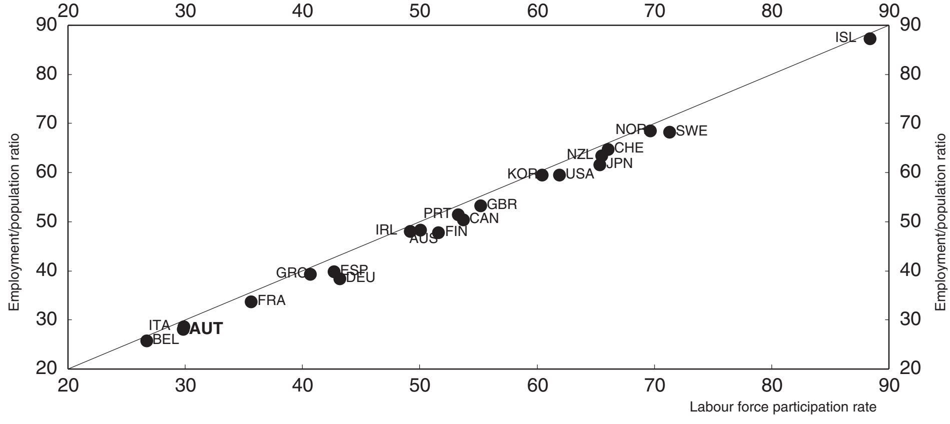
Discouraging labour force participation of older people has been a deliberate choice by policy makers over many years for the purpose of reducing unemployment, as was also the case in some other European countries. The main approach was to ease various channels into effective early retirement. At the same time, Austria is subject to strong demographic pressures that interact with the disincentives for labour force participation. Between 1990 and 2000 the rising share of older people in the total population already affected aggregate labour force participation more negatively than in almost all other countries in the OECD.[5] Overall, Austrian employment rates of older people are very low by international comparison. Only 27½ per cent of the population aged between 55 and 64 years are employed, placing Austria at the lower end within the OECD, whose employment ratio for older people averages some 53 per cent, with some countries significantly exceeding the average. The low employment rate for older people is mirrored in an equally low labour force participation rate for the same age group, which stands at 29 per cent as opposed to 55 per cent at the OECD average.

With fiscal pressure in the Austrian pension system mounting, the early retirement approach was partially revised, and measures were taken to curb entry into early retirement in the old age pension system. But there is still a perception in the society that economic growth is not high enough to prevent higher labour supply from translating into higher unemployment. However, while discouraging labour force participation might temporarily reduce statistical unemployment rates it also has a negative impact on job creation. What is required is reducing impediments to both higher labour supply and the firms' labour demand, so that higher volumes of employment contribute in turn to stronger economic growth and incomes. Indeed, massive early retirement in Austria did not prevent the secular increase in the registered unemployment rate among workers aged 55 and older being significantly above the national average.[6] By contrast, in OECD countries where participation rates of older workers are high, so are their employment rates suggesting few inherent barriers to employment at an old age (see Figure 6).

Moreover, with the share of older people set to increase dramatically over the next years and decades to come, Austrian aggregate labour force participation would drop even further without policy action. Simulations by the Secretariat indicate that the demographic effect alone – assuming all other things unchanged – would instigate a drop in Austria's participation rate by some 10 per cent until the year 2030. This deterioration is in the upper range within the OECD, and – without further policy action – would profoundly restrain GDP growth per capita and burden the social systems with new demands (Figure 7).

Figure 6. **Participation and employment rates for 55-64 year olds, 2002**[1]

Per cent

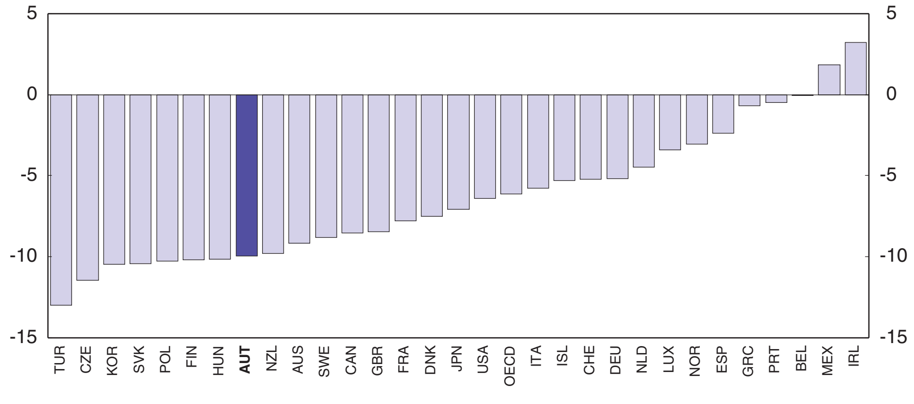


1. Participation and employment rates are, respectively, labour force and employment of 55-64 year olds divided by population aged 55-64.

Source: OECD, *Labour Force Statistics*, for EU member countries data is from the European Labour Force Survey.

Figure 7. **The demographic impact on labour force participation rates, 2000-2030**[1]

Per cent



1. Projected participation rate for 2030 (based on demographic developments only), minus participation rate for 2000 Participation rate is about force aged 15 years or more divided by population aged 15 years or more.

Source: OECD, *Taxing Wages*.

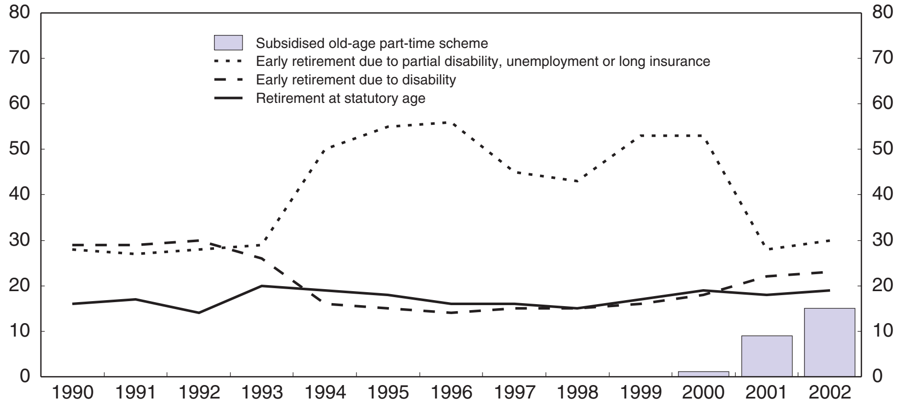
... reflecting significant disincentives to labour force participation of older people

One clear reason for low participation of older workers is the low effective retirement age. In 2001 the average entry-age into retirement – both old age and invalidity – stood at 58.7 years for males and 57.3 years for women. Since 1970 the retirement age has dropped by 3.2 and 3.1 years for males and females respectively, despite the secular increase in life expectancy.[7] According to OECD estimates, the effective retirement age for males and females in Austria stands within the lower quintile among the OECD.[8] At the same time Austria is close to the top in the OECD with respect to spending on pensions as a share of GDP, totalling some 10½ per cent net of pensions for civil servants, and some 14½ per cent with the scheme for civil servants added on. While earlier pension reforms sought to address these issues they remained partial. The government has recently tabled more fundamental pension reform legislation (see Chapter II below).

Some other features in the tax and transfer system also discourage labour force participation by older people. This is notably true for the old-age part time scheme, which subsidises compensation for older people provided they reduce their working time from full-time to part-time employment (*Altersteilzeit*). In particular, participants are allowed to allocate "part time work" so as to work full-time during the first years covered by the scheme and cease working in the remainder of this period. While the instrument is intended to make it more attractive for older people to stay in the labour market its actual impact appears to be just the opposite. Previous *Surveys* pointed to the scheme's disincentives for labour supply, which is reinforced by the interaction with early retirement provisions in the pension system. On the labour demand side, the instrument effectively allows firms to scale down the employment of the older people at the expense of the social security budget so as to avoid rising labour costs associated with seniority.

The scheme was also justified by the hope that reduced participation of older workers would increase hiring of unemployed younger workers and new entrants. In fact, the *Altersteilzeit* scheme has failed to deliver increased hiring of younger people. This is apparent from the fact that the scheme was hardly utilised in its original version which required new hiring of unemployed or apprentices as aprecondition for the subsidisation of working time reductions of older employees. However, since this condition was given up in October 2000 the scheme was used at increasing rates as an exit channel into effective early retirement. Between 2000 and 2001 inflow into *Altersteilzeit* increased by more than 550 per cent, and by another 70 per cent in 2002 (Figure 8). About two-thirds of the participants work full-time in the first years of the admissible time span and cease working in the second part.[9] The government is now reforming the scheme. The fact that utilisation of the *Altersteilzeit* scheme accelerated at a time when inflow into early retirement within the pension system has been retrenched illustrates the need to tighten simultaneously eligibility conditions for income replacing benefits across all potential channels into effective early retirement.

Figure 8. **Inflow into early retirement and the subsidised old-age part-time scheme**
Thousands



Source: Arbeitmarktservice Österreich and Hauptverband der Sozialversicherungsträger.

... while labour force participation for women is coming under pressure

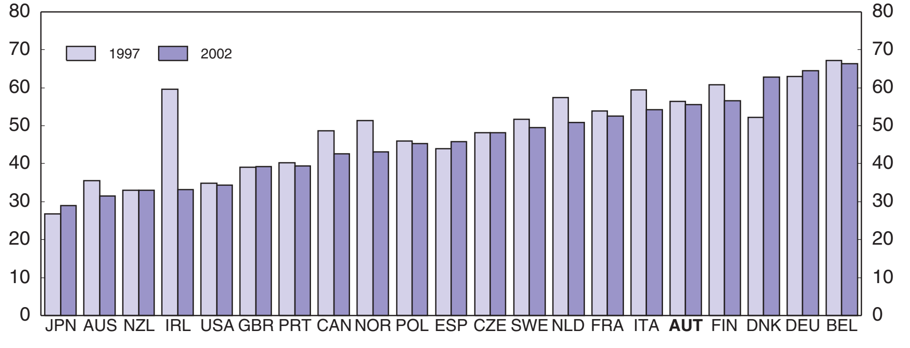
Female labour force participation is somewhat above the OECD average, and has increased over the last years. However, the change in the age distribution in Austria's society would substantially reduce female labour force participation if age specific participation rates for women remain unchanged. While family support policies target a number of goals that might be considered non-economic, they also have an impact on female labour force participation and employment. Social transfer schemes that discourage parents from participating in the labour market may be costly beyond their immediate fiscal impact for the society as a whole. Over the last years Austria has given a high weight to extending financial support to families, with the most recent extension of family benefits having occurred in 2002, placing Austria within the top range of the OECD with respect to the level of resources devoted to family support. However, in some respects the transfer system appears to imply disincentives for female labour force participation, while at the same time parents are subject to significant fixed costs of work. Hence, there is scope to make the support system more employment friendly.

Barriers to labour force participation interact with disincentives for labour demand

When barriers to labour force participation are abolished, unemployment could rise during the transition to a new state of the economy with both higher labour force participation and higher employment, if the adjustment on the labour demand side is too slow. Hence, a number of specific issues need to be addressed to ensure that labour demand meets supply. The same is true in view of future challenges requiring a higher responsiveness of labour markets to structural change. In Austria, barriers to labour force participation interact with a number of regulatory features that tend to increase the cost of labour to firms. With dismissal protection provisions being stricter for older workers, as age is a criterion to be taken into consideration in dismissal decisions, and severance pay being higher, laying-off older employees has turned out to be difficult in the past. For large groups of workers, wages increase strongly with seniority. With various regulatory provisions effectively insulating wage determination from outside wage pressure, this can make it worthwhile for employers to reduce employment of older workers. Utilisation of effective early retirement schemes thus becomes attractive for employers.

The tax burden on labour is high in Austria, with marginal tax wedges between compensation paid by employers and the employees' take home pay net of income taxes and contributions standing in the upper range within the OECD. Despite these high levels, marginal labour taxation has decreased only slightly since the second half of the 1990s (Figure 9). Rising social security contribution rates have played a key role in holding labour taxation at high levels. Hence, improving control over social security spending and encouraging labour force participation appear crucial to reducing effective labour taxation. Empirical evidence suggests that the size of the tax wedge on labour acts as a barrier to higher employment.[10] Indeed, the reduction of labour taxation in several EU member countries in the late 1990s may have been a

Figure 9. **Marginal tax wedge on labour**[1]
% of labour costs



1. For a single individual at the income level of the average production worker. Tax wedges are calculated by expressing the sum of personal income tax, employee plus employer social security contributions together with any payroll taxes as a percentage of labour cost. The effect of indirect taxes is not taken into account.
Source: OECD, *Taxing Wages*.

significant factor behind the relatively strong employment growth observed within the EU, especially were the measures were targeted at low paid jobs.

Aggregate real wage flexibility in Austria is high by international comparison. This has helped the economy to accommodate fluctuations in the business cycle while avoiding large fluctuations in unemployment. However, both the adaptability of the economy to structural change and productivity shocks and the employability of certain groups of employees, such as older people, require that relative wages adjust to asymmetric forces. A number of factors indicate that the flexibility of relative wages in Austria needs to be improved to increase the adaptability of the labour market to new demands.

In a range of areas Austria has taken significant steps within the last years to improve framework conditions in the labour market in favour of higher labour utilisation. The reform of the Public Employment Service stands as an example.[11] Scope for further improvements remains, and selected issues are highlighted further below in Chapter III.

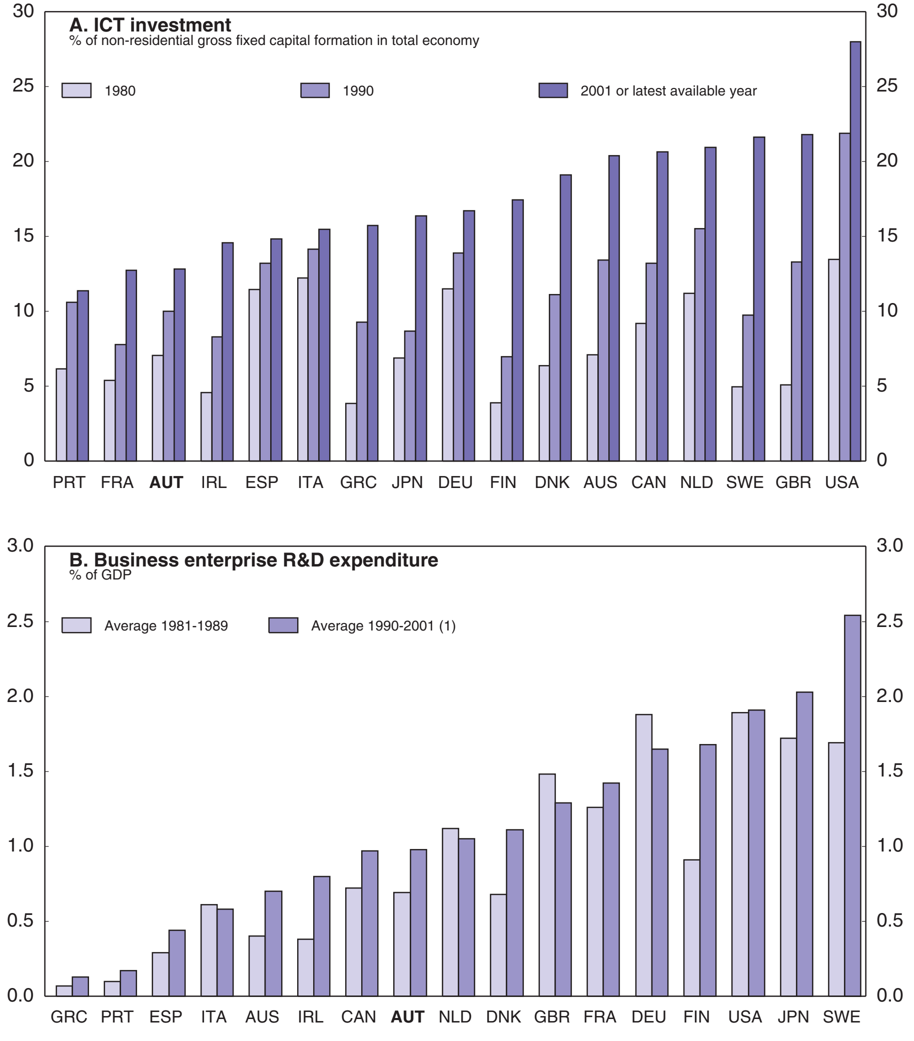
Productivity growth could be higher

Growth performance would also be supported by stepping up productivity. Although Austria's fixed investment as a share of GDP is high by international comparison, this is not sufficient to produce high labour productivity growth. Other factors come into play. In particular the extent to which technological progress is readily applied in the production process and embodied in the capital stock is also important. The share of ICT investment is of interest in this respect as capital deepening from ICT investment has turned out to be of special importance for growth.[12] More generally, a high degree of competition in product, labour and capital markets is instrumental for innovation and productivity growth.

The favourable growth record in comparison to other OECD countries was primarily due to sizeable increases in labour and multifactor productivity. This, in turn, reflects high productivity gains mainly in manufacturing and construction, while, in contrast, performance was comparatively weak in some services industries, including distribution, transport and communications (see Table 1 above). Moreover, labour productivity growth appears to have slowed in the 1990s. Further strengthening of product market competition will be helpful, and possibly necessary, for keeping productivity growth in the high end.

Over the last two decades Austria has experienced a significant increase in the share of ICT related investment in total investment, as is the case with other OECD countries. However, the content of ICT in total investment remains low by international comparison (Figure 10, panel A). In the same vein, the share of research and development expenditure, both private and government, in GDP is relatively low (Figure 10, panel B).[13] Firms' access to equity capital is likely to play an important role in the development of new, innovative products or processes,

Figure 10. **ICT investment and R&D spending**



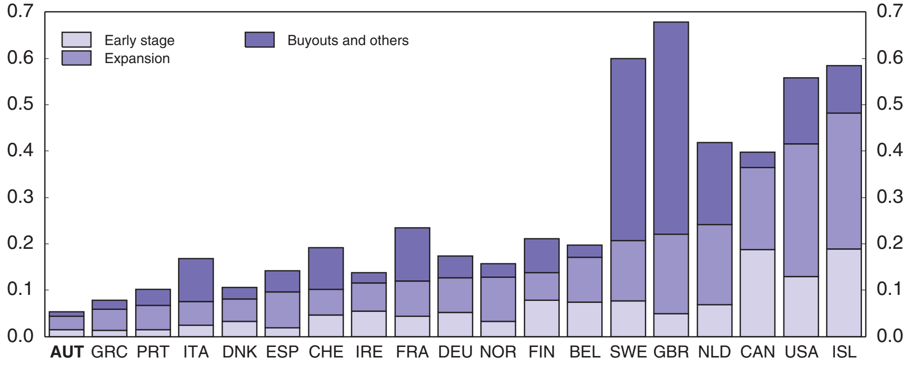
1. 2001 where data are available; Austria 1998. Refer to OECD *Main Science and Technology Indicators* for methodological issues.

Source: OECD, Capital Services Database; *Main Science and Technology Indicators*.

which by nature tend to be risky activities. While the volume of venture capital funds has increased remarkably more recently, within the OECD, Austria appears at the lower end with respect to venture capital investment in terms of GDP (Figure 11). Given the prevalence of a bank-based financial market system, the

Figure 11. **Venture capital investment by stages, 1998-2001**[1]

% of GDP



1. The definition of private equity/venture capital varies across countries. Countries are ranked according to the sum of early stage and expansion.

Source: OECD Venture Capital Database; Baygan, G. and M. Freudenberg "The internationalisation of venture capital activity in OECD countries: implications for measurement and policy", OECD STI Working Papers No. 2000/7.

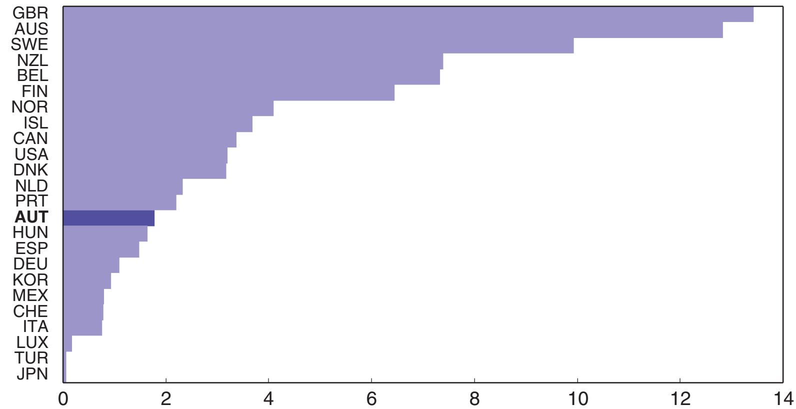
limited role of large pension funds as providers of equity capital is likely to be an important determinant of this result.

Other factors are likely to be important as well. Changes in work practices and organisational structures that are often needed to exploit new technologies increasingly require life-long learning so as to support the mobility of a well trained workforce. More generally, training designed to increase the productivity of the workforce acts positively on labour demand and contributes to reducing the qualification mismatch between labour demanded and supplied. While Austria's apprenticeship system is well known for providing high quality vocational training, outcome and spending indicators suggest that there is considerable scope to raise the performance of the secondary and tertiary education system.[14] Also, the relatively low enrolment rate for adults aged 35 years and above indicates that adult learning still needs to adjust to new demands (Figure 12). Private and social investment in adult training can only pay off if subsequent employment spells are expected to be sufficiently long. This reinforces the need for complementary measures improving the framework conditions for higher labour force participation and labour demand.

Improving economic performance requires fiscal consolidation

General government spending in Austria totals almost 52 per cent of GDP, one of the highest levels within the OECD. Moreover, even after the beginning of the 1990s the spending ratio has further increased, while for the EU as a whole it

Figure 12. **Adults in formal education, 2001**[1]
% of total enrolment of persons aged at least 35



1. Enrolments are full-time and part-time.
Source: OECD Education Database.

dropped significantly over the same period. This discrepancy becomes even more pronounced in comparison to the group of smaller fast growing European countries, where reductions in the spending to GDP ratio were particularly pronounced. Over the same period, Austria managed to reduce the structural deficit by some three per cent of GDP, roughly the same amount as the EU average. However, unlike other countries, this reduction was brought about by increases on the revenue side of the general government budget rather than by reduced spending.

Continued fiscal consolidation is necessary to cope with the challenges of ageing while making room for tax reductions and increasing the economy's potential for growth and employment more generally. This requires tight control of general government spending and structural reform that improves the quality of public outlays. Abolishing incentives for effective early retirement stands as an important example for structural reform impacting on growth and employment while simultaneously improving the general government budget from the spending side. Similarly, stricter prioritisation of government spending, based on programme evaluation, is required. The fact that subsidies for the *Altersteilzeit* scheme (the move to part-time working) account for 37 per cent of total spending on active labour market measures (2002) serves as an example.[15] Privatisation programmes, initiated in the 1980s, helped to boost growth, but state ownership remains large, calling for further reform. The government has put public sector reform high on the policy agenda, and some important features are highlighted in the next chapter.

II. Fiscal policy: sustaining consolidation via public sector reform

Since the beginning of this decade fiscal policies in Austria were largely shaped by the goal of balancing the general government budget. This target was reached in 2001, mainly via revenue increases but also by some spending restraint. Since then, low GDP growth as well as new spending demands, are leading to a recurrence of significant general government deficits. For the next years to come public sector reform, including reform of the social security system, continues to rank high on the government's policy agenda. However, the new administration, which came into office in March 2003 has widened priorities to include substantial tax reductions that are planned to be phased in from 2004 onwards. This would entail higher deficits for some years, before fiscal consolidation would be resumed. Hence, stepping up government spending reform is called for to establish a credible path of continued fiscal consolidation. This chapter highlights recent fiscal developments and considers major aspects of public sector reform.

Fiscal policy under heterogeneous priorities

A balanced budget was achieved in 2001 *– earlier than envisaged…*

The Stability Programme of December 2000 foresaw balancing the general government budget in 2002, reflecting the high priority the government had given to fiscal consolidation. This target was reached already in 2001, one year ahead of schedule, with the general government balance swinging from a deficit of 1.5 per cent in 2000 to a surplus of 0.3 per cent in 2001 (definition according to the EU Stability Pact). With GDP growing substantially below potential, this implied an improvement in the structural balance by 2¾ per cent, marking the largest improvement within the OECD. Consolidation was largely achieved on the revenue side, with revenues in terms of GDP increasing from 50.7 per cent in 2000 to 52.0 per cent in 2001 (national accounts definition). High profits in the years before as well as revenue raising measures included in the government's consolidation programme accounted for this outcome. In particular, a new penalty charge on unpaid tax liabilities boosted receipts, exceeding expectations by almost

½ per cent of GDP. The consolidation programme also comprised some spending reductions, mainly on account of pension reform, employment cuts and wage restraint in the federal administration (Table 6).

Table 6. **Net lending of the general government**
Billion euros[1]

	1998	1999	2000	2001	2002	2003[2]	2004[2]	2005[2]
Current receipts	98.4	101.6	104.5	109.8	110.9	112.3	114.0	115.7
Total direct taxes	26.0	26.3	27.4	32.0	30.5	30.9	31.3	30.0
Households	21.5	22.4	22.8	25.0	24.8	25.3	25.5	24.1
Business	4.5	3.9	4.6	7.0	5.7	5.6	5.8	5.9
Total indirect taxes	28.3	29.5	30.2	31.1	32.6	33.1	34.0	35.2
Social security	32.8	33.9	34.9	35.5	36.2	37.0	37.6	38.9
Other current transfer received	10.4	10.9	10.9	8.2	8.7	8.2	8.5	8.8
Property and entrepreneurial income	1.0	0.8	1.0	3.0	3.0	3.0	2.7	2.8
Current disbursements	98.0	101.6	104.2	105.5	108.2	111.9	113.8	117.0
Government consumption	37.2	39.0	39.8	40.5	41.1	42.1	42.8	43.9
of which: Wages and salaries	21.6	22.4	22.7	21.0	21.2	21.7	22.0	22.5
Interest on public debt	7.4	7.3	7.9	7.8	7.8	7.9	8.0	8.2
Subsidies	5.3	5.1	5.0	5.6	6.0	6.7	7.1	7.6
Social security paid	35.3	36.8	38.3	39.7	40.7	42.1	42.9	44.0
Other transfers paid	12.8	13.3	13.2	11.7	12.6	13.1	12.9	13.3
Net capital outlays	5.1	4.7	3.6	4.1	3.4	3.1	2.9	3.0
Gross investment	3.5	3.4	3.1	2.5	2.7	2.4	2.4	2.5
Net capital transfers	4.6	4.3	3.6	4.6	3.6	3.6	3.4	3.6
Consumption of fixed capital	–3.0	–3.1	–3.1	–2.9	–2.9	–2.9	–3.0	–3.0
Net lending	–4.8	–4.7	–3.4	0.3	–0.8	–2.7	–2.6	–4.3
Per cent of GDP	–2.5	–2.4	–1.6	0.1	–0.4	–1.2	–1.1	–1.8
Gross debt (Maastricht basis)	121.4	133.0	138.4	142.7	145.7	149.8	154.1	160.4
Per cent of GDP	63.7	67.5	66.8	67.3	67.2	67.4	67.8	67.9
Structural budget balance	–5.5	–5.6	–5.7	–0.3	–0.7	–1.7	–1.3	–3.3
Per cent of potential GDP	–2.9	–2.9	–2.8	–0.2	–0.3	–0.8	–0.6	–1.4

1. Except where indicated otherwise. Data is on a national accounts basis. For 1998 and 1999 at euro conversion rate.
2. Preliminary OECD projections.
Source: Ministry of Finance and OECD.

… while a small deficit re-emerged thereafter…

In 2002 the general government balance came in at a small deficit of 0.2 per cent of GDP (definition according to the EU Stability Pact) on account of slower growth. Unemployment related outlays surged, and so did pension outlays, partly on account of early retirement programmes. Both items combined exceeded expectations by almost 0.4 per cent of GDP. In addition, unforeseen spending to compensate for the damage associated with floods in autumn 2002 accounted for about

0.1 per cent of GDP. On the other hand, ongoing administrative reform curbed spending. This is mainly reflected in stagnating outlays for personnel.

On the revenue side, VAT and personal and corporate income taxes undercut budget plans. At the beginning of the year a tax package, designed to stimulate growth, was implemented, including *inter alia* a widening of the tax breaks for training and research and development and accelerated depreciation allowances for construction in 2002. In the second part of the year another stimulus package came into force, further widening the training and R&D allowances and granting tax expenditures for accelerated investment in machinery and equipment in 2002 and 2003. By contrast, additional revenues in the wake of the modification of the penalty charge on unpaid tax liabilities, introduced in 2001, once more came in far stronger than expected.

Most of the deterioration of the general government budget affected the federal government. The surplus of the states and communities totalled 0.7 per cent of GDP, slightly less than the target that was agreed in the domestic stability programme (0.75 per cent), notwithstanding unforeseen additional spending due to the floods in late summer 2002. Also, temporary shortfalls (0.15 and 0.1 per cent of GDP for the states and communities, respectively) are allowed under the domestic Stability Pact, provided the targeted surplus is reached on average over the horizon of the Pact.

… and is set to rise further…

Austria's updated Stability Programme, published in March 2003, foresees a temporary increase of the general government deficit to 1.3 per cent of GDP in 2003. On current projections the deficit might slightly undercut this level (Table 6). While weak growth contributes to this effect, about half of the deterioration is attributable to expansionary measures, the largest part of which having been implemented already in 2002. These have not been compensated for in the 2003 budget due to late budget formation, resulting from prolonged negotiations to establish a new government. A significant share of spending designed to compensate for the damage caused by the floods in autumn 2002 is becoming effective only in 2003. Financial support on account of the two stimulation packages that were legislated in 2002 accelerates. Moreover, family benefits are being further extended. There are also significant increases in pension outlays.

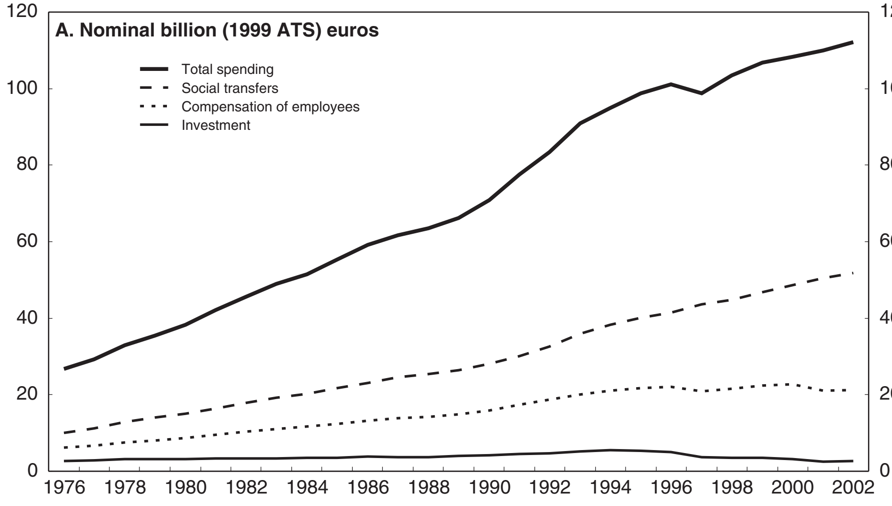
For 2004 the Stability Programme foresees that the general government deficit in terms of GDP falls back to 0.7 per cent, above the level prevailing in 2002. Termination of parts of the fiscal stimulation package improves the fiscal stance in 2004. Further relief on the spending side is foreseen from continued reductions in personnel. The government has also budgeted some savings from the pension reform measures. However, total savings in the early phase of implementation of the reform will be small and hardly reduce the secular trend of rising pension outlays. Also, budgetary savings are reduced by the introduction of new grandfathering provisions outside the pension system, notably extended unemployment insurance benefits for persons who are no longer able to claim early retirement on account of unemployment (see Chapter III below). Furthermore, the federal budget for 2004 devotes additional resources to some areas, notably in favour of support policies for research and development and a further extension of family benefits. Finally, income tax reductions are being phased in from 2004 onwards, with net tax reductions in 2004 accounting roughly for 0.2 per cent of GDP.

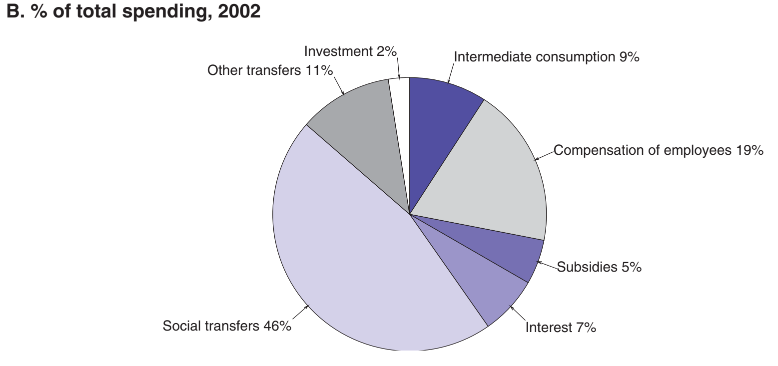
... while resuming a balanced budget has been deferred to the medium term

Since the mid-1970s social transfers were the fastest growing spending category in Austria. Social transfers together with compensation for employees – the second biggest spending item – account for 65 per cent of general government outlays. This composition indicates that lowering barriers to more employment, better targeting of transfers, and reform that improves the efficiency of the federal fiscal system more generally are key to securing the sustainability of general government finances. On the other hand, investment accounts only for a small share of government outlays, and has dropped in nominal terms over several years. The latter phenomenon is largely due to spin offs of public sector units into the enterprise sector and privatisations. Nevertheless, cuts in infrastructure investment are much easier to implement politically than those in entitlement spending, and reductions in public investment could have adverse consequences for Austria's growth potential in the medium term (Figure 13).

In the Stability Programme, the government aims at reducing the spending to GDP ratio by 2¼ percentage points between 2002 and 2007 (Table 7). This reduction is to be brought about via administrative reform and cuts in government employment (0.6 per cent on the side of the federal government, 0.5 per cent on the side of the states and communities), pension reform (0.5 per cent), reform of the social insurance system (0.5 per cent) and reductions in federal subsidies and reform of the Federal Railways system (0.1 per cent). The new administration considers the reductions in the spending ratio sufficient to create scope for phased tax reductions. The government's programme envisages tax cuts amounting to 1.3 per cent of GDP after full adaptation. According to the Stability Programme, the revenues-to-GDP ratio would fall from 51.1 per cent in 2003 to 49.4 per cent in 2007. The purpose of the reform is to strengthen the growth potential of the economy while giving ecological taxes a larger role. The programme is to be implemented in two steps. The first step in 2004 consists of an increase in the basic tax free allowance for low incomes in the personal income tax schedule, and reduced taxation of retained profits in partnerships. Moreover, social security contributions for older employees will be lowered. Energy taxes are scheduled to be increased. The implied net tax reductions of € 0.5 billion (0.2 per cent of GDP) are planned to

Figure 13. **Trends in general government spending**





Source: OECD, *National Accounts*.

be followed up by further cuts in 2005, amounting to € 2.5 billion (1.1 per cent of 2002 GDP).

Austria's tax-to-GDP ratio is high by international comparison, and so are tax wedges on labour (see Chapter I above). While this reinforces the case for tax reductions, policies need to take into consideration the trade off between the beneficial effects of lower taxation on the one hand and maintaining the momentum of fiscal consolidation on the other hand. Indeed, over some years the largest part of the tax reductions would be deficit financed (Table 7). Empirical work

Table 7. **Medium-term objectives for the general government**

National accounts basis, per cent of GDP

	2002	2003	2004	2005	2006	2007
Budget deficit	–0.2	–1.3	–0.7	–1.5	–1.1	–0.4
Memorandum:						
Budget deficit without tax reduction	–0.2	–1.3	–0.6	–0.3	0.2	1.0
Revenues	51.7	51.1	50.8	49.5	49.4	49.4
Expenditures	51.9	52.4	51.6	51.0	50.5	49.8
Debt	67.3	67.0	65.1	63.8	62.1	59.7
Memorandum:[1]						
GDP	1.4	1.4	2.0	2.5	2.5	2.4

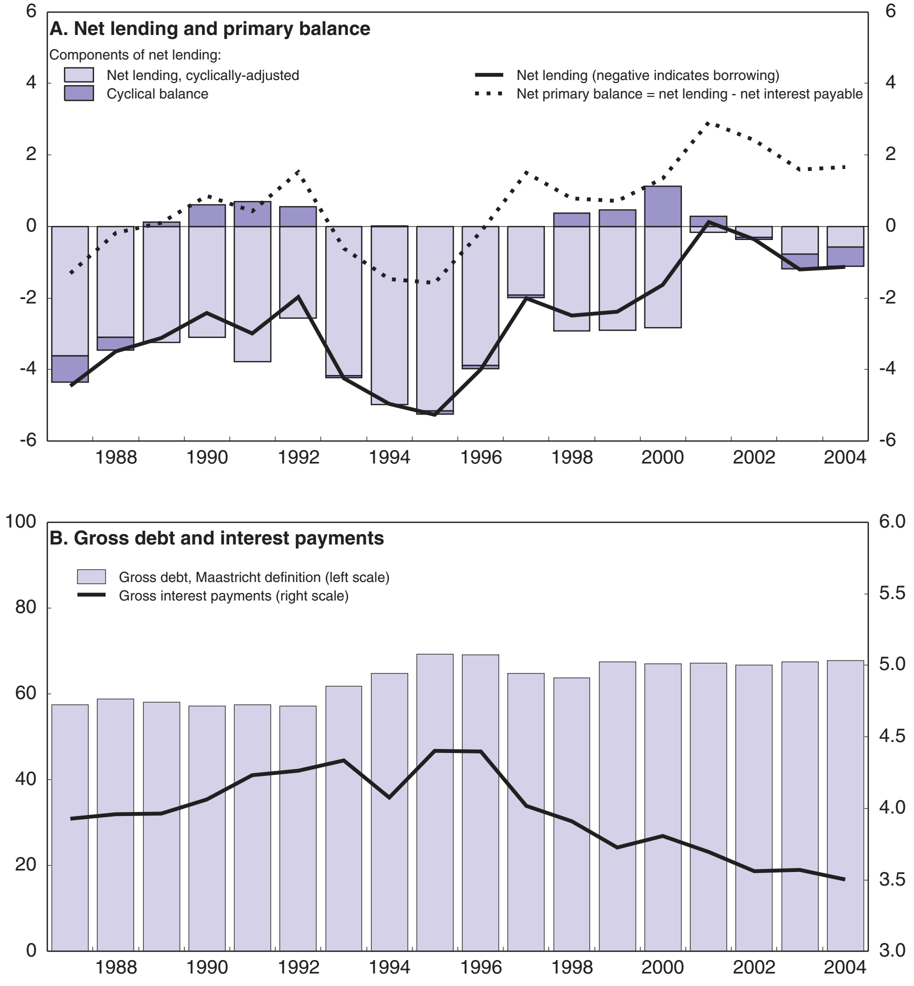
1. Annual growth rate.
Source: Austrian Government, Stability Programme of March 2003. For 2002: national accounts.

indicates that the gains from sustainable fiscal consolidation might be substantial for Austria.[16] To realise such gains it is important that uncertainties about the consolidation path are kept to the minimum. This was not always the case in the past. The two episodes of fiscal consolidation in the 1990s were followed by some rebound in deficits (Figure 14). To some extent the re-emergence of higher deficits was cyclical. But it was also caused by the fact that one-off measures designed to rapidly reduce the deficit were not fully replaced by lasting consolidation measures. Moreover, new spending or tax reductions were implemented to accommodate new demands.

A number of risks surround the government's present fiscal strategy. Larger than expected revenue losses associated with the tax reduction programme or the expansion of family benefits already legislated cannot be excluded. There is a significant degree of uncertainty surrounding revenue estimates, as witnessed by the recently introduced penalty charge on tax liabilities. Also, it is still an open question whether the next phase of public sector reform envisaged by the government generates the size of savings suggested. Some of the measures are associated with set up costs, such as the establishment of regional administrative courts. Budgetary relief from the scheduled pension reform will also build up only gradually, given the fact that transition phases extend over several years and decades. Caution is also warranted with respect to the growth assumptions laid down in the Stability Programme. On current indicators, the recovery from the present cyclical low might be slower than suggested, and assumed medium term growth is in the upper range of the Secretariat's estimate of potential output. Overall, adverse shocks might easily push the deficit much higher than foreseen in the Stability Programme.[17] This, in turn, might have adverse effects on the scope to allow the automatic stabilisers to work. Hence, tax reductions should not be made without further progress in reducing government spending.

Figure 14. **General government balances**

Per cent of (potential) GDP[1]



1. Per cent of potential GDP for net lending cyclically adjusted. Net lending and net primary balance include one-off revenues from sale of mobile telephone licences in 2000.

Source: OECD.

Issues in public sector reform

The federal government reaffirmed its commitment to continue public sector reform in the latest Stability Programme. Indeed, while over the last couple of years progress has been made on some scores further action in public sector reform is required to improve the capacity of the economy overall to adjust to new challenges and place government finances on a sound footing in a sustainable way. The 2001 *Survey* considered important aspects of the reform agenda, such as spin-offs of administrative units from the government budget. There appears to be considerable scope to further enhance the efficiency of public administrations. More fundamentally, revisiting the distribution of tasks and funding principles across the various layers of government is likely to have a very large potential to improve public sector efficiency and generate sizeable savings in the general government budget. Privatisations should be made an integral part of the reform project, and programme evaluation and control needs to be given a larger role. The section below highlights some aspects along these lines. Pension reform, which is a key item on the government's reform agenda for the social security system, is considered in the next chapter.

Streamlining administrations and targeting outcomes

Managing reductions in personnel

Reducing government employment is a major objective of the government's administrative reform agenda. Between the end of 1999 and 2002 personnel in the federal administration was cut by almost 7 per cent.[18] Some 29 per cent of the reductions in the government sector overall reflect spin offs of administrative units into the enterprise sector. Over the same period nominal expenditure for personnel stabilised. However, to a large extent reductions were achieved by early retirements on generous conditions (*Sozialplan*) if particular workplaces were surpressed. Between January 2001 and August 2003 civil servants aged 55 and older could opt for early leave packages replacing between 75 and 80 cent of gross salaries. Net income replacement is significantly higher. During the early retirement phase, bi-annual increases in the salary base are maintained, and full pensions are granted at the statutory retirement age (which is subject to a phased increase from presently 61½ to 65 years). Alternatively, public servants whose workplace is maintained can apply for early retirement with 5 per cent pension reduction per year. The programmes point to over-staffing in the government sector, which is often difficult to reduce given particular employment regulations for civil servants. Nevertheless, recourse to generous early retirement programmes is at variance with the necessity to encourage labour force participation. In particular, they run contrary to the government's intention to increase the effective retirement age in the general old age pension system and appear to have impaired the acceptance of pension reform in society. Hence, continuing public sector reform should facilitate labour re-allocations within and outside the public sector rather than early retirement. To this end, employment conditions need to be made more flexible. The following aspects appear to be of particular importance:

– Given that the output of administrative units is largely fixed, heads of administrations have an incentive to maximise the number of their staff. To the extent cuts in personnel are made, these are often proportionate across administrative units to avoid frictions between administrations. Indeed, the recent employment cuts in Austria were largely proportionate, although the education sector (one third of government employment) was excluded from the reduction programme. Introduction of output oriented flexible budgeting methods would improve incentives in favour of personnel reallocations. Simultaneously, current definitions of admissible reassignments of civil servants with respect to their function and pay should be revisited whether they are broad enough. In the same vein, it would be an option to establish pools of employees which can be assigned to different tasks. The Austrian Railways plans reform along these lines (personnel holding). Making more use of performance related pay schemes would be complementary to such reform.

– Employment and pay regulations are particularly restrictive for tenured civil servants (*pragmatisierte Beamte*). Since 2000 the federal government has aimed at reducing the share of tenured civil servants within the federal administration to make employment relations more flexible. However, while the number of tenured civil servants declined, between 1999 and 2002 their share even increased slightly (from 68.2 to 68.6 per cent). Although this adverse development is influenced by the fact that spin-offs of administrative units from the federal budget into the enterprise sector have primarily involved non-tenured staff, it is clear that further efforts are necessary. Abolishing entirely the special tenure for civil servants and associated rigid pay schemes is worth considering. In Switzerland the long-standing status of tenured civil servants was recently abolished.[19]

– Full harmonisation of the pension schemes for civil servants and the private sectors is necessary to abolish a significant hurdle to mobility between the two sectors. The introduction of individual pension accounts would be instrumental in this respect.

Improving incentives within administrations

Some instruments in favour of more output-oriented budgeting are in place. The Flexibility Clause of the federal budget act, which was recently prolonged, allows certain federal administrative units to steer their flow of revenues and expenditures on their own responsibility, subject to both the tasks assigned and the fiscal balance targeted.[20] If the budgetary outcome is better than targeted, part of the savings can be utilised to build up a reserve in favour of the administrative unit. Some share of this reserve, in turn, needs to be used for performance-related wage premia or training of the unit's staff. While flexible budgeting of this type can improve incentives for more efficient provision of public sector services, at present only very few administrative units are subject to this rule. Usually, budgetary allocations to government units are reduced if spending is reduced. Other countries within the OECD have also introduced greater fungibility of funds into budgeting. Future action in this field should include a concentration of competencies where warranted. For example, within the federal administration the responsibility for research and development support policies is dispersed between different ministries. Moreover, efficient budgeting along these lines requires that spending and revenue decisions be based on evaluations of benefits and costs. As has been highlighted in the last *Survey*, more efforts need to be made on that score.

Reducing administrative slack

Progress is also being made with respect to streamlining the provision of certain administrative or judicial services. The bundling of district courts is under way. In the past, several administrative tasks, such as issuing of passports, inhabitant registration, as well as approval procedures for certain fixed investment (*Betriebsanlagen*) were scattered across federal and state administrations. Execution is now more concentrated on the level of regional administrations (*Bezirksverwaltungsbehörden*), for which the states are responsible. The reallocation of tasks to one layer of government could significantly simplify administrative services and speed up permission procedures. To fully reap the benefits of this reform it should be followed up within the states by reorganisation of the regional administrative units affected. In particular, this would involve concentrating related tasks in the hands of one and the same regional administration so as to foster the implementation of the one-stop-shop principle for regional services and endorsements of industrial plants. This would also require reallocations and retraining of staff. In some instances regional administrative reform along these lines is underway, and savings in personnel have been reported. However, frictions appear to have arisen in adjusting the allocation of funds in accordance with the redistribution of tasks. Regional governments have complained that compensation was too narrow. Allegedly some cities, although eligible by their size, did not apply for the status of a *Bezirksverwaltungsbehörde* to avoid adverse implications of funding. Apparently, the inter-governmental "Consultation Mechanism", established some years ago as a part of the Domestic Stability Pact for the purpose of avoiding the devolution of tasks without a matching in funding, has not prevented these frictions. This reinforces the case for more fundamental review of inter-state funding principles.

Utilising the potential of competitive procurement policies

The potential of improving cost accounting and evaluation methods to increase the efficiency of public sector actions also becomes apparent in procurement. At 16-17 per cent of GDP, the public procurement market in Austria, as measured by the European Commission, is of a size similar to that of most other EU countries. The sheer size of this market underscores the pivotal role of well-designed procurement policies and the high potential costs associated with regulatory failure. Competitive procurement markets have been a central part of the EU's Internal Market programme, and the WTO Government Procurement Agreement sets out the rights of certain third countries. Austria complies with both of these sets of rules. Yet, the share of openly advertised public procurement was consistently lower than elsewhere throughout the 1990s. Less than 10 per cent of the total value of governments' purchases of goods and services were published in the EU's Official Journal during this period. Since then Austria has caught up with the EU average (of 15 per cent), though this itself is low. Moreover, direct cross-border procurement accounted for only 1¼ per cent of award notices in 2001, which was characterised by the European Commission as "abysmally low" (European Commission, 2002c). These figures testify to the strong headwind facing the efforts to open up public procurement markets – in Austria and elsewhere – to international competition.

Central and local governments are each responsible for their own procurement, and at each level of government this responsibility has been partly devolved to individual agencies and institutions. Knowledge about the evolution of competition between domestic suppliers in this environment is limited, since no statistical recording is being undertaken. Furthermore, in their conduct of procurement policies neither the federal nor sub-central governments appear to set and pursue measurable targets in any systematic way, let alone monitor performance. This indicates that surprisingly little attention is being paid by policy makers to ensuring best quality at the lowest price. A strong "buy local" sentiment, in particular among regional governments may be partly responsible for this. As a first step towards improving the situation, governments and agencies should set measurable targets for public procurement activity. To be effective, economic incentives should be developed to encourage managers to meet set objectives. Moreover, the benefits of pro-competitive policies should be made more transparent to the public.

The limited progress in opening up public procurement has been due in part to the hesitancy of local governments in embracing competitive tendering. However, a reform of the Public Procurement Act entered into force on 1 September 2002.[21] Most importantly, it introduced uniform rules throughout Austria. Previously, procurement legislation had been a matter for the *Länder*. This had repeatedly delayed full transposition of EU directives and had led to a fragmentation of the procurement market. The reform is a welcome improvement, which should facilitate greater transparency. However, it remains a regional responsibility to monitor and enforce compliance with the new provisions in cases where sub-central governments are party.

Improving the efficiency of federal fiscal relations

To improve the efficiency of the public sector in a broad range of areas, reform would have to be extended to revisiting fiscal relations between the different layers of government the federation, the states and the communities. In several areas spending and financing responsibilities are mixed between the federal government and the states or between all three layers of government. This can cause significant inefficiency in resource allocation, which makes fiscal consolidation policies more difficult and reduces policy effectiveness in areas such as labour market or educational reform.

Fiscal relations between the federal government, the states and the communities are largely based on the desire to create broadly equal living conditions across regions. Resources of the states and communities stem mainly from an elaborate tax sharing system and federal transfers. 74 per cent of total tax receipts are designed for redistribution among the three layers of government. Vertical tax shares are agreed upon collectively and legislated for a period of four years. Parallel to the vertical redistribution, horizontal equalization reduces income disparities between the *Länder* and across municipalities. In addition, the *Länder* and the communities receive earmarked grants from the higher government level for current and capital outlays in areas such as education, waste water treatment or investment in transport. While the redistribution system has succeeded in achieving a high degree of income equalization across regions, it appears complex and opaque. Redistribution mechanisms were found to produce high effective tax rates of additional revenues generated at the level of the communities, which can come close to or above 100 per cent, providing disincentives for policies designed to enhance growth.[22] Similarly, co-financed schemes often suffer from disincentives to achieve allocative efficiency and to control costs. Sub-central governments are likely to opt for spending projects as long as the benefits perceived exceed their own – partial – budgetary costs. This also reduces incentives to attain certain outcomes via administrative reform or inter-governmental co-operation.

The financing of investment for waste water treatment – purification plants and waste water networks – stands as an example. Both the federal government and the states co-fund investment for the purpose to rapidly increase the interconnection rate of buildings with purification plants. On average their contribution total some 50 per cent of the costs of the investment projects, but the share can be much higher if the community manages to hold construction costs low. Co-financing by the federal government and the states is linked to the area designed by the communities to be provided with waste water services, which in turn is related to the communities' stock of buildings and its reserves in cultivatable land (*Bauland*). This system, in combination with various other funding arrangements for infrastructure investment, provides few incentives to establish infrastructures in a cost efficient manner. Indeed, communities with very low population densities and large reserves of cultivatable land are able to establish comprehensive waste water networks at relatively low cost for the local budgets. While the communities' design of settlements determines the costs of infrastructure, notably for various local networks whose costs depend on the degree of population density, the statutory local contribution in financing local infrastructure and services is often very low. This is not only true for the waste water infrastructure but also for electricity, gas and telecommunication networks, and for the supply of various services such as postal services, mobile care for older and sick people and transportation of children to schools.[23] In the same vein, co-funding provides incentives to create excess capacities in purification plants, which have been criticised by the federal Court of Auditors. The Court recommends improving the utilisation of existing capacity by stepping up co-operation between local authorities.

The disincentives for efficient resource utilisation carry over to the final users of waste water networks. The financial contribution of the federal government and the states to the interconnection costs of households to the network increases with the costs of interconnection. In addition, the communities often take over a further share of the interconnection costs to reduce the contributions to be paid by private households for social reasons. Also, new interconnections are cross-subsidised out of the revenues from current waste water fees levied from all households together. As a result, total interconnection costs are not known to private households, and hardly prevent them from choosing residential locations that are associated with high infrastructure cost. Similarly, communities appear to come increasingly under pressure by owners of real estate at remote locations to give permission for residential construction.[24] At the same time, underutilisation of infrastructure in some cities and communities is increasing, making the financing of maintenance more difficult.

The importance of federal fiscal relations spills over into various fields that are subject to reform, such as job placement or secondary education. The last *Survey* pointed to a lack of coherence between unemployment assistance benefits (*Notstandshilfe*) and social assistance benefits (*Sozialhilfe*), both of which are means tested. At present, unemployment assistance is extended by the federal labour office, while the communities are responsible for social assistance benefits. The funding of social assistance outlays is shared between the states and the communities, with the latter financing up to 65 per cent. The dichotomy between the two benefit systems raises administrative costs. Moreover, the fact that the benefits extended by either administration do not reflect the full budgetary outlays of the income replacement can impair incentives for efficient job placement by the federal labour office on the one hand and the communities on the other hand. The government now plans to combine the two systems into one. This is likely to improve incentives for more efficient job placement, although establishing the unified system at either conceivable level of government – the federal labour office or the local authority – remains administratively difficult. In any case, unifying the responsibility for granting social assistance would have to imply a substantial reorganisation in inter-governmental funding. In particular, allocating the extended system of social assistance at the regional level would imply that a large financial burden is shifted from the federal government to the communities and the states.[25] The necessary reallocation of revenues should preserve incentives for local authorities to integrate unemployed recipients of social assistance into the primary labour market. This would be supported by funding schemes that are not earmarked to the social security outlays, but are fungible. The scheduled reduction of replacement rates in the public pension system (see Chapter III below) is also likely to increase the pressure on social assistance finances, reinforcing the need to establish more efficient funding arrangements.[26]

School teachers are employed by the federal states, with the federal government reimbursing the wage bill while teacher-to-student ratios are negotiated between the federal government and the states.[27] The dichotomy between spending and financing implies that the states have little incentives to increase the efficiency of teachers, and might bargain for higher teacher-to-student ratios instead. Overruns in staffing have occurred in the past, and the government has threatened in some cases that it might refuse their compensation. Similarly, the government has an incentive to cut its wage bill via adjustment of other parameters such as the number of hours of weekly teaching, which might ultimately lead to reductions in the number of persons employed. More generally, responsibilities to provide and fund adult training are widely dispersed, which can impair the efficiency of the programmes offered (see Chapter III below).

Hence, reform of the federal fiscal system should strengthen the links between spending powers and revenue raising powers. To this end choices need to be made as to what services can be provided by the private sector rather than the government and what level of government is best suited to deliver public sector services. A base for this review was already established in 2001 with the proposals made by the Task Reform Commission (*Aufgabenreformkommission*).[28] Moreover, a "Convent" was recently established in Austria that will also consider constitutional issues relating to a redistribution of competencies between the different layers of government.[29] Local governments could be given more scope in generating own tax revenues. In raising the taxing powers of the communities there are negative externalities that need to be balanced against the benefits of a higher degree of congruency between spending and revenue raising responsibilities. In particular, regional governments should minimize the use of mobile tax bases, redistributive taxes, unevenly distributed taxes and taxes subject to sharp cyclical fluctuations.[30] Property taxes appear to be particularly suited to function as local taxes. While local governments in Austria have some discretion in raising property taxes, these only play a small role as a revenue source for regional governments, unlike in some other countries within the OECD. Hence, one option is to widen the role of property taxes as a source of local government revenues, while at the same time reducing income taxation. Local governments might also obtain some discretion in setting a local income tax, up to some low rate so as to limit potentially adverse effects on the income tax system overall.

Complementary to this reform, the volume of co-funding should be scaled down to reduce potentially serious adverse incentives. For a variety of areas, such as waste water treatment, efforts should be made to internalise spill-over effects of local services to other localities via co-operation of local governments or public institutions or by merging local utilities. To the extent that co-financing is considered an important instrument in the future the full costs associated with spending programmes need to be taken into consideration in project evaluation, already in the selection and planning stages, as well as in *ex post* evaluation.

Reducing the size and scope of the public enterprise sector

The scope of the public enterprise sector has traditionally extended well beyond network industries, with large shareholdings in the financial sector and in manufacturing industries such as steel. Despite considerable reductions of government holdings over the past 15 years, enterprises with public majority participation still produced 13 per cent of total business-sector output by the end of 1998, while the similar figure for the EU as a whole was 8.5 per cent (Table 8).[31] Some studies emphasise the continued significance of public enterprises in the Austrian corporate structure. For example, Gugler *et al.* (2001) found that federal and local governments held a stake of 12 per cent of total equity in the largest 600 non-financial Austrian companies in 1996 and they were the largest shareholder in 15 per cent of these corporations.

There is extensive empirical evidence internationally that average performance of government-owned corporations is inferior to that of private companies.[32] In particular, productive efficiency and productivity growth tend to be lower, partly because companies in the public enterprise sector have often enjoyed the monopolist's privilege of a "quiet life". In the same vein, the risk of poor performance leading to bankruptcy or hostile takeovers is limited, and political influence may cause companies to pursue goals other than profit maximisation.[33] Such symptoms had become increasingly apparent in Austria in the 1980s.[34] The recurrent financial difficulties and emerging awareness about the potential benefits from regulatory reform eventually contributed to a reorientation of policy in favour of privatisation and clearer separation of political and commercial activities. In addition to liberalising network industries, sizeable government

Table 8. **The scope of the public enterprise sector in EU countries, end-1998**[1]

	Share of total[2]		Employees in public enterprises by sector[3]	
	Dependent employment	Value added	Energy, transport and post and telecommunications	Other industries
Germany	9.0	9.9	56.6	43.4
France	10.3	11.5	71.9	28.1
Italy	7.7	10.0	83.5	16.5
United Kingdom	2.5	1.9	66.4	33.6
Spain	3.9	3.3	48.3	51.7
Sweden	11.6	13.7	47.4	52.6
Austria	**9.1**	**13.0**	**77.1**	**22.9**
Belgium	10.4	11.3	77.9	22.1
Greece	12.3	13.5	67.4	32.6
Finland	10.9	10.5	51.9	48.1
Portugal	5.3	8.4	61.7	38.3
Netherlands	2.5	5.8	86.9	13.1
Denmark	6.1	7.5	87.5	12.5
Ireland	8.0	9.4	80.3	19.7
Luxembourg	5.3	5.3	80.4	19.6
EU	7.1	8.5	66.1	33.9

1. The figures are likely to underestimate the size of the public enterprise sector, since they only include enterprises with majority public participation. Thus, enterprises where governments had controlling influence via large minority holdings (such as for example French Renault or German Deutsche Telekom) or golden shares are not covered.
2. Per cent of total in non-agricultural business sector (*i.e.* excluding on-budget government activities).
3. Per cent of total employment in public enterprises.

Source: CEEP (2000).

shareholdings in manufacturing companies were sold (Box 2). At more than 5½ per cent of GDP, total proceeds since 1990 from privatisation of central-government shareholdings have been quite large by international standards.[35] Together with more intense international competition, this has been instrumental in boosting productivity growth in manufacturing in the course of the 1990s. Further privatisation should therefore rank high on the policy agenda for public sector reform.

Box 2. Privatisation in Austria

Most central government shareholdings are placed in the OIAG holding company. The roots of this company go back to 1946 with the nationalisation of previously German-held property, which at that time accounted for roughly one-fifth of aggregate output. Originally, OIAG included the lion's share of mining, energy and steel manufacturing besides Austrian Airlines and the Post and Telecommunications monopoly. Some divestments were made in the second half of the 1980s, but a coherent privatisation programme was not initiated until 1993. At that time, and by virtue of a change in its legal status, OIAG was transformed, *de facto*, into a privatisation agency with clear incentives to privatise in order to fulfil its debt servicing obligations. While most of the large holdings in manufacturing were sold or reduced between 1993 and 1996, OIAG retains major stakes in three large conglomerates (Voestalpine AG, BUAG and VA technologie) with a total turnover of € 9 billion and 45 000 employees on the payroll (Table 9). Following a pattern observed also in other countries, privatisation in network industries took longer to get underway and OIAG still has significant holdings in the telecommunications incumbent, in postal services and in Austrian Airlines. In total, OIAG continues to have large shareholdings in companies representing some € 25 billion worth of turnover and with a total staff of more than 100 000 (4 per cent of employees in the business sector). OIAG's average stake in these companies, which account for roughly half the market value of companies listed at the Vienna stock exchange, is 55 per cent. This includes holdings in Telekom Austria (39.7 per cent) and Post Austria (100 per cent), the full divestments of which are imposed under OIAG's current privatisation mandate issued in 2003. Outside of OIAG, the central government also retains full ownership of Austrian Railways and controlling influence in the *Verbund* holding company, the largest supplier and distributor of electricity in Austria. Chapter IV below considers competition issues in network industries.

Table 9. **Public enterprises with central-government shareholdings, 2002**[1]

	Turnover (€ million)	Employees	Government stake
ÖIAG holdings			
of which in manufacturing:			
Voestalpine AG	3 354	17 129	34.7[2]
Böhler-Uddeholm	1 509	9 298	25.0
VA technologie	3 999	18 847	15.0
ÖIAG-Bergbauholding	67	434	100.0
Other industries:			
Austrian Airlines (AUA)	2 172	7 946	39.7
OMV Group	7 736	5 659	35.0
Österreichische Post AG	1 518	30 357	100.0
Österreichische Postbus AG	194	2 953	100.0
Telekom Austria AG	3 944	16 586	47.8
Total	24 493	109 209	
Other holdings			
Austrian Railways	2 100	47 009	100.0
Verbund	2072	2 827	51.0

1. Operating revenue and employees concern 2001.
2. Further privatised in 2003.
Source: ÖIAG annual report, 2001, adapted by most recent events.

III. Issues in fostering labour force participation and employment

Reducing barriers to labour force participation is crucial for raising Austria's growth performance and increasing the capacity of the economy to respond to future challenges, notably in terms of a rapidly ageing society. This chapter considers major issues in this respect, such as policies associated with the recent pension reform and matters relating to female labour force participation. Equally important, a number of specific issues need to be addressed to ensure that labour demand meets supply. In particular, wages need to be sufficiently flexible to adjust to productivity, and non-wage labour cost needs to be reduced. Finally, education and training is increasingly important in a knowledge based society to safeguard high employment levels and boost productivity. There appears to be considerable scope to improve the efficiency of Austria's education system, major aspects of which are considered in the last part of this chapter. A summary of present and earlier recommendations is contained in Box 4 at the end of the chapter.

Reducing hurdles to labour force participation

Pensions

Austria's public pension system encouraged early retirement and discouraged higher labour supply over the life cycle more generally. The system is also fiscally costly. Recognising the threat of demographic developments to the fiscal sustainability of the system, consecutive governments implemented pension reforms for the general scheme for workers and salaried employees (ASVG) in 1993, 1997 and again in 2000. Although containing important elements, these reforms remained partial. Without further action the system was set to come under stress, and steeply rising pension contribution rates would have increased non-wage labour costs with adverse effects on employment. Simulations made by the Pension Reform Committee, appointed by the federal government, indicated that without further reform pension outlays, net of those for civil servants, would increase from 10½ per cent of GDP in 2000 to between 14.2 and 15.6 per cent in 2035, depending on assumed employment rates.[36] Against this background, the government has tabled a far reaching reform, which was adopted by Parliament in June 2003 (see Box 3). The reform marks substantial progress in securing the sustainability of general government finances. Some important elements are still missing, however, and need to be implemented soon.

A key element of the reform is the phased increase – until 2028 – in the number of years that count for the wage base of the pension claim (*Durchrechnungszeitraum*) from the current best 15 years (18 years in case of early retirement) to 40 years. The former regulation favours employees with minimal employment contracts beyond the "best" 15 years relative to those with more steady (full-time) employment. The latter pay *ceteris paribus* greater pension contributions over their life time than the former while both groups receive the same level of pensions. This discourages labour supply over the life cycle. In addition there is an incentive to maximise pension claims by pushing up wages with seniority, with potentially negative implications for the firms' labour demand for older employees. Basing the level of pensions on 40 years of earnings largely removes these distortions. Moreover, strengthening the link between contributions paid and benefits received allows employees to consider their contributions as savings rather than a tax, improving the base for their saving and consumption decisions. The reduction in the annual accrual rate for pension claims reduces incentives to retire early.[37] Both measures combined imply that for a given length of a person's work history replacement rates will be lower than prior to the reform, the more so the more variable the shape of the earnings curve over the life cycle.

Likewise key is the ending of early retirement on account of unemployment, and the introduction of larger discounts for early retirement on account of long insurance histories. Up to now retirement prior to the statutory retirement age has been the rule rather than the exception (see Figure 8 above). As has been argued in previous *Economic Surveys*, income replacement for the unemployed should be dealt with within the unemployment insurance and placement system rather than within the pension system. This preserves incentives to stay in the labour market, while early retirement represents workers dropping out of the labour force and is hard to reverse. Maintaining labour force participation, in turn, can increase the pressure to set wages and employment conditions in a way that accommodates re-employment. Overall, closing the channels into early retirement under preferential conditions is vital to relieving the general government budget and reducing the cost of inactivity to society more generally.

With such reform, care needs to be taken that no other channels into early retirement act as substitutes for those that are being closed. Previous *Surveys* on Austria found that inflow into other types of early retirement increased when eligibility conditions for one particular channel were tightened. While the previous pension reform in 2000 has reduced the scope for this type of substitution by abolishing early retirement on account of disability within the old age pension

Box 3. Pension reform 2003

Parameters of Austria's general public pension scheme for workers and salaried employees (ASVG)

Within the ASVG the size of a pension for the transition year into retirement is determined as follows

B = W * (S + A) with

B = Level of monthly pension;

W = Pension base: average – revalued – monthly earnings over the past 15 years of highest earnings (in case of early retirement: period extended up to the best 18 years);

S = Sum of annual percentage point accruals per year of insured work history, added over 40 years (*Steigerungsbetrag*);

A = Deduction (premium) for every year of earlier (later) retirement than the statutory retirement age; A is negative with early retirement and positive otherwise (*Abschlagsfaktor* or *Zuschlagsfaktor*).

Earnings in the wage base (W) are revalued by a pension adjustment index (*Aufwertungszahl*) so as to express earnings in terms of constant prices. Child care periods without employment increase W by a fixed monthly amount (€ 640 in 2003), for a maximum period of four years per child. In the accruals sum (S) 12 insured months (including qualifying periods) account for 2 percentage points. The accruals sum is reduced by a deduction (A) of three accrual points per year retired earlier than the statutory retirement age (65 and 60 years for males and females, respectively). The maximum replacement rate is 80 per cent of past real wages (W) after an insurance history of 40 years or more. The maximum deduction (A) amounts to 10.5 accrual points or 15 per cent of all accrual points. For each year of later retirement over the regular age S is increased by a premium of 4 percentage points. When a premium is granted the maximum replacement rate is 90 per cent, instead of 80 per cent, of the pension base. Once retired, current pensions are adjusted annually. The size of adjustment is decided by a commission – comprising the social partners, the Ministry of Social Security, Generations and Consumer Protection, the Ministry of Finance, the political parties represented in Parliament, and economic research institutes (*Kommission zur langfristigen Pensionssicherung*) – and has kept pensions growing moderately in real terms.

Pension reform measures

The government's pension reform bill (*Pensionssicherungsreform* 2003), initially faced stiff opposition in the public policy debate. In the process, some provisions were softened. The law came into force in August, and contains the following major elements:

- The accounting period (*Durchrechnungszeitraum*) for the pension base (W) will be gradually increased to the best 40 years of earnings for which contributions were paid (instead of the best 15 years). The extension is phased, with 12 months annually, starting in 2004 and finalised in 2028. The crediting of child care periods in the pension base (W) will rise from € 640 by 50 per cent in 25 years. Times for caring for dying relatives or seriously ill children are taken into consideration in the accruals period (*Familienhospiz*).

Box 3. Pension reform 2003 (*cont.*)

– The annual accrual rate (contained in S) will be reduced to 1.78 per cent (instead of 2 per cent), so that the full replacement rate of 80 per cent of past real wages (W) will be reached after an insurance history of 45 years or more (instead of 40 years).
– Early retirement on account of unemployment will be abolished.
– The minimum age (61.5 for men and 56.5 for women) for early retirement on account of long-term insurance contributions (35 contribution years for both men and women) will be increased in steps until 2017 to the statutory retirement age of 65 for men and 60 for women. Within the transition period, the deduction (A) for every year of earlier retirement will be increased to 4.2 per cent (instead of 3 per cent), up to a maximum of 15 per cent of the pension.
– The premium for later retirement will be increased by the same amount, up to a maximum of 10 per cent.
– Starting in 2004, maximum losses implied by the transition to the new system are capped such that they cannot exceed 10 per cent at the maximum.

Regarding the pensions of tenured civil servants the bill foresees the following steps:

– Extension of the pension base to 40 years (instead of the last salary). The transition period will last until 2028.
– A reduction in the annual accrual rate.
– Stepwise increase in the retirement age to 65 years.
– For civil servants with long-term tenure, early retirement at age 61.5 is only possible with discount.
– Increase of pension contributions by 1 percentage point.
– Increase of the percentage deduction for early retirement from 3 to 3.36 per cent.

system, there is still a risk that the invalidity retirement scheme outside the old-age pension system could act in a similar way. To avoid this, it needs to be ensured that eligibility conditions within the invalidity scheme are strictly conditional on health reasons only and tightly controlled. Moreover, there should be regular follow-up checks of health conditions, and re-entry into the labour force should be required if the degree of invalidity improves sufficiently. Several countries within the OECD follow this standard.[38] Other channels into effective early retirement outside the pension system also should be closed (see further below).

The increase in the actuarial adjustment factors for early retirement on account of long insurance spells is a welcome move towards actuarial fairness. This points to an important option for further developing the public pension system after the present phase of reform. There is no need to restrict retirement to a certain age or contribution period. Instead, a high degree of flexibility in the individual retirement decision could be secured if pension benefits were adjusted such that the expected discounted value of pension income at retirement would not increase with earlier retirement once a minimum pension level is achieved. Actuarially fair adjustment of pension claims would in principle allow employees to determine the length of their working life taking into consideration the trade-off between shorter life-time employment and lower pensions, while securing that early retirement would not raise the fiscal burden for the pension system. Policy makers could define financially viable replacement rates for a certain reference contribution period (such as 45 years), and deviations in both directions of actual contribution periods from the reference period would be associated with the actuarial reductions or bonuses. In practice, widening the choice to employees along this line also requires that the system is set up in a way that allows the insured to identify their claims, given their elapsed employment and contribution histories. This would be facilitated by establishing individual retirement accounts, which would also remove the distortions of the current system in favour of steeper earnings curves over the employment history. The government has expressed the intention to introduce such accounts in the next phase of reform. This should be implemented and associated with actuarially fair adjustment.

Introducing individual retirement accounts would tend to move the system toward a defined contribution system, although it still might have defined benefit elements. Benefits that are unrelated to individual contributions by the recipients are best financed out of general tax revenues rather than wage-based contributions. Hence, the size of redistribution – such as minimum pensions – should be identified and tax financed, to the extent the redistribution is not yet covered by transfers out of the federal budget, in order to promote actuarial fairness and tackle Austria's high level of non-wage labour costs.

Harmonisation across Austria's different public pension schemes is still to be achieved. As has been outlined in Chapter II above, harmonisation of the pension schemes for civil servants with the general pension system for workers and salaried employees (ASVG) should be an important part of public sector reform. While the pension reform law contains adjustments of the system for federal civil servants, harmonisation is not complete yet. The pension systems for the civil servants of the states are not included in the reform and remain dispersed. Apart from the ASVG, which represents the largest part of Austria's public pension system, there are also branches for special occupational groups such as notaries, self-employed and farmers. At present the responsibility for administering the different insurance schemes is split accordingly. This fragmentation is non-transparent and provides incentives to pressure groups to lobby for more favourable benefits – involving state subsidies – for their respective clienteles. Setting the same standards across the different branches of the public pension system is important to improve the efficiency of labour allocation in the economy overall.

Strengthening the funded layer of the pension system

In the public debate surrounding the design of the present reform, transition periods to the revised system have been criticised as too short. However, stretching out the adjustment of the pension parameters too far into the future would increase the upward pressure on contribution rates and shift the fiscal burden to the next generation while reducing incentives to adapt private saving plans. In fact, this is similarly true for the capping of losses that has been legislated over a transitory period. However, efforts need to be made to ensure that efficient instruments are available to support private retirement savings as a supplement to the pay-as-you-go part.

The almost universal coverage of public pensions in combination with income replacement ratios that are high by international comparison have implied that private pension savings are among the lowest in the OECD. In January 2003 a new private pension scheme was introduced that is associated with a tax preference (*Zukunftsvorsorge*). The scheme not only aims to promote private pension provisions but also the Austrian capital market. To this end, the scheme requires that at least 40 per cent of the funds' capital needs to be invested in European countries with a low stock market capitalisation.[39] However, restraining the diversification of pension investments across developed capital markets could increase the risks of Austrian pension fund portfolios. In the same vein, it is conceivable that a boost in the supply of funds would not be readily absorbed by the narrow Austrian market. In the longer run, the provision could also restrain the funds' potential returns and make it more costly to meet the additional requirement that the savers' contributions be guaranteed in nominal terms. Hence, the thin-market provision should be dropped, and broader diversification of portfolios should be allowed as in other countries with large retirement savings. Regulation should allow for maximum returns on assets while at the same time minimising the risks for the long-term solvency of the funds.[40]

The last *Survey* highlighted the adverse implications of Austria's severance pay system for labour market flexibility and described the plans to turn the system into a tool supporting the development of funded company pensions. Meanwhile, the system underwent thorough reform. In the new system (*Abfertigung neu*), which became effective in January 2003, the management of severance pay is attributed to retirement accounts, which are legally independent from the employers (*Mitarbeitervorsorgekassen*) and funded by employers via a monthly untaxed payment of some 1.5 per cent of gross wages. Accumulated entitlements rest in the employee's account until retirement, unless the work contract has been terminated by the employer, which makes cash payments admissible under certain conditions. Upon retirement, employees can either claim a cash payment or convert their entitlement into an annuity. While the former is taxed at a rate of 6 per cent, annuities remain untaxed. Investment rules under this regime are the same as they are for pension and life insurance funds.[41]

Several features of the revised system make it suitable to strengthen the funded pillar of the pension system. In contrast to the former system, entitlements now commence almost immediately (after one month of employment) and are portable across employers. Moreover, eligibility is extended to almost all employees by including the cases where contracts are terminated by the employees, and allowing seasonal workers to accumulate entitlements. These features combined extend employer based savings schemes to the vast majority of employees, independent of their occupation and length of employment spells. Moreover the reallocation of funds via the capital market – rather than the retaining of funds that was widely applied under the predecessor scheme – should improve the role of the capital market in supporting growth. On the other hand, the fact that employees are forced into savings reinforces the need to encourage competition among providers while minimising the risks of insolvency.

Old-age part-time employment and unemployment benefits

As outlined in Chapter I, the old-age part-time scheme (*Altersteilzeit*) has failed to deliver increased hiring of younger people, and has opened a highly utilised and fiscally expensive channel into early retirement outside the statutory old age pension system.[42] While early retirement fell steeply in 2001, when the disability scheme was abolished, inflow into *Altersteilzeit* surged, pointing to a certain degree of substitution between both schemes (see Figure 8 above). This undermines policies to raise the effective retirement age. Accordingly, the government revisited the scheme. From 2004 onwards working full-time during the first years covered by the scheme and ceasing work entirely in the remainder of this period will only be possible if another part-time employee is recruited. Also, financial support is halved without a new recruitment. This change makes it more difficult to enter "full-time" early retirement. However, the reform preserves financial incentives for those who have worked full-time to cut down their number of hours worked. This adverse labour supply effect might also strengthen resistance to reform of seniority wage schedules that would be conducive to higher labour demand. Hence, it should be considered to abolish the *Altersteilzeit* scheme entirely.

Unemployed aged 60 and older enjoy an extended eligibility period for unemployment insurance benefits of 78 weeks (subject to a certain contribution period). This preference, which has been introduced in 2001, is set to expire at the end of 2003. However, new legislation lifts unemployment benefits by 25 per cent for older persons so as to grandfather the termination or phasing out, respectively,

+of early retirement. For similar reasons, this measure should be phased out so that incentives for job search are increased and extending a road into factual early retirement is avoided.[43]

Family support

Family friendly support policies rank high on the government's agenda. Within the OECD Austria is in the top range with respect to resources devoted to child care.[44] In 2002 child care benefits were extended substantially (*Kinderbetreuungsgeld*, KB). The goal was to extend the duration of the benefits by one year so as to widen the parents' choice with respect to the utilisation of child care and make it easier for women to reconcile work and family obligations. As has been argued in the last *Survey*, the impact of the new scheme on female labour force participation is ambiguous *a priori*. On the one hand, higher tax-free earnings allowances raise incentives to expand part-time work. On the other hand, the income effect associated with higher benefits and the extension of the eligibility period tends to reduce labour supply. Prolonged spells of non-participation are likely to make it more difficult from the labour demand side to re-integrate parents into the labour market because of a more profound depreciation of their skills. First empirical evidence suggests that on balance the new scheme might diminish female labour supply by reducing re-entry rates into employment.[45] It is too early, however, to arrive at comprehensive empirical conclusions. The government has therefore commissioned a study to evaluate the impact of the regime shift on labour marker responses.

The majority of childcare benefit claimants is on parental leave, and therefore only entitled to earn up to 15 per cent of the earnings of an "average production employee" (APE), unless their employer agrees otherwise. Alternatively, if the parent gives up employment protection child care benefits are paid up to a ceiling of 69 per cent of APE earnings. If earnings rise above this level, the benefits are not gradually phased out but withdrawn completely. This produces very high marginal effective tax rates providing strong disincentives to expand earnings above the threshold value. Overall, in this case, a second earner with average earnings faces an effective tax rate of 52 per cent, up from a level of some 25 per cent when the parent earns two third APE (Table 10). Hence, the parameters of the system should be reconsidered so as to remove disincentives for labour force participation. One option would be to introduce a part-time work entitlement for parents on parental leave. Moreover, a phased reduction of the child care benefits would reduce marginal effective taxation of earnings.

Fixed costs of work, both monetary and non-monetary, have often been found to be an important impediment to female labour force participation. Fees to be paid for using a child care facility as well as commuting times to reach the facility are arguably the most important monetary and non-monetary fixed costs,

Table 10. **Taxes and benefits for couples with children**

Wage level (first adult – second adult) in per cent of the earnings of an APE	100-0	100-33	100-67	100-100
	Euro			
1. Gross earnings[1]	23 963	31 550	39 938	47 926
	Per cent			
Transfers (relative to gross earnings)				
2. Payments to government				
Income tax	9.0	7.6	8.1	10.6
Social security contributions[2]	18.1	18.1	18.1	18.1
3. Family benefits from government				
Children aged 1 and 4	38.1	28.6	22.9	8.1
Children aged 7 and 9	16.3	12.2	9.8	8.1
4. Total payments to government less family benefits (2-3)				
Children aged 1 and 4	–11.0	–3.0	3.3	20.5
Children aged 7 and 9	10.8	13.4	16.4	20.5
5. Average effective tax rates on second earners[3]				
Children aged 1 and 4		20.4	25.1	52.0
Children aged 7 and 9		20.4	25.1	30.1

1. APE or "average earnings" refer to the annual earnings of an Average Production Employee (APE) in the manufacturing sector. In 2002, these were $23 963 (€ 22 543) in Austria.
2. At the example earnings levels Austrian individuals are below the ceiling for social security contributions (164 per cent).
3. Average effective tax rates are calculated as the difference between the increase in gross earnings, and the increase in net income when a second earner starts work on 33 or 67 per cent of APE, expressed as a proportion of the change in gross earnings.

Source: OECD (2003), *Review of Family Friendly Policies in Austria, Ireland and Japan*, Paris, forthcoming.

respectively, associated with child care. In Austria child-care costs reduce the financial returns to second earners substantially, despite quite generous (means-tested) subsidies for child-care facilities.[46] In line with this observation, for both children aged up to three years and at school age utilisation of childcare facilities is low, standing at 13 per cent for both groups.[47] At the same time, there is a substantial excess demand for child-care facilities for children of the same age groups.[48] The KB does not lower the fixed costs of work, since it is granted unconditionally. Hence, one way to improve the compatibility of work and family obligations would be to devote a larger share of total family benefits in favour of child-care facilities so as to increase capacities and cut commuting times.[49] Giving financial support to the users rather then providers of services would help to improve the efficiency of the child care sector. Reallocating some part of the resources along this line would also help reducing marginal effective tax rates associated with benefit withdrawal when eligibility for KB is exhausted. Moreover, an option to reduce the supply constraints of care for children at school age would be to offer more opportunities for full-day schooling. At present, half-day schooling is the rule in Austria, with the supply of full-day schools being very limited, although progress has been made with respect to all-day supervision at schools.

In the same vein, regulatory issues of labour and product markets also come into play – and often interact – when it comes to reducing the costs of labour force participation of parents with small children. For example, combining child raising and labour-force participation would be facilitated if shop opening hours were further extended. Moreover, the decision on home production *versus* labour-force participation is influenced by the ease with which certain goods or services are available at competitive prices. A large variety of processed food, or a flexible retail system that allows deliveries of products at home as an option stand as examples. In contrast to income transfers, such regulatory measures do not burden government budgets and are beneficial for the economy overall. This reinforces the case that Austria should step up regulatory reform of the type highlighted in Chapter IV below.

Reducing the costs of employment

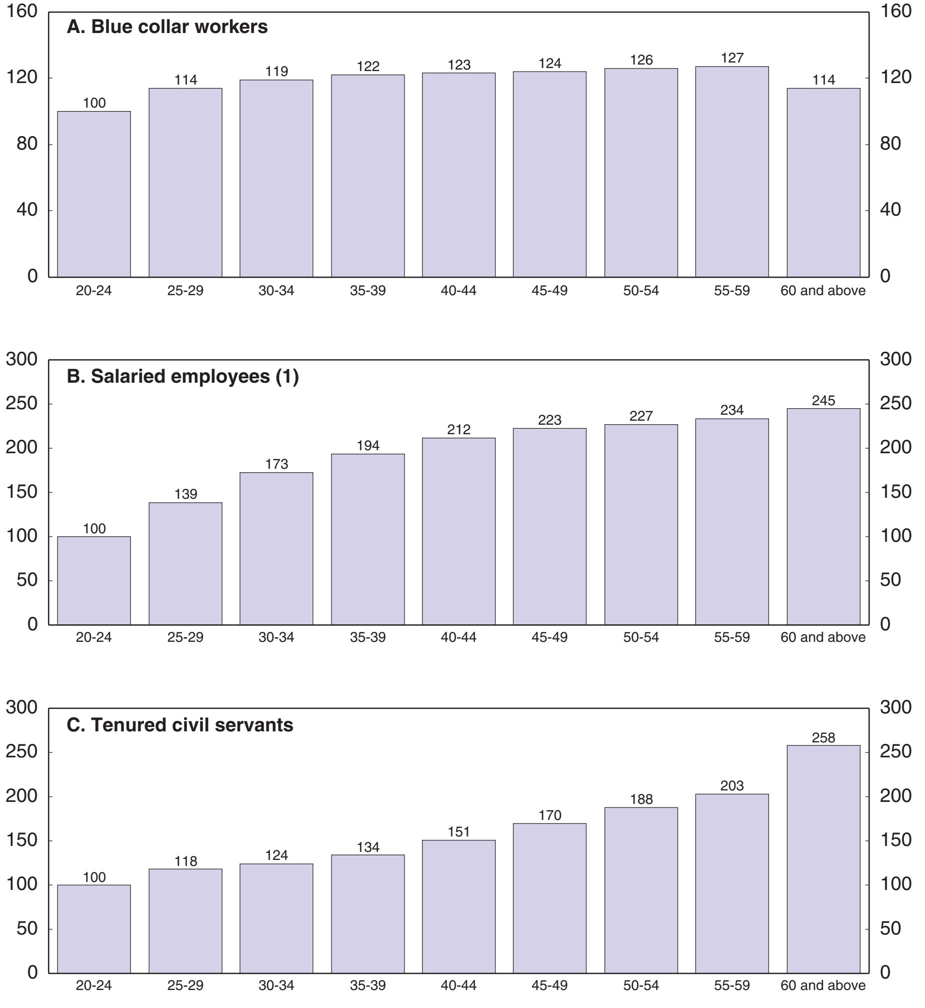
Increasing wage flexibility

Empirical work indicates that real wage flexibility at the macro level is high in Austria.[50] This has helped the economy to accommodate demand fluctuations over the business cycle while avoiding large fluctuations in unemployment. However, both the adaptability of the economy to relative shocks and the employability of certain groups of employees, such as older people, require that relative wages can adjust to asymmetric forces. Several factors indicate that the flexibility of relative wages in Austria on the disaggregated level needs to be improved to increase the adaptability of the labour market to globalisation and technological shocks.

Wages need to adapt better to the age profile of productivity…

Wages in Austria rise significantly with age for both salaried employees and civil servants independent of the productivity level. This is particularly pronounced in the government sector, where per capita wages of employees aged 60 and over exceed the wages of the 55 to 59 year old group by 27 per cent (Figure 15). For both tenured civil servants and salaried employees in the private sector, wage profiles by age are shaped by automatic biannual salary steps that are fixed by ordinance or in collective contracts, respectively.[51] By contrast, in nearly all other OECD countries wage profiles appear to be either less steep or decline in the older-age brackets.[52] To some extent, especially in a structurally stable environment, seniority based wage increases might reflect productivity gains due to experience or support the creation of internal labour markets. However,

Figure 15. **Wage-age profiles for men, 2001**
Age group 20-24 = 100



1. Excludes tenured civil servants.
Source: Statistics Austria.

observed wage schedules in Austria are likely to be biased upward, against higher labour demand for older people. As is well known, regulatory features of labour and product markets can effectively insulate wage setting for certain groups of employees from underlying market pressure. In Austria, tighter dismissal protection for older employees who already have a job, early retirement programmes, subsidised old-age part-time employment and extended unemployment benefit periods for older unemployed are all such insulating factors. Moreover, the fact that the level of pensions is determined on the base of the last earnings in the government sector, or the best earnings within the last 15 years of a person's employment history in the private sector, adds to incentives to push up wages with seniority. Also, as far as the salaried employees in the private sector are concerned, both some degree of substitutability of employment between the government and the private sectors and equity considerations are likely to support a certain spill over of high administratively fixed wage steps from the government sector into the private one. These factors combined might also have adverse implications for the mobility of older employees, in that a change of employer can lead to a partial loss in seniority based remuneration.

To lower labour costs and raise the employability of older people when early retirements are being curbed via the recent pension reform, the government plans introducing a training programme targeted at older workers and to reduce social security charges for older employees (see Chapter II above). Notwithstanding the fact that high non-wage costs have adverse effects on employment, subsidies for this end need to be judged with caution. Indeed, there is a risk that financial support could be counter productive by just adding to the factors that insulate wage setting from imbalances on the labour market. Instead, policies should aim at abolishing the factors that hold wages for older people artificially high. Several recent policy initiatives, such as the extension of the wage base for pension claims, already go a considerable way in this direction. Further reform is necessary, such as revisiting remuneration schemes in the public sector (see Chapter II above). Moreover, the social partners should revise the present system of seniority based remuneration. While some adjustment was made in the past, it remains insufficient. Rebalancing the system in line with demand and supply conditions should not stop short of cuts in relative pay so as to support higher labour demand for older people.

… and to shocks hitting the sectors and companies asymmetrically

Increasing the growth potential of the Austrian economy requires that labour markets are sufficiently flexible so as to support labour reallocations in line with market signals. Empirical evidence suggests that in Austria the distribution of relative wages across sectors is relatively unresponsive to shifts in demand and supply.[53] In the same vein, wage determination appears to have rigid elements when it comes to wage differentiation at the firm level.[54] Collective contracts for about one-third of employees, mainly in the manufacturing sector, determine actual wage increases rather than minimum wages. To give firms some discretion for differentiated wage increases that deviate from such collective agreements, optional "redistribution clauses" were introduced from 1997 on into several collective contracts (*Verteiloption*, VO). Typically, VOs allow some wage differentiation within the firm's workforce, provided there is an agreement between the firm's management and the workforce, and subject to further conditions concerning the total wage bill. For example, the collective agreement for the metal industry of autumn 2002 determines wage increases of 2.2 per cent. The contract's VO allows wage differentiation, provided the minimum increase is 1.9 per cent, and in addition the total wage bill rises by at least 2.5 per cent.

Hence, VOs are exclusively designed for the purpose of income redistribution within a firm's workforce but preclude adjustment of wages in accordance with differential developments in employment conditions and productivity. Quite in contrast, exercising a VO would often raise a firm's total wage bill by more than uniform pay increases, as is the case in the metal industry. Moreover, application of VOs might be hampered by conflicting goals of employers and work councils. For the former, the instrument might be potentially useful to support performance-oriented pay differentiation. By contrast, work councils might be more interested in equalising the wage distribution within the firm, in accordance with a tendency in aggregate collective bargaining outcomes. Accommodating conflicting distributional goals might be costly, however, reducing the attractiveness of VOs for employers further. Not surprisingly, VOs appear to be rarely used in practice, with polls among managers pointing to higher costs and administrative burdens as well as potential frictions within the workforce as main reasons for low utilisation.[55]

Overall, much more should be done to increase the responsiveness of wage setting to market forces. In particular, the VOs should be developed into opening clauses that allow firms to deviate from collectively bargained outcomes in both directions if a plant level agreement comes about between the firm's management and the labour force. Without such agreement collectively agreed outcomes would remain the default.

Revisiting employment protection

OECD indicators, referring to the end of the 1990s, rank Austria about in the middle of the OECD with respect to the strictness of employment protection legislation (EPL). Recent policy initiatives have aimed at increasing the flexibility of non-standard types of employment contracts. Restrictions on temporary employment in tourism and agriculture have been eased, and private job placement agencies are now allowed to act as temporary work agencies. The new severance pay scheme (see above) should also support more flexible labour allocation.[56] The portability of severance entitlements is likely to have a positive influence on labour mobility. Similarly the steady accumulation of entitlements – rather than discrete jumps after a sequence of longer employment intervals –

avoids incentives for dismissals or quits around pronounced hikes of entitlement. Some tightening of EPL has occurred, though, for blue collar workers.[57]

EPL, however, is more stringent, for employees aged 50 and over than for younger workers, as age is one of the social considerations that employers need to take into account in their dismissal decisions. Even if continued employment of an older employee appears to be at variance with business conditions, the management and the work council need to evaluate whether a younger employee could be dismissed instead. This provision may be a significant factor behind the low employment rate of older employees and the high utilisation of effective early retirement programmes within or outside the old age pension system. To the extent that easy channels into early retirement are available the dismissal provision is less binding. This is not true if early retirement is being curbed. Indeed, there is a secular increase in the share of employment disputes ending up in court cases. At the labour court of Vienna – where most cases are negotiated – settlement of about 70 per cent of total disputes were postponed to the next year in 2002, compared to about 40 per cent in 1987. Employment disputes (A*rbeitsverfassungsrecht*) almost doubled from 2001 to 2002, which might be related to the abolition of old-age early retirement on account of incapacity to work in 2001.

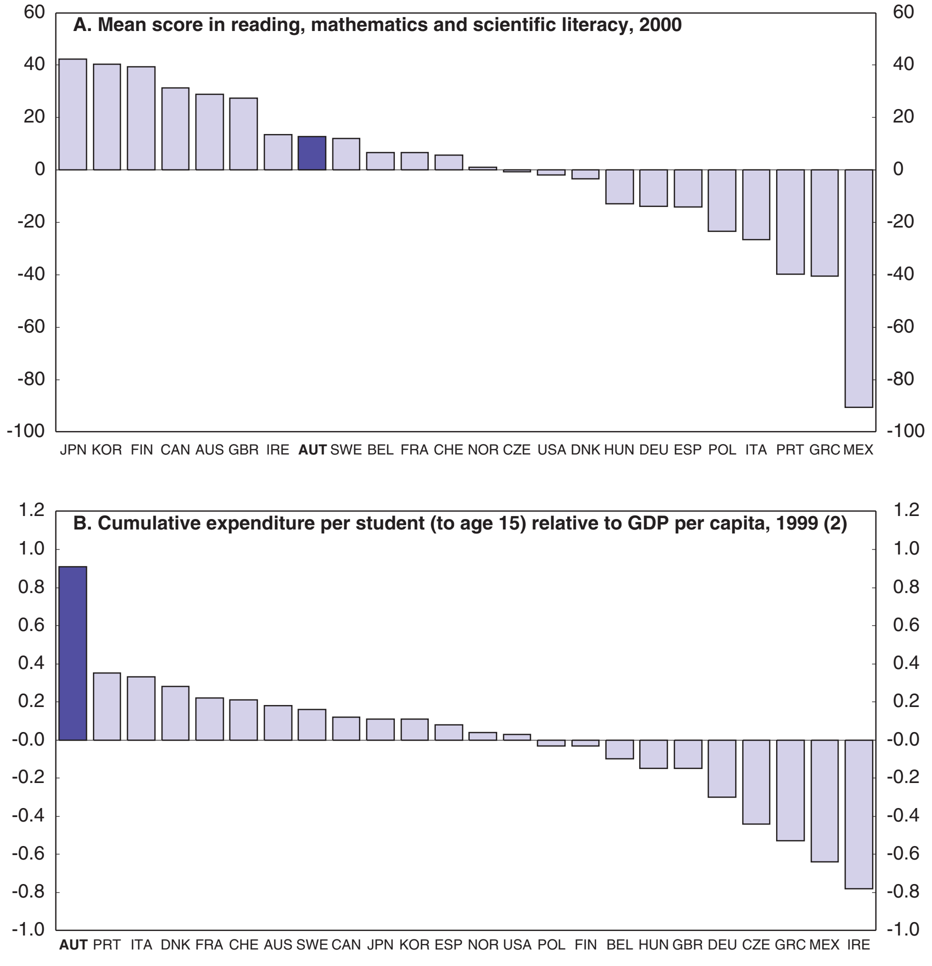
Recent legislation determines that the special dismissal protection of older people starts only after a waiting period of two years of continuous employment after recruitment, instead of six months as up to now. It needs to be seen whether this amendment will help to improve labour utilisation in the older-age bracket. In particular, the extension might be too modest to raise incentives for both employers and employees to engage in training that would lift the workers' productivity. Hence, it might be required further to revise dismissal protection for older people so as to increase the firms' incentives to employ older people. This might also be warranted in light of the tendency towards easier employment conditions for non-typical forms of employment such as fixed term contracts or temporary work. While this is likely to lower the costs of employment adjustments, care should be taken that the burden of adjustment is not concentrated on the group of low qualified "marginal" workers. At the same time the power of "insiders", working on permanent contracts, might increase if they feel more sheltered from unemployment than before.

Strengthening education

In the OECD's PISA study Austria figured above the OECD average with respect to the educational performance of 15 year old students. However, the fact that Austria stands at the top with respect to annual expenditure on primary and secondary schooling indicates that there is considerable scope for efficiency improvements (Figure 16).

Figure 16. **Educational performance of 15 year olds and spending on education**

Deviation from average[1]



1. Average of countries in panels. A positive figure indicates above average.
2. Expenditure on institutions per student from the beginning of education to age 15. Public and private institutions except for GRC, HUN, ITA, PRT, CHE which are public only and USA which is public and independent private only. See PISA source for details.

Source: OECD, *Literary Skills for the World of Tomorrow* – Further results from PISA 2000; *Education at a Glance 2003.*

The PISA study suggests that certain institutional factors are of particular relevance for increasing the performance of schooling while limiting the impact of the students' socio-economic background on attainment. Many of the countries that performed well in international comparison have been shifting education policy and practice from a focus on inputs – the resources, structures and content of schooling – towards a focus on learning outcomes. With this approach schools are given the authority for organising their own programmes and are held responsible for them. Also, in several well performing countries the extent of educational differentiation between schools is limited. There is scope to improve the performance of the Austrian school system on all of these scores. Differentiation of students by school types based on specific levels of performance takes place at younger age and is more pronounced than in some well performing countries. The degree of school autonomy in organising the learning environment differs across Austria, and there is a significant positive correlation between the level of school autonomy and student performance. Also, Austria shows one of the highest variations in school performance within the OECD. First initiatives have been taken to increase the degree of school autonomy, notably in budgeting. While progress has been made to develop quality standards for educational attainment in some areas, mandatory country-wide educational targets against which the performance of schools can be assessed on a regular basis have not been established. Against this background, a commission (*Zukunftskommission*) was set up for the purpose of making suggestions on how to shift the system further from input orientation toward focusing on learning outcomes.

With economies being based increasingly on education and knowledge, life-long learning is gaining importance.[58] In the Austrian context, the potentially beneficial role of life-long learning is reinforced by the prospect of a rapidly ageing society and the desire to increase employment opportunities for both women and persons aged 50 and over. As is apparent from the recent introduction of the general tax allowance for training, improving the skills of the workforce ranks high on the government's agenda, and various programmes are offered by the Ministries of Education and of Economics and Labour for this purpose. However, a number of conditions need be met to secure that resources are spent in an economically efficient way. Knowledge of the effectiveness of the different programmes of adult learning has been up to now rather partial, as evaluation of training and education is sparse.[59] Hence, programme evaluation needs to become a regular tool on which the policy makers' decisions can be based determining in which areas resources should be expanded or reduced. Using vouchers more widely would help in this respect by strengthening the scope for a market mechanism. Moreover, efforts should be made to arrive at a better integration of different training and education programmes. For example, in some instances active labour market programmes on the one hand and upgrade or supplementary education programmes on the other hand provide the same type of training, although the two are handled independently. Labour market programmes are developed and funded in the Ministry of Economics and Labour, and education programmes are funded by the Ministry of Education and the states. Bundling resources and more co-ordinated programme design, based on programme evaluation, is likely to raise the effectiveness of adult training and to generate savings in the general government budget. In particular, more links should be established that provide an option for the unemployed to develop further the skills obtained in labour market programmes by participating in upgrade education programmes.

More generally, the *Zukunftskommission* on education reform should serve as a policy advisory board on how to increase the effectiveness and the range of life-long learning opportunities. The council could be used to improve the connections across various educational paths, and foster co-ordination between the bodies that are responsible for designing and funding adult learning and training. Recent policy initiatives also include the widening of income tax allowances for employees engaging in adult learning. This measure is likely to improve incentives for both employees and employers to invest in training. However, as the expected returns to training depend importantly on the lengths of future employment, it is also necessary to take action of the type addressed in this chapter to lengthen the average period of employment within the overall life cycle.

Box 4. Labour and product market reform – an overview of progress

***This summary reviews progress in labour and product market reform since the Jobs Strategy recommendations were made for Austria in* 1997*. For competition related recommendations see* Box 9 *in Chapter* IV.**

Earlier proposals	Action taken since 1997	OECD assessment/ recommendations
I. Increase wage and labour cost flexibility		
• Encourage wage differentiation, greater plant-level bargaining and opening clauses.	Greater flexibility agreed in some sectors. Changed wage profile for white-collar workers.	Encourage the next step toward genuine opening clauses within the collective bargaining framework.
• Facilitate the employment of older workers and reduce incentives for early retirement.	Subsidies introduced for employment of older workers and fines for dismissals. Relaxation of conditions for part-time pensions.	Encourage wage negotiations which seek to take account of the special situation of older workers. Make unemployment benefits for older workers more closely follow market wages.
	Reduction of social charges for older workers.	
	Severance pay made more employment friendly with monthly payments into retirement accounts.	Monitor the situation.
II. Increase working-time flexibility and ease employment security provisions		
• Reform regulations underpinning inflexible working practices.	Law governing hours of work liberalised allowing more flexible organisation of working time for industries taking advantage of this (*e.g.* metal). Greater flexibility agreed in some collective contracts.	Review effects of regulations and, when necessary, open possibilities for flexible agreements.
• Liberalise terms for renewing fixed-term contracts	Restrictions reviewed and assessed to require no action.	Keep situation under review.
• Facilitate part-time and casual work.	Extension of obligation for employers to pay social security contributions extended to self-employment and to casual jobs. Subsidised training leave targeted more tightly. Restrictions for part-time employment in the public sector eased.	Review the introduction of social security contributions for casual jobs and self-employment with a view to supporting the transition from unemployment to employment. Liberalise restrictions on working time by occupation. Reconsider subsidies for part-time employment of older people.

Box 4. **Labour and product market reform – an overview of progress** (*cont.*)

Earlier proposals	Action taken since 1997	OECD assessment/ recommendations
	Strict dismissal protection (*Kündigungsanfechtung*) for older people valid only after a waiting period of two years.	Consider abolishing *Altersteilzeit*.
• Reform dismissal protection.	Existing regulations eviewed and assessed to require no action.	Keep situation under review.
	Strict dismissal protection (*Kündigungsanfechtung*) for older people valid only after a waiting period of two years.	Relax regulations for older employees.
III. Reduce disincentives for labour market participation; foster job mediation		
• Reduce the incentives for early retirement.	Early retirement restricted. Incentives for early retirement pensions reduced.	Consider further means to curb early retirement in the short term and strengthen longer-term measures (stricter eligibility criteria, higher actuarial discounts for pension benefits). Abolish institutional segmentation of pension system. Reduce replacement rates of the pay-as-you-go system. Replace severance pay by company-based funded pensions.
	Unemployment benefits for older people will be temporarily increased by 25 per cent (*Arbeitslosenübergangsgeld*).	Measure should be phased out soon.
	Unlimited extension of unemployment benefits for participants in ALMPs provided by the PES.	Apply strict criteria for extending unemployment benefits for participants in ALMPs
• Reduce unemployment benefits to seasonal workers in the tourist industry.	Eligibility conditions tightened.	Monitor and proceed with reforms.

Box 4. **Labour and product market reform – an overview of progress** (*cont.*)

Earlier proposals	Action taken since 1997	OECD assessment/ recommendations
• Reduce disincentives to take up work in social assistance programmes and develop in-work benefits.	Unemployment benefits and assistance are now gradually decreased for temporary employment, rather than immediately withdrawn. For unemployment insurance: waiting period introduced, the required minimum employment period lengthened, maximum duration of benefits increased.	To lower marginal effective tax rates at lower income levels, further examine possibilities to raise earnings disregards while simultaneously lowering benefits rapidly as people approach full-time employment. Develop in-work benefits in the context of greater wage differentiation. Widen job acceptance criteria with respect to skills. Abolish extended durations of unemployment benefits for older people.
• Give greater emphasis to active measures and less to passive measures.	Subsidies now paid to employers for employing those on unemployment assistance. For those on leave, a subsidy is paid if an unemployed is hired to fill the job or if training is taken up.	Monitor to see whether the restriction to take on unemployed is administratively feasible and that leave is not abused and becomes costly for the economy.
	Financial aid to firms and the unemployed for training and integrating the unemployed is being expanded. Target groups narrowed for promoted employment in social and health occupations. Subsidies for employment no longer associated with regional infrastructure investment.	Focus the measures narrowly on problem group. Evaluate effectiveness of schemes.
	Temporary work agencies are allowed to conduct job placement and private placement regulations were eased.	Monitor.
	Subsidies for apprenticeship training introduced.	Monitor.

Box 4. Labour and product market reform – an overview of progress *(cont.)*

Earlier proposals	Action taken since 1997	OECD assessment/ recommendations
	Child benefits extended with respect to duration, eligibility and size.	Restructure in favour of child care facilities.
		Better integrate the various employment services, including the provision of social assistance. Introduce contestability of PES-services.
IV. Improve labour force skills		
• Preserve and restore the attractiveness of the dual vocational training system, clarify its relationship to higher education.	Curricula for some apprenticeships revised and new occupations introduced. Health insurance contributions for apprentices waived and work hours of apprentices liberalised. Procurement contracts to be linked to training. Tax break granted and injury insurance contribution waived for companies taking on apprentices. Financial assistance to institutions organising additional vocational training.	Continue to revise vocational training curricula and occupations. Avoid attaching subsidies and procurement to training. In support programmes for youths who have not found apprenticeships, ensure that market forces are important in determining the type of training to be offered.
• Shorten and reform higher education and focus it on more occupational-oriented studies. Extend role of new higher level schools (universities for applied sciences, *Fachhochschulen*).	New university legislation allows for shorter study periods. Tuition fees introduced for students. More output-oriented budgeting being phased in.	Examine potential for moving some study fields to the new institutes of higher education. Shorten higher education and make it more occupationally oriented. Continue with reform of universities. Link funding to performance.

Box 4. Labour and product market reform – an overview of progress (*cont.*)

Earlier proposals	Action taken since 1997	OECD assessment/ recommendations
V. Enhance creation and diffusion of technological know-how		
• Foster venture capital markets and reduce regulatory barriers.	Stock exchange merged with options and futures markets. Vienna exchange now to link with Frankfurt. New single regulator for financial markets. Voluntary take-over code introduced. Programmes to encourage venture capital and business angels.	Lower effective taxation of equity. Widen the potential for investment funds to take equity in enterprises. Focus public financial support programmes on complementing private funding.
• Stimulate the diffusion of technology	Technology package being implemented which seeks to raise level of R&D. Clusters to be promoted in basic research and employment of scientists in industry subsidised. Competence centres being established.	Continue with basic reforms of the university and tertiary sector to encourage greater integration with the economy and increased productivity of research funding.
VI. Support an entrepreneurial climate		
• Facilitate the establishment of new enterprises	Regulations governing commencement of a trade liberalised (*Gewerbeordnung*). Relaxed restrictions on opening large-surface shopping centres to protect local shops. Costs of establishing SMEs lowered.	Continue to examine regulatory impediments and improve procedures especially at *Länder* level. Further liberalisation of trades law and of hours of trade.
	Abolishment of stock exchange turnover tax. Establishment of unified financial market supervisor.	Monitor effectiveness of new institutional structure.
• Reform bankruptcy law to facilitate reorganisation.	Reform to bankruptcy law, changing governance incentives and powers of individual creditors including a lowering of potential personal costs associated with bankruptcy. Re-organisation procedures established with financial sanctions for directors if bankruptcy follows.	Monitor effects of reorganisation law. Consider extending protection to companies under restructuring. Improve discharge procedures allowing faster re-entry to business life of an entrepreneur.
• Planning approval needs to be simplified.	Approval procedures simplified and in some states down to three months.	Monitor the effectiveness of the new procedures and continue reform. Complete the one-stop-shop permission process.

IV. Product market competition and macroeconomic performance

The rate of growth in per capita income in Austria over the past decade or so has been above the OECD average, due notably to a more favourable productivity performance. Stronger product market competition has been instrumental in boosting growth over this period. In particular, preparation for membership of the European Union and privatisation of public enterprises were helpful in promoting competition. External factors such as the opening of the eastern European economies worked to the same effect. However, the boost to productivity growth from these factors is likely to have been temporary. Looking ahead, further strengthening of product market competition will be helpful, and possibly necessary, for maintaining high productivity growth. This may be incited, to some extent, by stiffer competition from EU accession countries. Nevertheless, regulatory reforms targeted at service industries such as distribution and professional services are warranted too. While manufacturing industries have performed well, owing in part to favourable external shocks, the picture is somewhat bleaker for services, where performance was comparatively weak in some industries, including distribution, transport and communications (Table 1 above).

The scope for competition enhancing policies

The aim of this chapter is to assess what role policies that bear on competition have played for economic performance in the past and what potential they may hold for the future.[60] While recognising the progress made on many counts, the analysis seeks primarily to identify areas where policies continue to impair performance, thereby preventing Austria from exploiting its full capacity. The remainder of this section gives a broad review over useful indicators on the stance of competition. Next, the chapter provides a discussion of the effects of international trade and market openness on product market competition over the past decade. Then, the chapter turns to discussing current policies and recent reforms in two areas. The first policy section provides an overview of competition law and enforcement one year after the coming into force of a new legal framework. Next, a review and an assessment are made of regulatory policies towards network industries, the distribution sector and professional services. The concluding section draws these partial analyses together by providing a set of policy recommendations and an assessment of the magnitude of the macroeconomic gains that Austria might realistically envisage by undertaking further product market reforms. Public sector issues – procurement and privatisation – are considered in Chapter II above.

The underlying question that ties together the analyses below is whether the relatively comfortable growth record has occurred because of pro-competitive structural reforms, or rather in spite of the absence of such reforms. As a starting point, a few observations can usefully be made on the basis of available quantitative indicators of the stance of competition such as mark-ups or concentration rates. Separately, these need to be interpreted cautiously and are often subject to considerable measurement problems. Still, when taken together such indicators may convey useful insights or point to areas where further analysis is warranted.

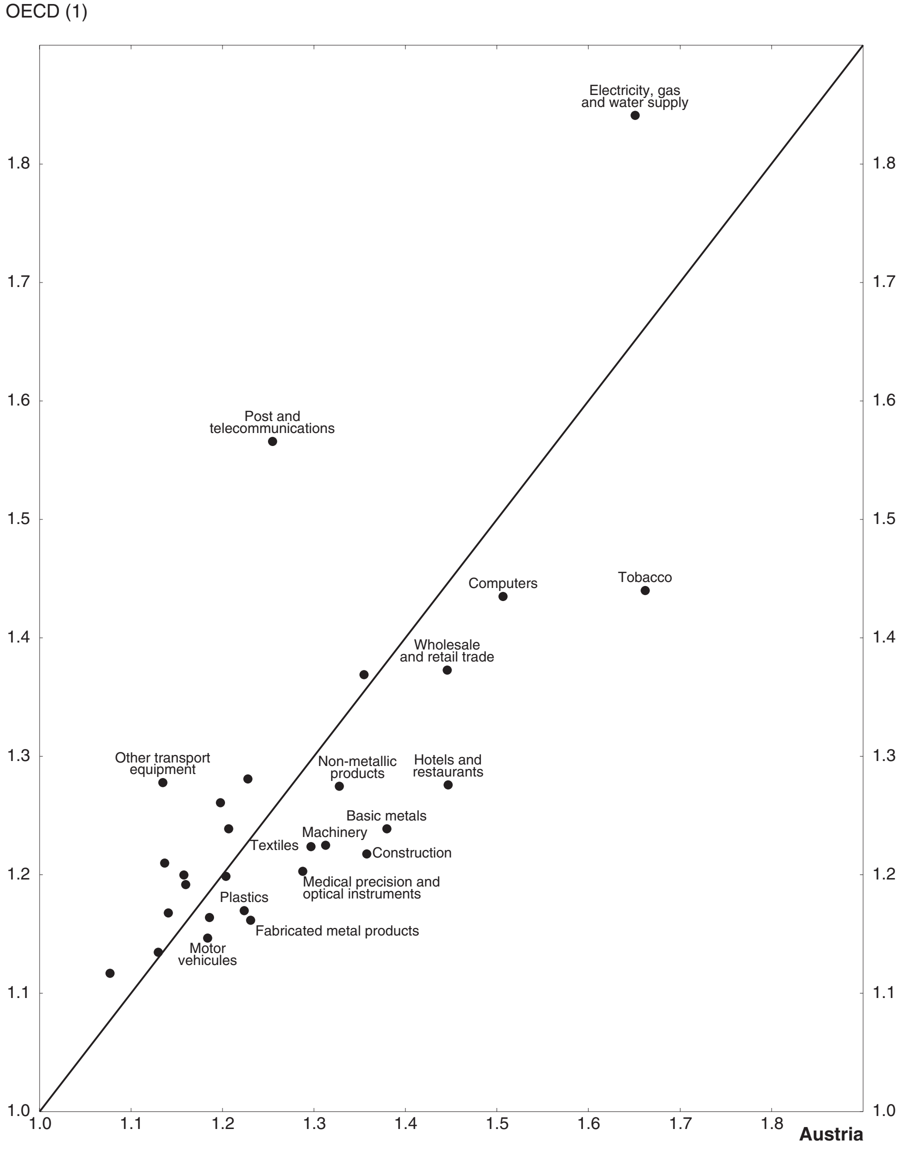
- For Austria, estimated price-cost margins are higher than the average of other OECD countries in some industries, but lower in others (Figure 17). Above-average mark-ups are found mainly in non-manufacturing industries such as retail distribution, hotels and restaurants and construction. In manufacturing, the only sector with particularly high mark-ups is the steel industry, where public ownership has traditionally been high.
- As in other small countries, concentration indices are generally above average, but must be seen together with a relatively high exposure to foreign competition (see next section).
- There is some evidence that firm turnover rates are comparatively low in Austria, while survival rates are unusually high. As this might indicate significant barriers to entry, a separate section in the chapter looks at regulations of trades and services.
- Finally, Austria scores comparatively low on most indicators of innovation activity (Table 11), although this appears mainly to be the result of a low specialisation in high R&D industries (rather than owing to within-sector effects). In any case, for a small open economy such as Austria, it may be more important that adequate incentives exist to adopt new technologies from abroad and, more generally, that diffusion of new technology functions smoothly.

Policies and other forces acting on competition via international trade

The strong productivity performance in manufacturing over the past decade has taken place against the background of fiercer international competition and greater globalisation. The decline in tariff and non-tariff barriers has been comparable to developments elsewhere, and the feasibility, prior to joining the

Figure 17. **Industry-level mark-ups in Austria and other OECD countries**

From 1981 to the latest available year



1. Average of Austria, Belgium, Canada, Finland, France, Germany, Italy, Japan, Netherlands, United Kingdom and United States.

Source: OECD, STAN database. OECD estimates based on the Roeger method.

Table 11. **Specialisation patterns and indicators of innovation in selected countries**

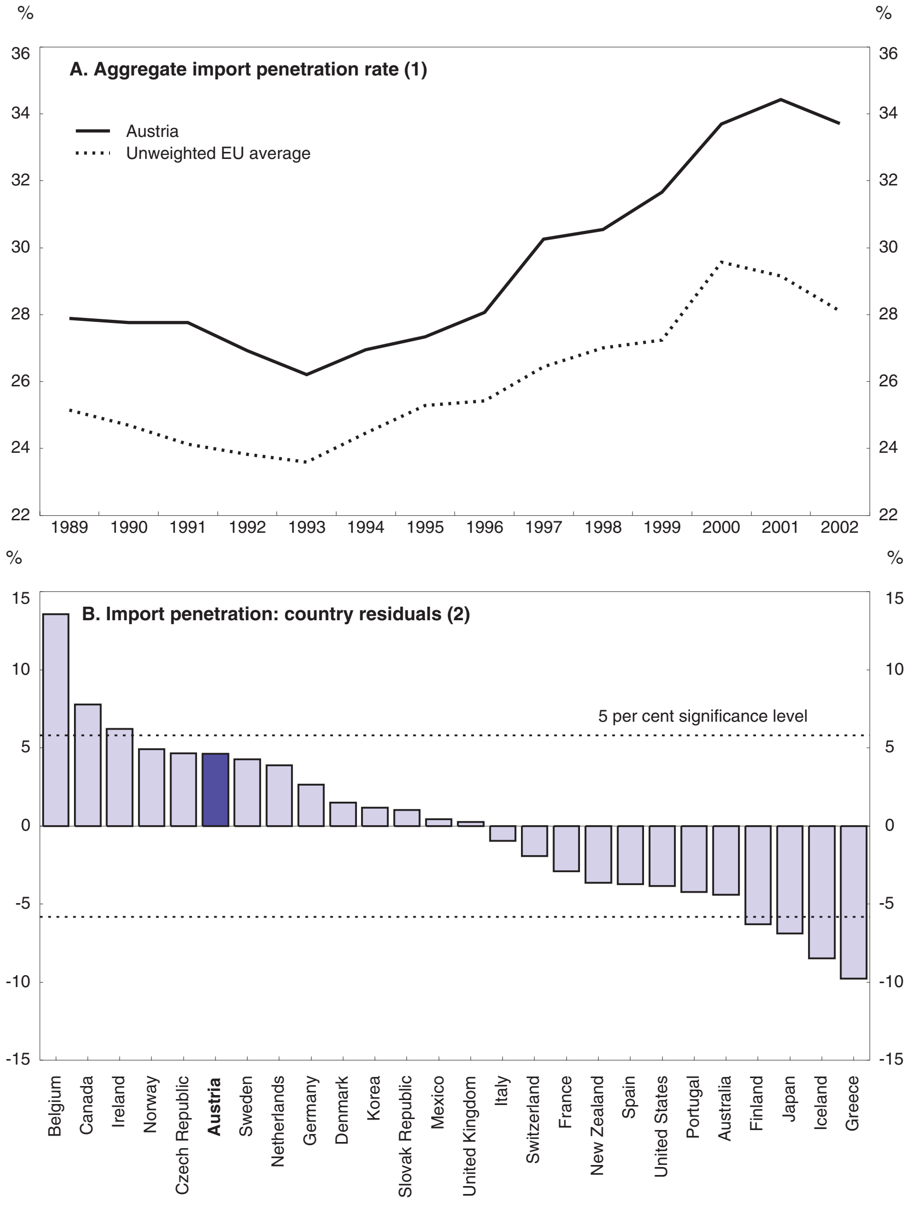
	Austria	Germany	EU[1]	Japan	USA
	Per cent of total value added				
Industrial structure, 1999					
Agriculture	2.3	1.2	2.4	1.7	1.4
Manufacturing	20.7	22.3	20.4	22.8	17.3
Electricity, gas and water	2.6	2.1	2.2	2.9	2.3
Construction	8.1	5.5	5.4	8.9	4.6
Business sector services	45.9	47.5	48.0	42.8	53.9
Distribution	12.7	10.7	11.5	11.3	17.1
Restaurants and hotels	4.0	1.3	2.8		0.9
Transport and communication	7.0	5.8	6.7	6.3	6.7
Finance and insurance	22.2	29.7	27.0	25.3	29.3
Public sector services	20.4	21.5	21.6	20.9	21.3
Indicators of innovation activity					
Investment in knowledge[2]	3.5	4.1	3.8	4.7	6.0
Business sector R&D:					
Expenditure[3]	1.6	2.5	1.8	3.1	2.8
Share of total R&D spending, 2000	40.2	65.8	55.8	72.4	69.3
Output share of high-R&D industries[4]	41.3	55.7	–	48.6	49.6
Per cent of ICT patents in all patents, 1997	4	8	11	19	16

1. The industrial structure pertains to the euro area, excluding Ireland, Luxembourg and Greece.
2. Total investment in higher tertiary education, R&D and software. Per cent of GDP, 1998.
3. R&D expenditure as a percentage of domestic product of industry in 1999 (1998 for Austria).
4. High-R&D industries' share of manufacturing value added. The figures pertain to 1997 for Japan; 2000 for Germany and the United States; and 2001 for Austria.

Source: OECD, STAN database, OECD (2001).

European Union, of unrestricted parallel importing also contributed to market openness.[61] The opening of the eastern European economies has been particularly important for Austria. Estimates indicate a cumulative boost to output of more than 3 per cent over the 1990s, although the long-term effect is likely to be significantly smaller (Breuss and Schebeck, 1999).[62] These gains have come about via lower import prices and higher import penetration. The aggregate import penetration rate rose by 6 percentage points between 1990 and 2002, while the average (unweighted) increase for all EU countries was 3 percentage points over the same period (Figure 18). When adjusted for country size, standards of living and transportation costs, the import penetration rate slightly exceeds the international norm. The comparatively sharp rise in import penetration since 1990 is likely to have been spurred by the preparation for the EEA (from 1993) and subsequent full EU membership, which imposed comprehensive structural reforms over a short period. Starting from a backlog position, Austria caught up considerably on the transposition of internal market directives between 1992 and 1995 (European Commission, 2002a). According to some studies, EU membership boosted GDP growth by as much as ½ percentage point per year in the second half of the 1990s (see for example Breuss, 2001).

Figure 18. **Indicators of market openess**



1. Imports relative to import + GDP.
2. Residuals after control for effects of country size, GDP per capita and transportation costs.

Source: OECD, *Monthly Trade Statistics* and OECD Secretariat.

Thus, there is clear evidence that product market competition was invigorated during the 1990s by closer international integration, to the benefit of consumers. It is not unlikely that the combination of the eastern opening and the EU accession may account for the larger part of the difference between Austria's productivity growth over the 1990s and the European average. It is also possible that the boost to productivity growth from these factors will soon start to peter out, or is already fading. This would be consistent with the observed decline in average annual labour-productivity growth from 2½ per cent between 1990 and 1998 to 1¾ per cent in the four years to 2002.[63] However, this deceleration in productivity growth may be temporary or may reflect factors unrelated to product market competition. Looking ahead, the imminent EU enlargement could stiffen competition from abroad and may induce a further temporary boost to productivity. On the other hand, additional competition-enhancing structural reforms may be required if the favourable growth record of the 1990s is to be preserved in the years to come.

Competition law and enforcement

The most important general competition rules are set out in the Cartel Act and the Competition Act.[64] The former contains all rules on cartels, vertical agreements, abuse of dominance, mergers and enforcement procedures, while the latter contains provisions relating to the Federal Competition Authority (FCA), which was established as part of a new legal framework for competition policy that came into effect on 1 July 2002. This reform has brought Austrian competition law closer to the international mainstream, although certain special features have been preserved.

The institutional settings

The principal responsibility for applying competition law rests with the FCA and the Cartel Court. The FCA is not bound by instructions of the government. The FCA has no independent rule-making powers and it cannot impose fines on its own accord. Instead, the Cartel Court is the court of first instance in practically all proceedings that relate to the Cartel Act. Prior to the reform in 2002 the panels of the Cartel Court consisted of a professional judge and two expert lay judges nominated by the social partners (chambers). Moreover, decisions were strongly influenced by the expertise of the Joint Committee on Cartel Matters, an official advisory committee in which solely the social partners were represented. This dominant influence of interest groups seriously compromised the Cartel Court's impartiality and had become subject to increasing criticism (OECD, 2001a). Following last year's overhaul of competition law, the advisory committee was abolished and court panels now comprise two expert lay judges and two professional judges including the head of panel, who has the casting vote (Table 12).

Table 12. **Competition law enforcement: the institutional settings**

	Federal Competition Authority (FCA)	Public Prosecutor in Cartel Matters (PP)	Competition Commission (CCom)[1]	Cartel Court (CC)
Main functions	Investigate notified mergers and possible violations of the Cartel Act. Start proceedings against offenders before the CC. Co-operate with and support the EC Commission in its own antitrust cases.	According to the Cartel Act the role of the PP is to "represent the public interest in competition matters". The PP is intended a supplementary role only.	The CCom is an advisory body to the FCA in merger cases. Also, it issues annual recommendations on priority areas for the FCA's work.	Court of first instance in all matters of competition law (all CC rulings may be appealed by the FCA, the PP or the companies involved to the Cartel High Court)
Initiating rights	May initiate examination proceedings in all matters provided for by the CC and may appeal CC-decisions to the Cartel High Court.	The PP has the same rights as the FCA to initiate CC examinations and to appeal CC rulings.	The CCom may request the FCA to start examination of notified mergers. While the FCA is not bound to comply with such recommendations, it must make public its arguments for not doing so.	The CC has no rights to initiate proceedings.
Investigative powers	Comparable to international norms. Include requests for information and, where there is reasonable suspicion of an infringement, official searches on business premises based on a CC-issued search warrant.	The PP has no investigative powers of its own, but may ask the FCA to start investigations.	None. Members of the CCom have the right of access to merger notification documents.	Following the Austrian procedural law in competion matters, the court is obliged to participate actively in the fact finding procedure. It can do so by questioning witnesses, appointing an official consultant to the court, requesting the FCA to obtain information and other means.
Decision making powers	None.	None[2]	None[2]	The Cartel Court takes all decisions in subject matters.
Members/staff resources	Some 20 staff.	No staff resources over and above the Public Prosecutor and the Deputy Public Prosecutor.	The CCom consists of eight, in principle independent, expert members. It does not have its own secretariat.	The CC has 6 professional judges. It has formed 5 panels, each consisting of two professional judges (including the court president, who has the casting vote) and two lay judges.
Relationship with policy makers and chambers (social partners)	Fully independent. The Director General is appointed by the government.	Bound by instructions from the Minister of Justice.	The members are appointed by the government, four of which following a proposal by the social partners (one by each of the three main chambers and one by the Austrian Trade Unions' Association).	The chambers of labour and commerce each appoint one lay judge.

1. In terms of competition law enforcement, the role of the CCom is more limited than the roles of the other three bodies.
2. If the FCA and the PP decide, however, not to refer a case to the CC (possibly after having negotiated remedies with the parties to address competitive concerns) the merger is deemed approved.

Source: Stockenhuber (2002), Ministry of Economic Affairs and Labour (2002); Kartellrecht (2002).

The Public Prosecutor in cartel matters (PP) and the Competition Commission (CCom) have supplementary and/or advisory functions. The PP is a legal institution under the Ministry of Justice, and is bound by ministerial instructions. Its main function is to represent the "public interest". In merger cases, for example, if the FCA is prepared to issue a clearance, the PP may request an examination to be conducted by the Cartel Court. The CCom is a permanent advisory body to the FCA with two main functions.[65] The first is to recommend, in an annual report, areas of priority for the future work of the FCA. Secondly, in merger cases the CCom can give recommendations. Most importantly, it may recommend that the FCA initiate an in-depth review at the Cartel Court. While the FCA is not obliged to comply with such recommendations, it must make public its arguments if it chooses not to do so. Notwithstanding the FCA's independence, this intricate system which allocates competencies to several players makes competition enforcement less transparent than in most other OECD countries and may adversely affect its effectiveness, particularly in the area of merger control.

Key features of the legal framework

In its substantive rules, the legal framework for competition policy has converged toward EU law, although material differences remain in a number of areas. The concept of market dominance plays a key role in the Cartel Act (Box 5).

Merger control regulation

The Cartel Court must prohibit mergers, acquisitions, joint ventures and certain other concentrations, which create or strengthen a dominant market position.[66] However, the Cartel Act includes a "general interest" exemption, stating that a merger must be allowed if it leads to "an improvement of the conditions of competition, which surmounts the disadvantages of market dominance" or if it is "necessary for the maintenance or improvement of the international competitiveness of the undertakings involved and is at the same time justified from a national economic point of view". While similar exemptions exist in some other countries' laws, in Austria their applicability has not clearly been established.

The merger review process differs from the international mainstream in two major aspects. First, up to four different bodies may be involved in the first phase review of a notified merger. There is a question whether this institutional set-up results in an efficient use of resources, provides enough opportunity for expedited reviews of uncontroversial mergers, and furthers the goal of greater transparency in the review process. Second, the FCA is not responsible for second phase examinations. While such investigations can be initiated only if FCA or the PP files a request, it is for the Cartel Court to decide how the review process should be organised. Because the Cartel Court does not itself have the resources to carry out in-depth examinations – due to requirements of the Austrian procedural

Box 5. Definition of market dominance in Austria

Abuse of a dominant market position, such as discrimination, predatory pricing or resale price maintenance is prohibited. Market dominance is defined in the Cartel Act by the use of both qualitative and quantitative criteria. A dominant position exists if an undertaking:

- is exposed to no or no substantial competition;
- has, in relation to its suppliers or users, an overreaching market position (economic dependence). Such a situation is deemed to exist if the suppliers or users depend crucially on the maintenance of the business relation with the merging undertakings concerned;
- has, in relation to its competitors, an overreaching market position (dominance);
- if an undertaking reaches one of the following market shares in the whole of Austria or in a smaller relevant market it has to prove that such market dominance does not exist; *i*) a market share above 30 per cent; *ii*) a market share above five per cent and exposure to only two competitors, and: iii) a market share above 5 per cent and belonging to a group of four undertakings with a combined market share of at least 80 per cent.

Only a minority of OECD countries applies explicit quantitative criteria to define – or create (reputable) presumptions of – market dominance. The United Kingdom applies a 30 per cent threshold as in Austria, while Denmark, Sweden and Australia all use a 40 per cent threshold.

law – is part of the standard procedure that the Cartel Court assigns an outside expert as official consultant to the court to provide an expert opinion. The CC can rely on the FCA's expertise only to a very limited extent, primarily because of the rules governing investigations by the CC. It would seem preferable to entrust a more central role during both the first phase and the second phase reviews to the FCA. This would help to build expertise in one single entity and ensure greater consistency and transparency in the review process.

Restrictive agreements

Agreements between competitors that restrict competition are subject to rules which are both detailed and rather complicated. While in principle such agreements and concerted practices are always prohibited, they may be exempted from the prohibition by ministerial regulation[67] or authorized by the Cartel Court upon application. Even hard-core restrictions, such as price fixing and group boycotts are not *per se* unlawful and can in principle in certain circumstances be authorized by the CC. So-called *de minimis* cartels are not prohibited, but can be prohibited upon request.[68] Likewise, agreements and concerted practices that have only the effect (but not the purpose) of restricting competition are legal, unless prohibited by the Cartel Court. The complexity of the law tends to make compliance and effective enforcement unnecessarily burdensome. On balance, restrictive agreements among competitors appear to be treated more leniently than in other OECD member countries.

Since theoretical predictions about the economic effects of vertical restraints depend on the circumstances, it is maybe not surprising that policy differs across jurisdictions. The prohibition principle, supplemented by certain exemptions, has been adopted in EU law and in the majority of EU member states. In contrast, Austrian competition law rests, fundamentally, on the abuse principle. With the exception of resale price maintenance (RPM), in general ties between upstream and downstream firms are allowed unless they are "not economically justified".[69] All agreements must be notified to the Cartel Court (*i.e.* there are no *de minimis* rules) and can be prohibited by the Court upon request of the FCA, the PP, the Chambers and certain other interested parties.

In the past, the obligation to notify was but a formality and virtually no enforcement action took place.[70] The only certain effect of the regulation was to impose unnecessary work and costs upon firms. The FCA recently has begun to review all newly notified agreements and urges modifications in certain cases. Special emphasis is given to automobile distribution as the industry is currently restructuring its distribution system on account of the Commission Regulation (EC) 1400/2002. Generally, firms follow the FCA's requests as otherwise a request for prohibition would be filed before the CC. There is a question whether the current situation in which the FCA reviews all agreements limits the FCA's ability to set enforcement priorities and, more generally, the effectiveness of competition law enforcement in this area. It should be considered adopting a regime that focuses on vertical agreements where at least one party has appreciable market power, as those agreements are most likely to have anticompetitive effects. In this context, approximation of the Austrian rules concerning vertical arrangements to EU competition law rules should be considered.[71]

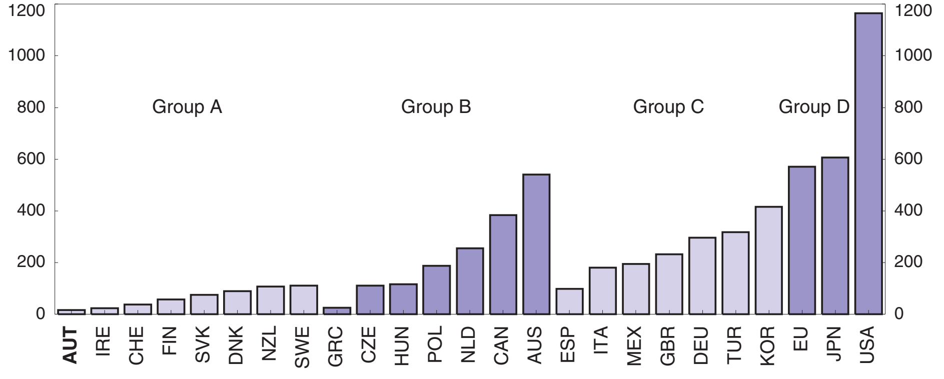
Enforcement

The Cartel Act is subject to various exemptions, which tend to reduce its effectiveness. RPM is allowed for books, art, music recordings, newspapers and magazines. Furthermore, the law is not applicable to state-owned monopolies and affairs under the legal authority of regional governments (except electricity companies). The scope of these immunities is difficult to assess. They appear to be relatively generous by international standards.[72] Some of them, such as those concerning state-owned monopolies and government regulated conduct, appear to be of minor practical importance.

While the FCA is entrusted with standard investigative powers, including on-site "dawn raids," its capacity to effectively enforce competition law remains inadequate. Understaffing is the most obvious short-term problem. With staff of 22 persons, the FCA has fewer resources than competition authorities in virtually all other OECD countries (Figure 19). The lack of economic expertise is of particular concern. At present, almost all activity is reactive rather than proactive, and largely confined to dealing with pending merger cases. The new, more decentralised, EU enforcement regime coming into force as from 2004 is likely to increase the FCA's workload.

Figure 19. **Staff resources of competition authorities in OECD countries**[1]

2001[2]



1. Public resources for enforcement and for development of general competition policy, the figures may include ministry policy office as well as the enforcement office or agency, and may include resources of public prosecutors that are applied to competition enforcement. Countries have been grouped according to population (millions): group A: 0-10, group B: 10-40, group C: 40-100 and group D:+100. Within each group, countries are ranked from lowest to highest staff level.
2. Except Netherlands, 2002.

Source: OECD.

Besides the initiation of investigations on its own, important priorities for the FCA should be to create a public record of its activities and to engage in competition advocacy. Such activity is important in order to promote overall transparency and strengthen awareness about competition issues in the general public and among businesses. However, owing to inadequate resources, the short time that the FCA existed, and an FCA policy to informally resolve cases, these fields have been neglected so far.[73] By way of illustration, the few publications which the FCA has released to date are very general and lack any specific information about competition policies pursued by the FCA that could serve as guidelines to private parties. This applies to the handful of notices concerning cases in which the authority decided to intervene, including recent conspicuous merger cases,[74] but also to the FCA's first Annual Report. No explanatory guidelines have been published.

Criminal sanctions were largely abolished with the recent reform. Participation in bid rigging cartels, however, continues to be subject to criminal sanctions.[75] Financial penalties comparable to those applied in EU law, *i.e.* with a maximum of € 1 million or 10 per cent of total annual company turnover, were introduced instead. The abolition of criminal sanctions followed pressure from business organisations and was justified by the Austrian authorities by the fact that criminal sanctions were virtually never imposed in practice. However, criminal sanctions have proved to be an important element in an effectual overall enforcement regime in some other countries. Therefore, criminal sanctions should be considered for hard core cartels and co-exist with financial penalties. Leniency programmes exist in some OECD countries, offering, on certain conditions, a lenient treatment, and possibly amnesty, to companies or individuals that have been involved in cartels and who approach the authorities with information and co-operate in disclosing such activities. In particular, a leniency programme could impair the stability of cartels and reduce overall enforcement costs, but has been deemed unfamiliar to Austrian legal traditions.[76]

Regulatory policies

With a view to assessing the role of regulatory policies, this section addresses key competition issues in network industries, retail distribution and professional services. These activities account for some 35 per cent of Austria's total value added and 50 per cent of output in the non-agricultural business sector. Compared with manufacturing these services industries have traditionally been subject to more extensive regulation and are much less exposed to international competition.

Network industries

All OECD countries have undertaken regulatory reforms in network industries over the past two decades. There is solid evidence that, most often, such reforms have paid off to the benefit of consumers. However, there are also examples of less successful reforms or outright failures, which demonstrate that careful attention to the design of reforms is key. Austria has fully opened up its telecommunications (1997), electricity (2001) and gas (2002) sectors in advance of the deadlines imposed by EU directives. Likewise, the railway sector will be opened up as of 2003, one year ahead of the EU-imposed deadline.

Separate regulatory bodies have been set up for each of the network industries (energy, telecommunications and railways). Their responsibilities typically include general monitoring of the competitive situation, arbitration of disputes between incumbents and other market participants, setting of network access charges and handling of various industry-specific issues. The application of competition law proper, *i.e.* merger control and antitrust rules, is mostly under the remit of the FCA and the Cartel Court. Regulators, however, can bring actions pertaining to abuse of dominance before the Court. Each of the sector regulators has significantly higher staff levels than the FCA. The legal frameworks under which the regulators operate share some key features. For example, Austria has appropriately opted for regulated third-party access to networks in all areas. The regulators are all independent of the government in their current operations and decisions, but their directors are appointed directly by ministers rather than by a professional board or parliament.

As in other countries, liberalisation has progressed furthest in the telecommunications industry. The incumbent's market share, while still very high, has declined noticeably and new service providers have entered the market (OECD, 2001a). Nonetheless, the telecommunications regulator needs to maintain a pro-active stance, as there remains considerable scope for reducing prices (see Box 8 below). On balance, however, barriers to entry and still-to-be-addressed regulatory issues are fewer, and less significant, than in most other network industries. In the energy sectors, for example, supply structures generally remain characterised by very high concentration and market segmentation, which seriously limit consumer choice. The subsequent section analyses in more detail the state of play in the electricity sector, while the scope for further reforms in network industries at large is discussed in the concluding section of the chapter. The rationale for singling out the electricity sector for a closer review is that, in contrast to gas and railways, some first post-reform experience has been obtained, while, on the other hand, the scope for further policy action is greater than in the telecommunications industry.

Electricity

Starting with the introduction in early 1999 of free supplier choice for large customers, a step-wise reform of Austria's power sector has been implemented in recent years. A new sector regulator, E-Control, was set up at the beginning of 2001. Formally E-Control consists of two different working parts. E-Control private limited company serves as the operating office for the three-member E-Control Commission, which is independent of the government and has been entrusted with considerable strength and jurisdictional reach. The Commission takes the formal decision on network charges, arbitrates disputes between market participants and decides on most issues specific to compensation in the electricity sector. The main task for E-Control plc is to promote competition in the electricity sector. This involves, *inter alia*, ongoing monitoring of compliance with current law, promotion of market transparency and issuing of (or providing input to) new market rules.

The Electricity Act prescribes regulated third-party access. When E-Control started to operate, network charges were very high relative to long-term costs and displayed huge regional differences. At that time the most imminent task for the E-control was therefore to have network access charges reduced. Considerable progress has been made on this count. The average charge has been cut by half and regional disparities have diminished. Nevertheless, network access is still some 50 per cent more expensive than the rates typically seen in other EU countries (Table 13), and further reductions are required.

Full liberalisation of the demand side was accomplished in late 2001, when the possibility to choose supplier freely was extended to all customers. Consumer switching rates have risen gradually since then, following broadly the same pattern as in countries that liberalised the electricity sector earlier. In this process, market transparency has been furthered by easy-to-access on-line price information provided by E-Control. The combined effect of market forces and regulator-imposed lower access charges has resulted in lower prices to the benefit of consumers. Pre-tax electricity prices have declined for all customer groups, from large scale business consumers to households.[77] Between early 1996 and early 2002 prices for small and medium sized business consumers and for households fell by 10 and 45 per cent, respectively (Figure 20). The greater decline for business customers is similar to patterns seen in other countries, although it is more pronounced in Austria.[78]

The full liberalisation of the demand side has not, as yet, been accompanied by any major changes of the ownership structure. Constitutional provisions stipulate that federal or provincial governments must have majority shareholdings in electricity companies, and private investors' voting rights are limited to five per cent of the share capital.[79] These ownership restrictions obviously create high entry barriers and allow public enterprises to preserve extensive dominance at all stages of production and distribution (Box 6), a situation that is unlikely to change anytime soon. At some 65 per cent the market share of the three largest generating companies is high, albeit not above the average of other EU countries. In addition to the high-market concentration, the company structure is tangled into a web of cross-holdings, the federal incumbent having sizeable stakes in some regional utilities and *vice versa*.

The trend towards greater concentration is ongoing, most recently with the agreement on the so-called "Austrian energy solution". This alliance (E*nergie* A*ustria*) is a joint venture between the federal incumbent (V*erbund*) and a group of provincial utilities of their sales and distribution activity *vis-à-vis* large industrial customers. The participating companies' share of total power generation is almost 70 per cent. Since more than one third of the new company's turnover is outside of Austria, the merger falls under the exclusive jurisdiction of the European Commission. The Commission initiated an in-depth examination because it is concerned that the transaction might lead to the creation of dominant positions in several electricity markets in Austria, but ultimately cleared the merger with conditions.

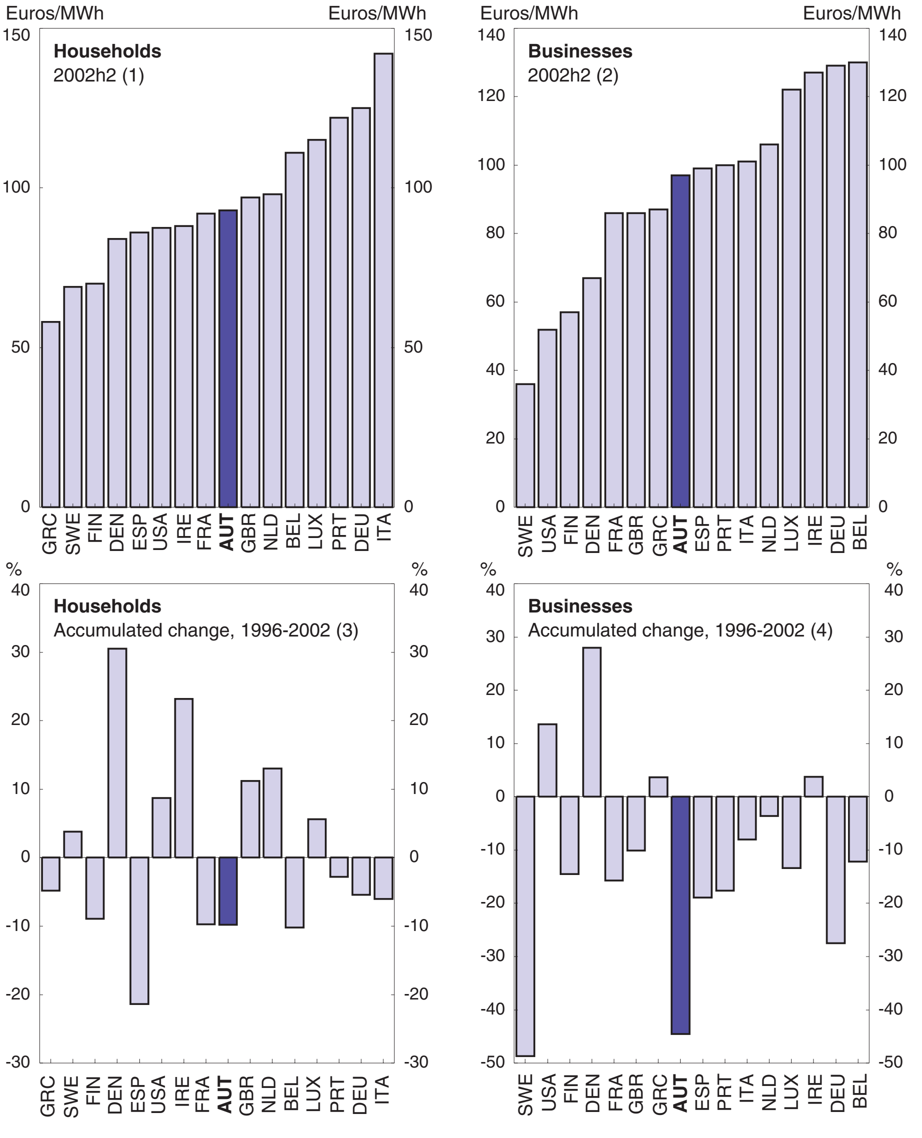
Table 13. **Indicators of regulation and competition in the electricity market in EU countries, 2002**[1]

	Date of full opening of demand	Unbundling		Reserve capacity per cent	Concentration (CR3)		Concentration HHI[5]	Potential competition from imports[6]	Net access charge[7]	
		Transmission[3]	Distribution[3]		Generation[4]	Retail sales			Medium voltage	Low voltage
Austria	**2001**	**L**	**A**	**34**	**45/70**	**67**	**2 028**	**21**	**20**	**65**
Belgium	2003	L	L	2	96	53	6 118	25	15	n.a.
Denmark	2003	L	L	–	78	38	4 018	39	15	25
Finland	1997	O	M	–	45	33	2 472	22	15	35
France	–	M	A	16	92	90	9 606	12	15	50
Germany	1999	L	A	5	64	50	1 756	11	25	55
Greece	–	L	A	7	97	100	10 000	12	15	n.a.
Ireland	2005	L	M	–2	97	90	9 418	7	10	40
Italy[2]	2004	O	L	9	69	72	5 560	14	10	n.a.
Luxembourg	–	M	A	–	n.a.	100	8 158	100	20	n.a.
Netherlands	2003	O	M	7	59	48	1 814	19	10	35
Portugal	2003	L	A	13	82	99	4 008	30	15	n.a.
Spain	2003	O	L	16	83	94	2 466	4	15	45
Sweden	1998	O	L	–	90	47	2 538	29	10	40
United Kingdom	1998	O	L	12	36	42	1 044	3	n.a.	40

1. The information to 2002, except for the concentration rates (2000).
2. The market opening in 2004 concerns non-household customers only.
3. Unbundling concerning operators. A = Accounting, L = Legal, M = Management and O = Ownership.
4. The European Commission's estimate (45 per cent) is too low. The combined market share of the federal incumbent and the two largest regional utilities is approximately 70 per cent.
5. A market is generally considered competitive with a HHI < 1 000, moderately concentrated with HHI < 1 800, and highly concentrated with HHI > 1 800.
6. Per cent of domestic generating capacity.
7. Estimated average charge, €/MWh.

Source: European Commission (2002b); AEEG (2002).

Figure 20. **Electricity prices in Austria and selected OECD countries**



1. Except United States: 2002q3.
2. Except Netherlands: 2001h2 and United States: 2002q3.
3. Changed from 1996h1 to 2002h2, except Sweden: 1996h2-2002h2 and United States: 1996q1-2002q3.
4. Change from 1996h1 to 2002h2, except Netherlands: 2002h1-2001h2, United Kingdom: 1996h2-2002h2 and United States: 1996q1-2002q3.

Source: Eurostat and IEA, *Energy Prices and Taxes*.

Box 6. Electricity market fact sheet

Austrian law requires federal, provincial or local governments to have a shareholding of at least 51 per cent in all electricity producing companies with a generating capacity above 200 kW or with a supply greater than two times their self-generation (OECD, 2002b). Electricity utilities exist at each of the three levels of government. In addition to the majority shareholdings by the respective governments, there are considerable horizontal and vertical cross-holdings.

The largest producer, *Verbund*, operates throughout the country. The federal government holds a 51 per cent stake, while utilities controlled by provincial and local governments own an additional share of 25 per cent. In 2000, the *Verbund* supplied 49 per cent of total generation, the large majority being based on hydro-electric power. The company also owns and operates Austria's high voltage transmission grid. Most of its generation is sold on the wholesale market to provincial utilities, which in turn re-sell this power onto final consumers. However, *Verbund* sells some 15 per cent of its production directly to end customers, mostly large manufacturing companies. Hence, *Verbund* is not only omnipresent geographically, it is also active at all levels of the value chain, except household retailing. The company's different activities are functionally unbundled into separate companies, but these all operate under the *Verbund* holding company structure.

The provincial electricity utilities generated some 40 per cent of the country's total power supply in 2000. These companies also engage in non-electricity activities such as natural gas sales, district heating and transportation. Furthermore, they own a small share of the high-voltage transmission lines and all of the lower voltage distribution lines in their respective territories. Following the liberalisation of demand, five of the provincial utilities formed a strategic alliance, *Energie Allianz*, in 2001. The participating companies have agreed to market their electricity together on the retail market and to work together in the trading on the wholesale market. Retailing of electricity to household consumers is managed mainly by smaller utilities at the municipal level, which also own both low-voltage distribution lines and occasional power stations.

Owing to heavy investment in power generation over the past twenty years and long-term import contracts, electricity supply is abundant in Austria. While minor distribution bottlenecks exist in a few areas (OECD, 2002b), aggregate generating capacity is one-third higher than peak demand. Excess capacity of this magnitude is higher than in most other countries and the implied low capacity utilisation rate tends to reduce capital productivity and might act as a deterrent to entry. There are some150 grid operators, but the ten largest (*i.e.* the Verbund and the nine provincial utilities) own 98.5 per cent of the transmission and distribution system.

The E-Control, too, had expressed its concern. However, although it had raised concerns as well, the FCA did not request that review of the merger be referred to it, by the Commission, even though the potential competition problems pertain only to domestic markets. The FCA justified its decision on the grounds that questions concerning the electricity industry are deeply imbedded in the Internal Market project and that an examination of the case by the Commission avoided speculation of political interference. The merger has strong domestic political support,[80] partly due to a widespread perception in Austria that further consolidation in the electricity sector is vital in order to safeguard the future competitiveness of domestic firms in the liberalised EU market. This is a misguided aim if it leads to higher prices for domestic customers, and it would tend to weaken the competitiveness of other firms. Moreover, if the merger is approved on the basis of a broad definition of the relevant market, E*nergie* A*ustria* might take advantage of its current dominant position in domestic markets to impede entry and prevent the larger market from ever materialising. Thus, there is a risk, at least in Austria, that the liberalisation at the EU level could elicit pressure to cement incumbents' already strong market power.

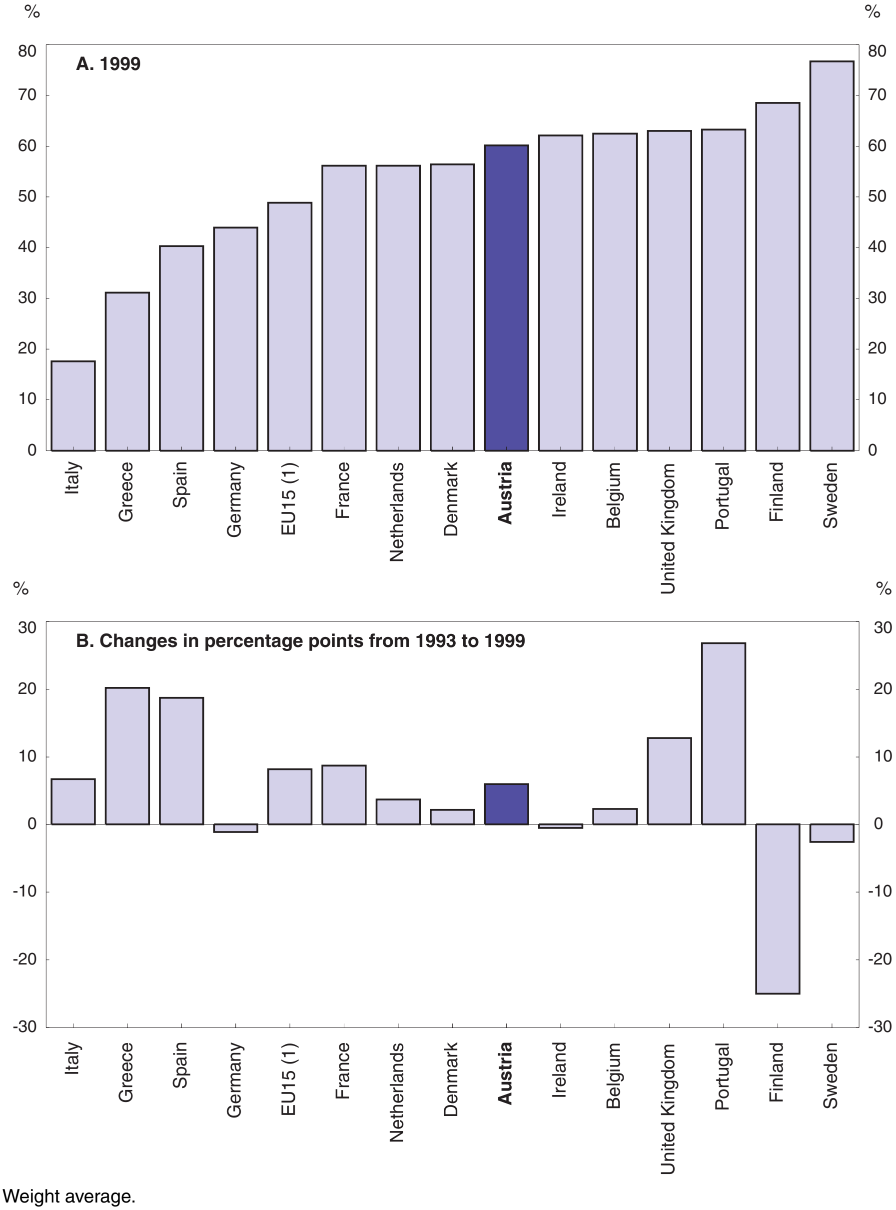
In summary, the liberalisation of demand and the action taken by E-Control have led to measurable benefits for consumers. Nevertheless, network access charges are still considerably higher than the international norm. These high charges are jeopardising competition, since they boost potential entrants' cost level, while making it possible for incumbents to pursue predatory pricing strategies. Little change has occurred on the supply side of the industry, which remains characterised by extensive vertical integration and is dominated by government-owned companies. The scope for cross-subsidisation is considerable and such practices are believed to be widespread (E-Control, 2002). Further reforms are required, aiming, *inter alia*, to ensure greater vertical separation, thereby curbing the scope for cross-subsidisation. This would facilitate a continued reduction of network access charges. Moreover, the current restrictions on ownership and voting rights should be discontinued as they, too, increase entry barriers and undermine those reforms that have been implemented. Unfortunately, concentration in the sector has risen further of late.

Retail distribution

Market concentration has risen considerably in retail distribution over the 1990s (Aiginger *et al.*, 1999), a trend that Austria shares with many other countries. In food retailing, the combined market share of the largest five retail groups grew from 54 per cent in 1993 to 60 per cent in 1999 according to Dobson *et al.* (2001), and it has risen further since then.[81] Among the EU countries, this share is significantly higher only in Finland and Sweden, while it is of similar size in Belgium, Ireland, Portugal and the United Kingdom (Figure 21). In addition to fairly high concentration there is some evidence that mark-ups are comparatively high (see Figure 17 earlier). The high and increasing concentration is driven, in large part, by the mounting importance of economies of scale and scope.[82] Concern has been voiced, for example by the CCom, that weak downstream competition may prevent such benefits from being passed on to consumers, and the FCA has

Figure 21. **Five-firm market concentration in grocery and daily goods retailing in EU countries**

1993-1999



1. Weight average.

Source: Estimates based on data from Corporate Intelligence on Retailing's European Retail Handbook. Reported in Dobson *et al.* (2001).

identified food retailing as a priority area for the imminent future. Increasing market concentration raises other issues as well. In particular, it affects vertical relationships, as the balance of power between suppliers and retailers changes. In cases where suppliers have substantial upstream market power the upshot may be the creation of bilateral oligopoly structures. This may be more conducive to competition than dominant suppliers or retailers, particularly if inter-brand competition between different vertical structures is fierce. By contrast, in segments where large retailers face suppliers without similar leverage in upstream markets, buyer power might be exercised to tie suppliers and squeeze their profitability, and to limit shelf space for new producers, thereby creating or raising barriers to entry.[83]

Austria's distribution sector is characterised by a relatively low outlet density, while the average number of employees per outlet is among the highest in the EU (Table 14). This reflects a very low incidence of small owner-operated shops, which, in turn, may be due to the fact that entry into commerce has been regulated by strict qualification requirements until recently (see later). The low outlet density and high number of employees per outlet might be expected to be

Table 14. **Key structural features of the retail distribution sector, 2000**

	Outlet density[1]	Employees per enterprise	Retail distribution, total value added per employed person[2]	Value added per unit of labour costs[2]	Non-specialised stores[3]: Share of total output in retail distribution	Non-specialised stores[3]: Value added per unit of labour costs[2]
Austria	**43**	**7.7**	**100**	**100**	**20**	**100**
Belgium	80	3.5	100	97	35	111
Denmark	47	8.1	95	101	39	110
Finland	46	5.0	121	112	44	126
France	64	4.2	123	106	37	127
Germany	35	9.0	104	118	33	124
Ireland	36	9.3	87		41	
Italy	130	2.2	75	73	31	92
Netherlands	54	8.5	74	119		
Portugal	150	2.5	40	83	31	114
Spain	133	2.8	68	99	32	123
Sweden	65	4.3	120	90	34	103
United Kingdom	36	14.2	91	126	43	147
European Union	71	6.3	92	102	35	116
excluding Italy, Portugal, Spain	51	7.4	102	108	36	119
Norway	68	6.0	103	100	40	116
Switzerland	56	6.8	91			

1. Number of enterprises per 10 000 inhabitants.
2. Austria = 100.
3. Includes large-format outlets such as hypermarkets and department stores.
Source: Eurostat, New Cronos.

conducive to high productivity. However, productivity appears to fall short of the levels in many comparable countries. Moreover, the prevalence of large-format outlets is remarkably low, and unit costs are high. These features can be traced down to the "non-specialised stores" segment, where productivity is some 16 per cent below the EU average. This loss of efficiency is only partially offset by higher productivity in other parts of the retail sector.[84] An alignment of productivity in retail distribution to top European levels would imply a boost to the level of aggregate productivity of at least ½ per cent and possibly more than 1 per cent.

The likelihood is that the weak productivity performance results directly from prevailing regulatory policies. OECD indicators suggest that, next to France, Austria had the most restrictive regulation of retail distribution in 1998 (Boylaud, 2000) and reforms that have been implemented since then remain incomplete. Both shop opening hours and establishment of large stores are subject to stiff regulations, which should be reconsidered since they impede the development of large-format stores, thereby preventing economies of scale and scope from materialising.[85]

- The setting up of new outlets, particularly large ones, is regulated both by federal and provincial governments, while enforcement is largely with the latter. Of particular importance, the Trade Act prohibits the establishment of outlets with a surface of more than 800 square metres in out-of-town shopping centres if these threaten the "local supply of daily necessities". In practice this has been administered stringently and very few large outlets have been permitted. In part, this reflects the fairly broad range of goods being considered as daily necessities, but it may also be relevant that the social partners, representing incumbents' interests, take part in the decision-making bodies.

- The Shop Closing Act limits shops' maximum weekly opening time to 66 hours per week within certain intervals. The law also stipulates a near-total ban on Sunday trading. These provisions are stricter than in virtually any other OECD country and, as a result, the average effective weekly opening time up to now is the shortest in the EU area (Table 15). Several exemptions exist, though, and it is not surprising that shops for which more liberal provisions apply take advantage of the freedom to expand their product ranges.[86] Moreover, the federal government has recently widened the legal scope for extended shop opening hours. The states can now extend the maximal opening time to 72 hours per week. Clemenz (2002) strongly questions the possible justifications for strict regulation that traditionally have been advanced in Austria. They have not protected small shops, their number being low by international standards, as has already been mentioned. Furthermore, they are unlikely to protect employment, as the experience from countries that have liberalised opening hours mostly indicates a small gain in aggregate

Table 15. **Opening hours in retail distribution in the EU, 1999**

	Average weekly opening hours	Share of outlets open 66 hours or more per week	Maximum weekly opening hours
Austria	**48**	**4**	**66**
Spain	48	6	Variable
Portugal	49	14	variable
Denmark	51	13	–
Italy	53	24	78
Sweden	54	9	No limit
Germany	54	6	70
Netherlands	55	11	No limit
EU average	56	22	–
United Kingdom	57	19	No limit
Greece	57	50	–
Ireland	61	34	No limit
France	61	45	75
Belgium	67	56	91

1. Data for Finland are not available.
Source: European Commission (2000), *European Economy Supplement* B, No. 5. May 2000; OECD, International Regulation Database.

employment. Also, shopping patterns *have* generally responded in those countries, which illustrate the positive effects on consumers' welfare from greater flexibility in opening hours. Even after the most recent reform, opening hours regulations are generally more liberal in neighbouring countries, and while some Austrian consumers can benefit from cross-border shopping, it would be preferable to further liberalise domestic regulations. In the same vein, the Länder should make full use of their option.

The distribution sector is very heterogeneous, and the most pertinent competition issues outside of food retailing may be quite different from those within. In particular, for many high-end consumer goods the balance of power between retailers and manufacturers is often the reverse, *i.e.* strong suppliers facing competitive retailers. Under such conditions, recommended retail prices (RRPs), rather than buyer power, may be the major concern. While resale price maintenance is subject to *per se* prohibition RRPs are generally allowed. In addition, the scope for selective distribution agreements is quite large both in Austria and elsewhere. If RRPs are *de facto* binding, for example because retailers expect sanctions from strong manufacturers for non-adherence, their economic effects are likely to be fairly similar to those of RPM. Evidence from the United Kingdom, Sweden and Denmark suggests that RRPs are widespread and can be costly.[87] For Austria, no information is available as regards the prevalence of – or retailers' *de facto* adherence to – RRPs, but the issue warrants the FCA's attention in the future.

Rules governing the importation of branded goods protected by intellectual property rights (IPR) became less liberal in the course of the 1990s. The scope for price discrimination (whereby manufacturers seek to maximise profits by setting different prices according to local market conditions and income levels) is greater if parallel imports are prohibited. Prior to entering the European Union, Austria had applied the principle of international exhaustion (*i.e.* parallel importing was generally allowed), but now follows the stricter community wide approach of regional exhaustion. The latter implies that parallel importing is feasible within the community – indeed, it is crucial for the functioning of the internal market – but not from non-member countries.[88] All else being equal, this is likely to have increased prices on some branded goods in Austria in the recent past. However, there is no clear evidence that Austrian consumers suffer from systematic price discrimination. Surveys of cross-country differences in prices of branded goods suggest that price levels in Austria are most often quite close to the average.

Regulation in trades and professions

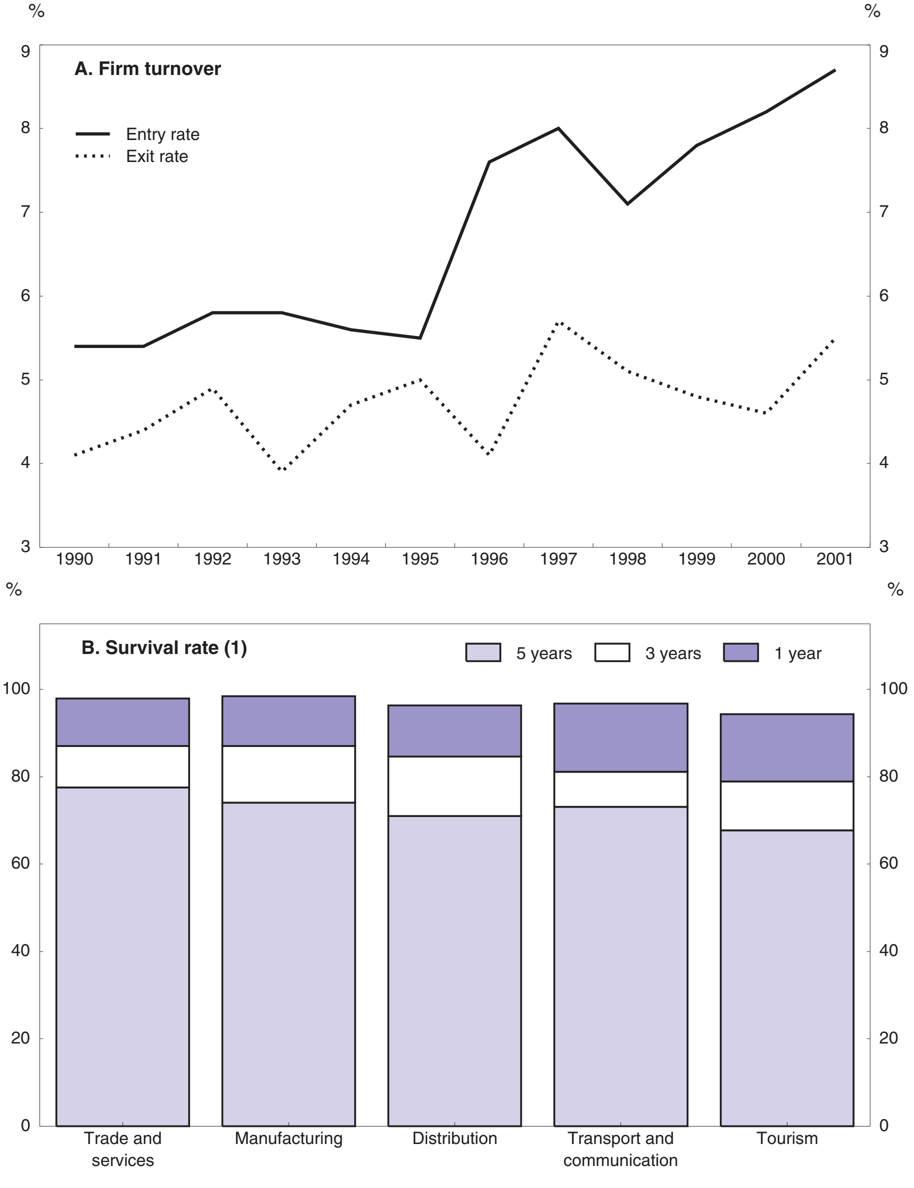
Trades and professions in Austria are subject to a complex set of regulations, comprising both statutory provisions and significant elements of self-regulation. The most conspicuous element of the regulatory framework is perhaps the fact that membership of a Chamber is compulsory for all firms. Another salient feature is the Trade Act (*Gewerbeordnug*), which has its roots in the traditional guild-system. Attempts to assess the Trade Act's scope and significance are complicated by its immense complexity; the provisions are often specific to the individual trades and very diverse across trades. Yet, the code has undoubtedly inflicted significant distortions on competition in the past (OECD, 1990). On the other hand, regulations *have* gradually been eased over the latest decade or so. Most recently, a revised set of rules entered into force in 2002, which eased entry restrictions on a number of counts, particularly in wholesale and retail trade.[89]

One important, quasi-general, feature of the Trade Act is the regulation of entry. In some trades, the eligibility to set up a firm is dependent on the owner having obtained a certificate of qualification. While the list of so-called regulated trades has shrunk considerably over the past decade, certificates are still required in 82 trades, including all crafts. This is likely to impede entry and lead to market segmentation. For example, individual firms are limited in their scope of operations by the owner's certificate of qualification, thereby hampering multi-disciplinary firms from emerging. Qualification requirements may help to safeguard the quality of the services being provided, but the coverage of such regulations should not be broader than necessary, and it would seem more natural if the requirements pertained to employees rather than those of the owner. In the Austrian environment, firm entry and exit rates could be expected to be fairly low. Although cross-country comparison of enterprise turnover rates is subject to considerable measurement problems, the balance of evidence suggests that, indeed, the incidence of firm creation in Austria is low, even though it has risen in recent years.[90] Perhaps more remarkable, the survival rate of new firms is very high by international standards. More than 85 per cent of new firms are still active after three years and 75 per cent survive five years or more (Figure 22). By comparison, the typical five-year survival rate is in the range of 40-50 per cent in most other countries.[91] This difference may have several explanations, but one possible interpretation is that, in combination, high entry barriers and market segmentation has reduced the threat of failure for those who manage to overcome the initial hindrances.

Regulation of liberal professions (*freie Berufe*), such as lawyers, accountants, architects, engineers and doctors, is set in separate laws, and firms operating in these areas are legally obliged to be members of their relevant Chamber. While only few studies are available which compare the regulatory framework for professions with policies in other countries, those that do exist lead to the conclusion that regulations are particularly strict in Austria. Felderer *et al.* (1998) conclude, on the basis of a comparative study of the regulatory regimes for the legal and accounting professions in Austria, Germany, England, Wales and the Netherlands, that in Austria more restrictive rules pertain to both entry conditions and ongoing operations. Barriers to entry arise from the compulsory membership of a Chamber, extensive exclusivity rights and stricter requirements to formal education and practical training. For certain professions (for example architects) the right to practice is limited to some extent by nationality requirements that exclude people without citizenship from an EEA country. Firms' possibility to compete is limited by pervasive price regulation, as recommended fee schedules tend to serve, *de facto*, as minimum prices. Furthermore, restrictions apply to advertising, and co-operation across professions is generally not possible or even prohibited. Finally, firms are generally not allowed to open local branches elsewhere in the country, thereby further cementing market segmentation.[92] As for the institutional set-up, certain regulatory powers have been delegated to the respective Chambers, which thus function both as regulators and interest groups. For example, the Chamber for accountants (*Kammer der Wirtschaftstreuhänder*) is in charge of organising the legally prescribed entry tests as well as for appointments of individuals and recognition of corporations.

The effects of these regulations are apparent in performance. Felderer *et al.* (1998) find evidence of monopoly rents inasmuch as Austrian firms' profitability is higher than in the other countries reviewed. Furthermore, they conclude that scale economies are foregone and that the relative number of practising lawyers and accountants is well below levels elsewhere. The latter finding suggests that these professions may be underdeveloped in Austria due to distortions of resource allocation, and in particular the diversity of services appears overly restricted by the principle of universal personal responsibility, which prohibits cross-sectoral co-operation and specialisation.

Figure 22. **Firm turnover and survival rates in Austria**
1990-2001



1. Per cent of new firms that remain active after one, three and five years.
Source: The Austrian Chamber of Commerce.

The impression of excessive regulation and accompanying adverse effects on performance is corroborated by a study by Nguyen-Hong (2000), which develops synthetic indicators of the restrictiveness of regulations in four professions, legal services, accounting, architects and engineering, for 38 countries. In each of these professions, Austria is found to have the most restrictive policy among OECD countries (Figure 23). Econometric analysis, pertaining to engineering services, indicates that stricter regulation tends to boost price-cost margins, in the case of Austria possibly by as much as 10-15 per cent.

Overall assessment and scope for further action

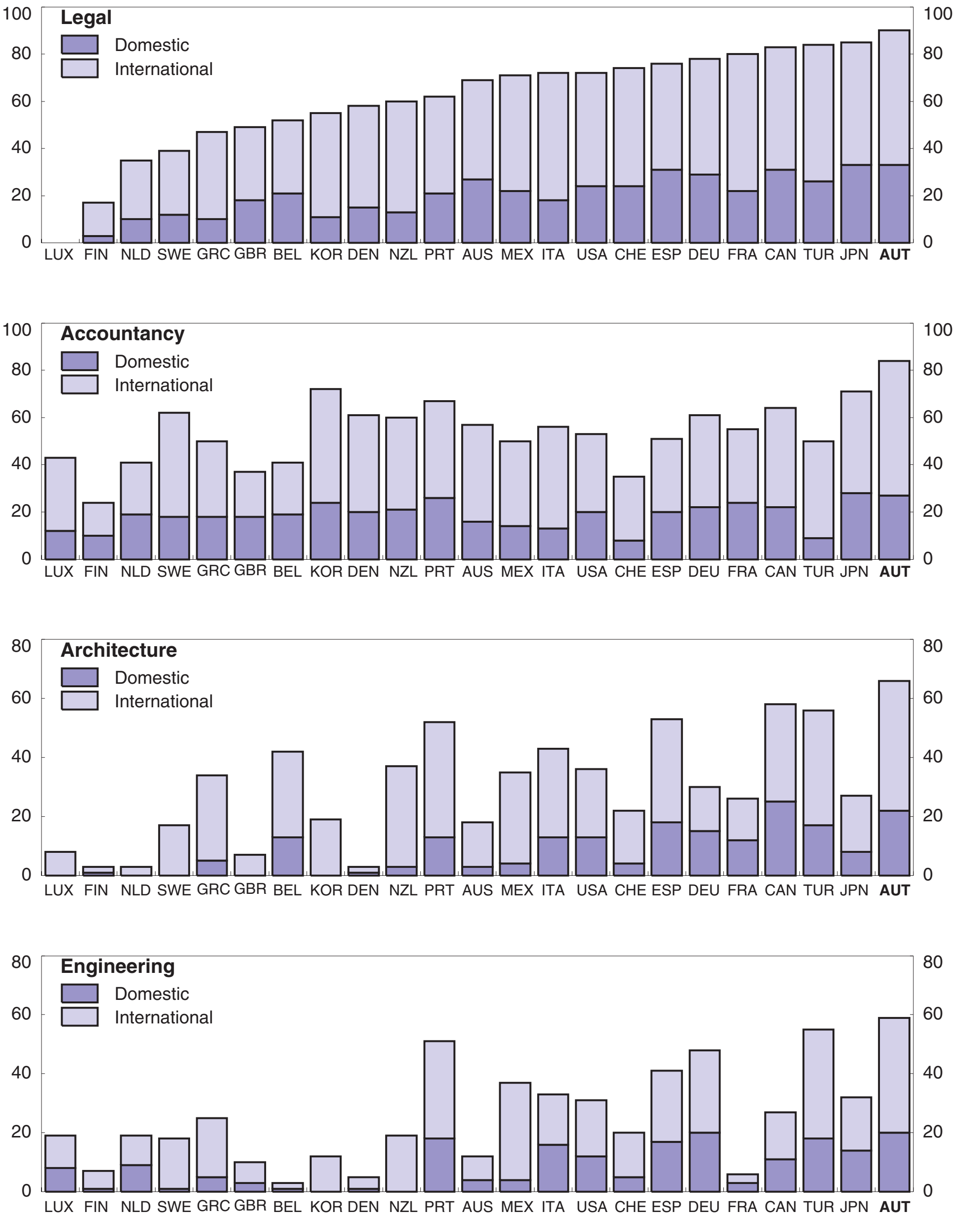
Productivity performance over the past decade has been good, perhaps enviable from some other OECD countries' perspective. Manufacturing industries have performed particularly well, owing to an increasing exposure to international competition and, probably less important, downscaling of the public enterprise sector. The boost to productivity growth from these sources may now be fading, though, and further product market reforms are required for Austria to continue to reap the benefits from increasing competition. On the whole, policy has been brought closer to the middle of the road, but in some areas policy makers have been more reluctant than elsewhere to abandon obsolete regulation that impedes competition. Indeed, the analyses above provide evidence that there is considerable scope for further action in several sectors. Furthermore, while competition law has recently been reformed, the framework now in place does not compare well to average, let alone best, practices and enforcement remains inadequate. This concluding section attempts to quantify potential effects of further reforms and provides a set of recommendations as to the policy changes required for these gains to materialise.

Potential macroeconomic effects from further regulatory reform in selected industries

The way – and speed with which – sectoral regulatory reforms play out for the economy at large depends on many factors (Box 7). While acknowledging the complexity of the interplay, it may be useful to provide some rough indications of the potential aggregate effects of future reforms in the industries that have been reviewed above. At least two, simple, approaches lend themselves to that end. First, synthetic indicators of regulatory stance may be included in regressions of aggregate performance variables. This method is appealing because it does not require any assumptions about the character of reforms. The second approach would be, on the basis of cross-country performance benchmarking, to start out from explicit assumptions about the potential for reforms to reduce price-cost margins and boost productive efficiency and performance.

Following the former approach, some OECD studies have included time series indicators of the regulatory stance in network industries in regressions of

Figure 23. **Regulations of professions: restrictiveness indices for OECD countries**[1]



1. Country order ranked by restrictiveness of legal services regulation.
Source: Nguyen-Hong (2000).

Box 7. Economy wide effects of sectoral reforms

Pro-competitive regulatory reforms in particular industries may improve within-sector economic performance through multiple channels.

- First, they may reduce output prices directly via lower price-cost margins. This, in turn, may diminish the scope for rent-sharing, thereby putting downward pressure on wages in the industries concerned.
- Second, reforms may force firms to reduce slack in the use of input factors (*i.e.* boost X-efficiency), thereby improving labour and/or capital productivity.
- In addition to these static gains a more competitive environment could elicit greater efforts to innovate and adopt new technologies, which would tend to raise productivity growth, thereby increasing GDP per capita.

Attempts to quantify the possible magnitude of reforms' effects on sectoral performance, let alone their timing, are bound to be subject to considerable uncertainty. Assessing the possible effects in a macroeconomic context adds further complications. For example, reduced rent sharing (stemming from lower mark-ups) might have favourable spill-over effects on wage formation more generally. Furthermore, since the corollary of higher reform-induced productivity at the sectoral level is often a reduction of employment, it is crucial for aggregate labour market outcomes that redundant labour be rapidly re-employed elsewhere in the economy. Rigid labour market structures may thwart a speedy adjustment process, thereby leaving aggregate employment at a lower level than prior to reforms. Therefore, economy-wide effects of product market reforms cannot be seen independently of the structural settings in the labour market.

output, productivity and employment. For example, Nicoletti *et al.* (2001) found a significant effect of regulatory reforms on the employment rate in the (non-agricultural) business sector, probably reflecting the fact that reduced wage *premia* in the industries concerned had beneficial second-round effects on wage formation more generally. Reforms undertaken between 1978 and 1998 were estimated to have increased individual countries' employment rates by an average of 1½ and up to around 2½ percentage points. According to this study the pace of reforms in Austria was a bit slower than average, with an estimated reform-induced boost to the employment rate of 1¼ percentage points. As for the regulatory stance in the late 1990s, Austria held a position in the middle. Taken at face value the empirical findings indicate that by moving towards the situation in the least restrictive countries, Austria might envisage an increase in its employment rate by ¾-1 percentage point in the long term.

Following the second approach, Table 16 provides estimates of possible long-term effects on sectoral and aggregate performance of reforms in network industries, retail distribution and professional and community services. The numbers

Table 16. **Assumptions and effects of pro-competitive regulatory reform in selected countries**

	Energy	Post and telecommunications	Road transport and railways	Retail distribution	Professional services[1]	Community social and personal services[2]	Total economy
Assumptions (per cent change)							
Cost of intermediate inputs	0	0	0	–5	0	–5	
Labour costs							
Labour productivity[3]	–25	–5	–10	–10	–10	–5	
Wages[4]	–10	0	–5	0	–10	0	
Capital costs	–25	–10	–20	0	0	0	
Profits	–10	–10	–10	–10	–30	0	
Price elasticity of demand	–0.5	–0.5	–0.5	–0.5	–0.5	0	
Sectoral effects (per cent)							
Direct price effect	–11.0	–6.7	–9.2	–6.5	–7.8	–4.2	
Price-induced output effect	5.5	3.4	4.6	3.3	3.9		
Employment, price induced effect[5]	–19.5	–1.6	–5.4	–6.7	–6.1		
Economy-wide effect on (per cent)							
Producer prices, direct effect	–0.3	–0.2	–0.4	–0.8	–0.3	–0.9	–3.0
Producer prices, total effect[6]	–0.4	–0.2	–0.4	–0.9	–0.5	–0.9	–3.4
Employment (after full labour market adjustment)							0.0
Labour productivity[7]	0.7	0.1	0.5	1.3	0.4	1.1	4.1
Output							4.1
Memorandum items:							
Share in aggregate employment	1.0	1.3	4.8	14.4	3.9	22.6	
Share in aggregate output	2.8	2.5	4.8	12.8	4.1	22.0	

1. ISIC74, other business services.
2. Effects from improving public procurement policies and greater use of competitive tendering.
3. Reduced labour costs due to improved productive efficiency.
4. Reduced labour costs due to reduced rent sharing.
5. Resulting from the direct effect via productivity and the induced (offsetting effect via higher output).
6. Combines the direct effect of the fall in prices of the sector being deregulated with that resulting from the fall in prices in other sectors due to lower input costs.
7. Contribution from each industry to the increase in economy-wide productivity.

Source: OECD.

suggests that the scope for reforms in these sectors could amount to a substantial increase in aggregate labour productivity and decline in producer prices, respectively. The estimates rely on judgmental assumptions about the potential for reducing price-cost margins and increasing labour and capital productivity within each industry, if performance were to be aligned with observed best or average practices. These assumptions, in turn, are based mainly on the empirical evidence presented above (Box 8). The input-output table from 1995 is used to gauge the economy-wide effects. As a simplification, aggregate employment is assumed to be unaffected. On the one hand, this may be a conservative assumption, since, as mentioned above, there is some empirical evidence that regulatory reforms may have dynamic effects that tend to boost aggregate employment. On the other hand, aggregate employment may fall for a protracted period if rigidities in the labour market thwart the reemployment of redundant labour in other sectors of the economy. Overall, it should be stressed, that the effects reported in Table 16 do not take into account that more competitive markets could lead to higher

Box 8. Potential effects of sectoral reforms

Electricity

In the electricity sector network access charges in Austria are roughly 50 per cent above the levels typically seen in other countries, with mark-ups relatively high. While retail prices depend also on technology and other factors, network access charges are an important cost component. Indeed, a simple correlation between network access charges and pre-tax retail prices are consistent with a 1:1 relationship. Finally, the fact that excess generating capacity is substantially higher than in most other countries indicates that there is a large potential for reducing capital costs in the long term.

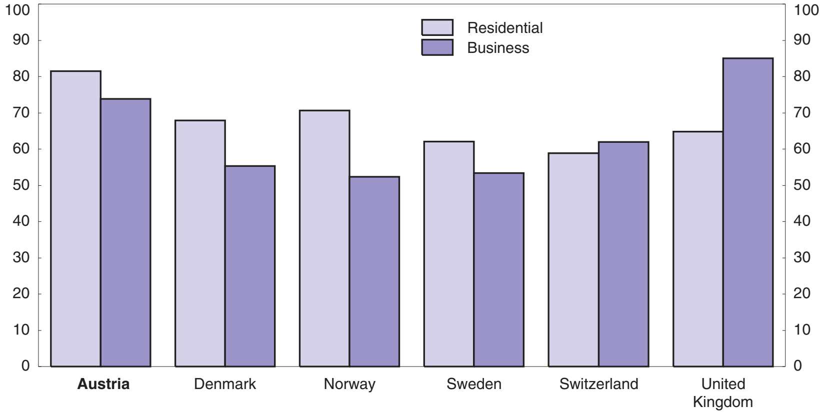
Telecommunications

As emphasised in the previous Survey, Austria was early among the European countries to open up its telecommunications industry. Some market segments, notably mobile telephony, are highly competitive by now and, more generally, prices have converged toward levels in other countries. Nonetheless, the Survey also concluded that for typical baskets of services, prices were above average European levels and much higher than in the cheapest countries. This remains true. In particular, residential price baskets are some 20 per cent higher than the OECD average and more than 50 per cent higher than in those countries where prices are lowest (Figure 24). Available indicators, such as employment levels or the number of access lines per employee, do not suggest that productivity is particularly low. Nor do wage premia appear to be higher than elsewhere. Therefore, high profit rates more than high costs would seem to be the most important factor explaining the relatively high price level.*

Box 8. Potential effects of sectoral reforms (*cont.*)

Figure 24. **Composite basket of telephone charges, August 2002**

OECD = 100



Source: OECD, *Communications Outlook 2003*.

Other industries

Retail distribution in Austria is characterised by comparatively low labour productivity and high price-cost margins. It is assumed, therefore, that productivity could be boosted by 10 per cent and that mark-ups could be lowered by 10 percentage points. As for professional services, it is assumed that average price-cost margins could be reduced by 10 percentage points, which is consistent with the findings of the empirical studies cited above. Performance in the community services industry (public sector) could be improved via reforms that encourage greater use of contracting out and promote competition in public procurement markets. The former could directly boost labour productivity, while the latter might lower the costs of intermediate inputs.

* For more detailed information about price and market trends in the telecommunications industry, see OECD (2002d; 2003a) and European Commission (2002d).

dynamic efficiency; all else being equal, this implies a downward bias in the reported effects. Neither do the figures in Table 16 include the welfare gains resulting from a more efficient resource allocation.

A *menu of reforms*

A summary of recommendations that follows from the findings presented in this chapter is presented in Box 9. Warranted adjustments of competition law include changes of both the merger review process (making the Federal Competition Authority (FCA) responsible for in-depth examinations) and provisions concerning restrictive agreements (repealing notification obligations and focusing on agreements in which firms with significant market power take part). There is considerable scope left for strengthening enforcement: the FCA's resources should be significantly increased; re-introducing criminal sanctions should be considered; and a leniency programme would be helpful. In the electricity sector, current restrictions on ownership and voting rights are a straightjacket on the hoped-for effects of opening demand; hence more liberal entry conditions are strongly needed. Performance in retail distribution would benefit from a full liberalisation of shop opening hours and some easing of large-store regulations. Barriers to competition in trades and professional services, arising from the Trade Act or other regulations, should be removed; there is a need to lower entry barriers (for example easing the current, overly strict, qualification and training requirements) as well as to attenuate regulations of ongoing operations (for example recommended fee schedules and limitations on advertising and co-operation with other service providers). Finally, as considered in Chapter II above, reforms of public procurement policies and continued downscaling of the public enterprise sector would be instrumental in improving Austria's overall performance.

Box 9. **Summary of recommendations**

Recommendation	Present situation	Elaboration
Competition law and enforcement		
Simplify the institutional set-up and strengthen the role of the FCA.	The reform in 2002 was commendable on a number of counts, such as the change in the balance of powers between professional and lay judges in the Cartel Court and the creation of an independent authority. Still, the system now in place is overly complex and the FCA's powers are weaker than those of similar authorities in other OECD countries.	The Chambers' right to nominate lay judges to the Cartel Court should be discontinued. More discretionary powers should be assigned to the FCA with a view to more clearly establishing it as the key antitrust enforcement agency. For example, the Cartel Court's role in 2nd phase investigation of mergers should be transferred to the FCA.
Significantly increase the FCA's resources and strengthen its economic expertise.	The number of staff at the FCA is well below levels in comparable countries' competition authorities and economists are vastly underrepresented.	A doubling of resources would appear to the minimum increase required if the FCA is to adequately attend the responsibilities charged to it. This would still be a low level both by international standards, and taking into account the possible increase in workload when the more decentralised regime for enforcing EU law enters into force in 2004.
The merger control review process should be reformed.	The FCA's influences at different stages of merger control are unbalanced. It can independently negotiate and accept sufficient remedies. In contrast, it can only request the Cartel Court to initiate a 2nd phase examination and its role during such reviews is limited. The overlapping competencies assigned to the Cartel Court, the PP and the CCom tend to weaken the transparency of merger control procedures for the involved companies and reduce the possibility of issuing early clearances in uncontroversial case.	The FCA should have full responsibility for conducting 2nd phase investigations, while a role for the Court in merger control procedures should be preserved by requiring the FCA to bring a case before the Court if it wants to block a merger.

Box 9. Summary of recommendations (*cont.*)

Recommendation	Present situation	Elaboration
Align the treatment of vertical agreements with the mainstream.	All vertical agreements must be notified to the Cartel Court, even between companies with no market power. FCA reviews all notified agreements and urges modifications in certain cases.	It would be more effective to adopt a regime in which enforcement focuses on agreements where at least one party has market power.
Consider reintroducing criminal sanctions against cartel participants.	Criminal sanctions were abolished as part of the reform in 2002 except for bid rigging.	Criminal sanctions have proved to be an effectual deterrent in other jurisdictions. They should be reintroduced and co-exist with higher administrative fines, and should be enforced more stringently than in the past.
Strengthen the role of private action in competition law enforcement.	The legal system makes it difficult to pursue civil action to enforce competition.	The right to bring civil action should be expanded and obstacles for individual litigants should be reviewed.
Consider introducing a leniency programme (LP).	A leniency programme was considered during the preparation of the revision in 2002 of the Cartel Act but was deemed unfamiliar to Austrian legal traditions.	A leniency programme should be introduced. Yet, to be effectual such a programme must be accompanied by more vigorous enforcement efforts more generally in order to increase the perceived risk cartel participants of being detected.
Strengthen competition advocacy.	Competition advocacy is largely neglected, and transparency about rules and established case law is weak.	The FCA should give higher priority to promote awareness about competition policy, for example by issuing guidelines, analytical reports and other material. It should also take pro-competition positions where the government promotes transactions that could lessen competition. More resources are key if this is to be done adequately.

Box 9. **Summary of recommendations** (*cont.*)

Recommendation	Present situation	Elaboration
Electricity sector		
Repeal restrictions on ownership and voting rights.	Government shareholding of at least 51 per cent is required in all electricity companies above a certain size. Private shareholders' voting rights are limited to five per cent of the share capital in such companies.	The restrictions should be abolished with a view to reduce barriers to entry.
Impose sharper vertical separation.	The electricity sector is still characterised by extensive vertical integration. Cross-subsidisation appears widespread and network access charges are high by international standards.	Stricter unbundling requirements in transmission and distribution of electricity would reduce the scope for cross-subsidisation and facilitate a lowering of access charges.
Retail distribution		
Liberalise shop opening hours.	Owing to stricter regulations, average opening hours is lower than in other EU countries. A near-total ban on Sunday trading applies.	All restrictions on shop opening hours should be repealed.
Liberalise large-store regulation	The prevalence of large-format outlets is low by international comparison.	The regulation of large stores should be better balanced between efficiency, consumer welfare and sustainable development.. In general, policy should focus on market dominance rather than on the size of outlets. The formal representation of insiders in decision-making bodies should be abolished.
Trades and professional services		
Repeal anti-competitive regulations in the Trade Act	A pro-competitive step was taken with the revision of the Trade Act in 2002, not least the discontinuation of certificates of qualification in commerce. Still, more than 80 professions still require such certificates, which may prevent firms from offering multi-disciplinary services.	The range of trades requiring certificates of qualification should be narrowed, and the scope for offering multi-disciplinary services should be increased. Regulation that aims to safeguard minimum levels of quality could rely more on other means such as reputation.

Box 9. Summary of recommendations (*cont.*)

Recommendation	Present situation	Elaboration
Make entry easier.	Entry into professions is subject to stricter regulations than in most other OECD countries. There are more extensive requirements to formal education and practical training, and firms are legally obliged to hold membership in their relevant Chamber.	Align educational requirements with the international norm. Entry tests should be managed and evaluated by government authorities rather than by the professions themselves. Make Chamber membership voluntary.
Remove barriers for competition amongst existing firms.	Recommended fee structures, exclusivity-rights, restrictions on advertising and geographical segmentation tend to impair competition.	The scope of such restrictions should be reduced significantly. In particular, trade associations' recommended fee schedules should be prohibited.
Public sector issues		
Strengthen competition in public procurement markets.	National rules on public procurement were introduced in 2002, while enforcement remains with the provinces. There is no tradition for systematically setting objectives, let alone follow up, in this area.	Governments and agencies should set measurable targets for public procurement activity, and economic incentives should be developed, which could encourage managers to meet set objectives.
Further reduce the scope of the public enterprise sector.	Considerable privatisation has taken place in recent years and OIAG operates under a clear mandate to further divest government shareholdings in some companies.	Complete the current OIAG mandate. Then reinvigorate the privatisation programme to include shareholdings in, for example, postal services, the energy sector and in the steel industry.

V. Some aspects of sustainable development

There is growing concern that long-run sustainable development may be compromised unless countries take measures to achieve balance between economic, environmental and social outcomes. This section looks at three issues of sustainable development that are of particular importance for Austria. In each case, indicators are presented to measure performance, and an assessment is made of government policies that affect the issue. The section also considers whether institutional arrangements are in place to integrate policymaking across the different areas of sustainable development (see Box 10). The section first looks at the policies that have been put in place to control emissions of greenhouse gases. It then examines waste management policy. Finally, the section considers trade and aid policies in terms of their ability to help developing countries to achieve sustainable development.

Climate change

Main issues

Man-made emissions of greenhouse gases (GHGs) are widely agreed to have been the principal cause of the increase in average temperatures over the past century. With global emissions continuing to grow, climate change may impose significant costs on the OECD and, especially, non-OECD countries. Austria is participating in international efforts to limit GHG emissions by means of the Kyoto Protocol. Under the EU burden sharing agreement, Austria is committed to reducing its emissions by 13 per cent by 2008-2012 from their 1990 levels (in contrast to the 8 per cent fall for the European Union as a whole). Given the already low carbon intensity of the Austrian economy relative to others, meeting this target could impose large costs on society unless cost-effectiveness is vigorously pursued in this area.

Performance

Greenhouse gas emissions per unit of GDP are well below OECD average and noticeably lower than in most other EU countries (Table 17). This is largely

Box 10. Policy integration across sustainable development areas*

Until the mid-1990s, the integration of environmental policy with economic and social aspects was largely limited to criteria of affordability for enterprises and government. Since then economic analysis weighing benefits against costs has increasingly been used in fields where environmental requirements are costly to the economy, such as waste, or may become so, such as climate change. However, as the analysis is usually controlled by the agency sponsoring the regulation, there could be a risk that the assumptions made can be influenced by the desired outcome. To guard against the possibility of any such practices, the assumptions and methodology applied in these studies should be scrutinized more closely in the existing reviews by independent experts. This would further improve transparency and could result in better assessments of costs and benefits, and thus strengthen the capacity of cost-benefit analysis to serve as a tool for integrating the different dimensions of sustainable development in government decision-making processes.

The Austrian Strategy for Sustainable Development, which was approved by the federal government in April 2002, intends to integrate economic, social and environmental objectives in a systematic fashion. The main goals are to sustain a high level of quality of life both within and across generations, to promote Austria's competitiveness, to preserve living spaces and to foster global sustainability. The Strategy was prepared by a group of representatives from all levels of government, the social partners and non-governmental organisations. This should ensure widespread consensus about the targets. A permanent committee consisting of the same constituencies as those preparing the Strategy will monitor progress towards the stated objectives. However, the measures suggested by the Strategy to progress towards the various goals were not costed and therefore there was no prioritisation based on cost-benefit analysis. In addition, no indication was given on either how to make their financing compatible with the preservation of sound public finances or how to resolve trade-offs between possibly conflicting objectives.

* The sections in this report dealing with climate change, household waste and helping developing countries move to a sustainable development path are inputs into the Organisation's follow up on Sustainable Development as mandated by the Ministerial Council decision in May 2001.

due to the 70 per cent share of hydropower in electricity generation[93] and to the use of biomass which represents 11 per cent of the total primary energy supply in 2000[94]. Compared with the European Union as a whole, the decoupling of emissions from GDP growth has been weak, though emission intensities have fallen at a relatively fast rate in the manufacturing, road transportation and household sectors (Table 18). However, with the rise in activity and consumption offsetting the impact of lower intensities, total GHG emissions rose modestly in the 1990s

Table 17. **Main indicators: climate change**

Indicators of greenhouse gas (GHG) emission intensity, grams of CO_2 equivalent per $PPP of GDP, in 1995 prices

	Total GHG emissions	CO_2 emissions, electricity	CO_2 emissions, transport	Other GHG emissions	Total GHG emissions	CO_2 emissions, electricity	CO_2 emissions, transport	Other GHG emissions
	Level, 1999				Average annual percentage change 1990-1999			
Australia	1 053	370	155	528	–2.07	–0.21	–1.93	–3.24
Austria	**419**	**72**	**91**	**256**	**–1.87**	**–2.75**	**–0.52**	**–2.06**
Belgium	617	97	101	419	–1.36	–2.12	0.16	–1.52
Canada	893	151	193	549	–0.98	–0.12	–0.36	–1.41
Czech Republic	1 058	457	88	513	–3.05	2.55	5.53	–6.93
Denmark	549	194	94	261	–1.64	–1.43	–1.49	–1.85
Finland	652	181	105	366	–1.88	–0.02	–1.29	–2.83
France	416	32	103	280	–1.69	–2.04	0.16	–2.26
Germany	536	169	96	271	–4.00	–3.86	–0.57	–5.05
Greece	813	275	130	408	–0.24	0.07	0.74	–0.73
Hungary	786	250	84	453	–2.33	1.44	0.38	–3.74
Iceland	395	4	88	303	–1.28	0.00	–2.31	0.81
Ireland	694	165	103	426	–4.27	–2.41	0.79	–5.75
Italy	439	105	92	242	–1.05	–0.82	0.37	–1.64
Japan	432	130	82	221	–0.30	–0.03	1.24	–0.99
Luxembourg	344	6	242	97	–11.46	–30.20	–0.45	–18.81
Netherlands	573	138	82	352	–2.38	–1.03	–0.94	–3.15
New Zealand	1 096	92	175	828	–2.28	4.58	0.65	–3.32
Norway	487	4	113	369	–2.54	1.31	–1.53	–2.87
Poland	1 195	481	90	624	–4.96	–6.63	0.50	–4.12
Portugal	540	149	106	285	0.41	2.58	3.37	–1.39
Slovakia	957	200	76	680	–4.47	–1.21	3.13	–5.78
Spain	537	127	130	280	0.41	1.12	1.28	–0.26
Sweden	358	41	112	204	–1.55	0.07	–0.65	–2.30
Switzerland	276	3	79	195	–0.62	–1.96	–0.28	–0.73
United Kingdom	526	132	108	287	–3.66	–5.30	–1.38	–3.61
United States	792	278	196	318	–1.89	–0.60	–1.18	–3.28
OECD total	649	196	140	312	–1.80	–0.98	–0.38	–2.83
EU	506	120	103	283	–2.36	–2.60	–0.16	–2.95

Source: Greenhouse gas emissions: national submissions to the UNFCCC and national publications. Carbon dioxide emission's for electricity and transport: IEA, OECD.

mainly due to a sharp increase in transport-related CO_2 emissions. According to the authorities' business-as-usual scenario, emissions could rise by 6 per cent between 2000 and 2010, by when a 20 per cent reduction would be needed to reach the EU burden-sharing target.

Table 18. **GHG emissions and sectoral indicators**

	Total GHG emissions		CO_2 emissions per Kwh electricity	Manufacturing CO_2 emissions per unit of industrial production	Residential CO_2 emissions per unit of private consumption	Road transport CO_2 emissions per vehicle	Electricity use per unit of GDP	Industrial output per unit of GDP
	Level million tons CO_2 equivalent 1999	Annual average percentage change						
		1990-1999[1, 2]				1990-1998	1990-1999	
Australia	489	1.6	0.4	–0.5	–2.0	–1.7	–0.6	–1.9
Austria	**80**	**0.3**	**–2.5**	**–3.1**	**–4.6**	**–1.8**	**–0.2**	**1.1**
Belgium	151	0.6	–2.0	–1.0	–1.3	0.0	–0.1	–0.3
Canada	699	1.6	0.4	–3.1	–3.4	1.4	–0.6	1.0
Czech Republic	138	–3.4	1.9	–12.6	–11.4	–1.4	0.6	1.7
Denmark	73	0.6	–3.7	–3.6	–5.5	0.5	2.4	0.8
Finland	76	–0.1	–1.0	–5.4	–7.7	–0.6	1.0	2.9
France	549	–0.1	–2.8	–1.5	–1.2	0.1	0.8	–0.2
Germany	994	–2.3	–2.2	–2.7	–5.0	–2.6	–1.7	–0.9
Greece	124	1.9	–1.7	–1.6	8.0	–1.1	1.8	–1.4
Hungary	84	–2.0	–1.2	–13.5	10.0	–2.0	2.7	6.2
Iceland	3	1.1	. .	. .	–8.5	–1.6	2.9	. .
Ireland	65	2.2	–0.6	–11.2	–5.6	3.5	–1.8	5.6
Italy	540	0.4	–1.6	–1.8	0.4	0.4	0.8	–0.4
Japan	1 328	1.0	–1.1	0.7	–2.3	0.1	1.1	–1.9
Luxembourg	6	–6.4	–21.5	–13.8	–1.2	1.0	–11.1	–3.3
Netherlands	218	0.4	–0.3	–2.4	–4.1	–0.2	–0.7	–0.8
New Zealand	76	0.5	5.6	0.3	–3.4	–0.6	–0.9	–1.0
Norway	56	0.9	4.8	–2.0	–7.8	0.9	–3.4	–1.5
Poland	400	–1.5	–3.7	–6.3	15.6	–1.7	–3.0	3.8
Portugal	86	3.1	0.6	1.2	1.9	–0.4	2.0	–1.2
Slovakia	53	–3.6	–2.0	–6.3	–0.4	0.6	0.9	–2.4
Spain	371	2.9	0.1	–1.5	1.9	–0.2	1.0	–0.4
Sweden	71	0.0	1.0	–4.0	–4.1	0.4	–0.9	1.5
Switzerland	53	0.0	–3.8	0.1	–2.5	–0.7	1.9	1.0

Table 18. **GHG emissions and sectoral indicators** (*cont.*)

	Total GHG emissions		CO_2 emissions per Kwh electricity	Manufacturing CO_2 emissions per unit of industrial production	Residential CO_2 emissions per unit of private consumption	Road transport CO_2 emissions per vehicle	Electricity use per unit of GDP	Industrial output per unit of GDP
	Level million tons CO_2 equivalent 1999	Annual average percentage change						
		1990-1999[1, 2]				1990-1998	1990-1999	
United Kingdom	647	–1.5	–4.7	–1.7	–0.7	–0.2	–0.7	–1.6
United States	6 830	1.2	0.2	–5.3	–2.3	1.1	–0.8	1.2
Total of above OECD countries	14 257	0.5	–0.7	–3.1	–1.6	0.1	–0.3	0.1
OECD excluding US	**7 428**	**0.0**	**–1.8**	**–2.0**	**–1.1**	**–0.6**	**0.0**	**–0.6**
EU countries	4 048	–0.4	–2.4	–2.2	–2.0	–0.6	–0.2	–0.5

1. 1995-1999 for Czech Republic; 1991-1999 for Germany; 1992-1999 for Hungary and Slovakia; no data for Iceland.
2. 1991-1998 for Czech Republic; 1995-1999 for Slovakia.

Source: GHG National submissions to UNFCCC, national sources and UNFCCC; carbon dioxide data, IEA; industrial production, private consumption, OECD.

Policies

In June 2002, Austria adopted a Climate Change Strategy which aims to meet up to 80 per cent of the measures needed to reach the EU burden-sharing target through reductions of domestic emissions (Table 19) and the remainder through purchasing project-based carbon credits from other countries. According to a study conducted by WIFO[95] these reductions would be achieved at no net cost to the economy, and would even increase Austria's GDP by 1 per cent. This view rested upon optimistic assumptions, as investments in GHG mitigation, such as insulation and the purchase of more energy efficient durables, were assumed to have positive spillover effects through enhanced technological developments, reducing the cost of the capital expenditure by 30 per cent. Also, changes in behaviour, such as the containment of urban sprawl and the increased use of bicycling and telecommuting, were assumed to occur at virtually no cost. In recognition of the likelihood of costs proving much higher, the authorities have given a greater role to international economic mechanisms, requalifying the 80 per cent threshold for domestic action as a ceiling rather than a floor. In addition, domestic reductions can be substituted by purchases of permits under the EU cap-and-trade regime which covers industrial sectors that account for 40 per cent of Austria's CO_2 emissions.

Without the decision to use more international economic mechanisms, the costs of attaining the burden sharing target domestically would appear, on more conventional assumptions, quite high. For example, a study that took into

Table 19. **GHG emissions by sector: trends and targeted reductions**
Million tons of CO_2 equivalent

	1990	1999	2000	Trend 2010	Targeted emissions in 2010	Targeted reduction	Reduction per cent
Heating and small boilers	14.60	14.89	14.17	14.5	10.5	4.0	–27
Energy production	14.44	12.97	12.18	14.5	12.4	2.1	–14
Waste	6.26	5.31	5.33	4.8	3.7	1.1	–23
Transport	12.32	16.59	17.53	20.0	16.3	3.7	–18
Industry	21.71	22.46	23.15	22.0	20.7	1.25	–6
Agriculture	5.60	4.93	4.81	4.8	4.4	0.4	–8
Fluorinated gases	1.74	1.60	1.74	3.0	1.8	1.2	–40
Other	0.97	0.95	0.84	0.8	0.7	0.1	–12
Total	77.64	79.73	79.75	84.4	70.5	13.85	–16
Projects in foreign countries						3	
Net total (Burden Sharing Agreement)					67.5	16.85	

Source: National authorities.

account both the capital and running costs associated with induced changes in behaviour implied that meeting the target domestically would require a carbon price of € 225 per ton given the sectoral distribution of the cuts and the sectoral cost curves.[96] Such a price is more than three times the value recommended by the European Commission for use in cost-benefit studies (€ 73 per ton of carbon) and ten times higher than the estimated price of carbon if permits were to be traded on the international market.[97] If the same carbon price were applied in all sectors the marginal cost would fall to €180 per ton of carbon, putting the total minimum cost of attaining the target through domestic reductions at around 1 per cent of GDP.[98]

According to the Climate Change Strategy, improved energy efficiency should be the single most important contributor to reducing GHG emissions in the coming ten years. This is to be achieved by increasing subsidies that provinces allocate for this purpose at the expense of other housing subsidies.[99] The choice of subsidies to mitigate emissions from residential heating is likely to be sub-optimal. Government-administered investments in private buildings are unlikely to be allocated in an optimal fashion, and static energy savings by investments in energy efficiency can be partially offset by the "rebound effect" as people are likely to choose a higher ambient temperature when net heating costs are reduced.[100] An alternative would be to raise taxes on heating fuels, exploiting the current under-taxation of fuel oil and natural gas relative to electricity.[101] This would create an incentive for owner-occupiers to invest in insulation and more efficient appliances, but would require changes in rent-control laws to enable landlords to recuperate investment costs from their tenants.

With nuclear power prohibited since 1978 and opposition to new large-scale hydropower projects, the Climate Change Strategy in combination with the EU directive on renewables has sought to reduce GHG emissions in electricity generation by expanding renewable energy. The main objectives are twofold: a minimum 9 per cent of small hydropower in electricity supply and a gradual increase in the minimum share of non-hydroelectric renewables such as biomass, wind and photovoltaic from 1 per cent in 2001 to 3 per cent in 2005 and 4 per cent in 2008 and the support of combined heat and power plants for public district heating. Although the recent decision to equalise guaranteed feed-in tariffs for renewable energy across regions is likely to reduce the economic costs associated with this form of energy, the abatement costs per ton of saved carbon are likely to be substantial. According to a green tax reform adopted by the Austrian parliament in June 2003, taxes on fuel oil and natural gas will increase significantly on 1 January 2004, by 42 per cent and 51 per cent respectively. Coal will be taxed as from the same date in order to prevent coal from substituting for other energy sources. These changes will reduce the distortions in the taxation of energy inputs and benefit carbon mitigation.[102] However, the energy tax creates no marginal incentive at all for energy-intensive industries since the payments are capped at

0.35 per cent of the net production value. In the longer term, the prospective emissions trading regime in the European Union could constitute a valuable framework for tackling emissions at a low cost.

Austria's Climate Strategy aims at reducing emissions from the transport sector by various measures, including prevention of traffic through urban planning, subsidies for investments in the railway infrastructure, increases in mineral oil taxes and tolls. The focus is on urban planning and the expansion of the railway network rather than increasing the use of economic instruments to encourage abatement. If the mix of instruments in this sector were to succeed in attaining the targeted emission reductions, it would most likely accomplish that in a costly way. Conventional models suggest that to achieve the desired reduction in transport emissions the implicit price of carbon would have to rise by € 460 per ton,[103] exceeding costs in other sectors of the economy.[104] However, urban planning and transport investment are not exclusively undertaken for the purpose of pollution abatement and thus give rise to additional benefits.

Conclusions

Austria has a relatively low level of GHG emission intensity but is committed to an ambitious target of emission reductions by 2010. If these goals are to be met economically there will be a need to establish regular monitoring programmes that focus *inter alia* on costs. Official economic studies seem to underestimate the actual costs of reducing emissions that could prove sizeable unless more care is taken to favour the lowest-cost options. Emission reductions in the housing sector could be pursued in a cost-effective way by increasing tax rates on heating fuels and allowing market forces to determine investment in energy efficiency but this would require a change in rent-control laws. Policy should also rely more on market mechanisms in the power sector and in industry, two sectors where fuel taxes are a long way from pricing GHG emissions and where abatement costs are likely to be comparatively low. A quick start is needed to put the administrative infrastructure in place necessary to ensure that the prospective EU trading regime can be operated as from 2005. The price of carbon apparent from the trading schemes should then be used to set the level of efforts in non-covered sectors, notably transport, in order to avoid excessive discrepancies in the respective marginal costs of emission reductions and the associated inefficiency.

Improving the management of household waste

Main issues

If mishandled, the disposal of waste can cause long-lasting damage to ecosystems and to human health that is reflected in negative externalities from leakage to aquifers and surface waters from landfills, amenity costs and greenhouse gas emissions. The federal government has introduced stringent environmental regulations on landfills and incinerators and promoted recycling and energy recovery through a mix of taxes, mandates and voluntary agreements. High recycling and recovery rates have been achieved and have contained volumes going to landfills in spite of a continued rise in waste production. The main concern in this area is to keep costs in balance with the environmental benefits and to reap efficiency gains in waste collection and treatment.

Performance

The generation of municipal waste is slightly above the OECD average both per capita and relative to private consumption (Table 20). In the 1990-2000 period, the quantity of waste from households and similar establishments generated per inhabitant grew approximately proportionally to GDP. While the growth in household waste may in part reflect an increase in the number of households, there are thus no signs of decoupling of waste generation from GDP growth. Between 1990 and 1999, the proportion of waste going directly to landfills was reduced from 63 to 29 per cent through large increases in the shares of recycling, composting and energy recovery (Figure 25). Consequently, the weight of municipal waste ultimately landfilled, including residues of treatment and incineration, was reduced in the period 1990-1999 at an annual average rate of 4¼ per cent. Two-thirds of packaging materials were recycled in Austria in 1997, a recycling rate second only to Germany amongst EU countries.[105] Recycling rates are particularly high for some materials, reaching 84 per cent for glass in 2000.[106] In the area of industrial and construction waste, an important development is the rapid increase in recycling demolition waste from 45 per cent in 1995 to 80 per cent in 1999, representing an annual saving of landfill capacity equal to twice the volume used for household waste.

Policies

Waste management is an area of competence for both the *Länder* and the federal government. The federal government has full responsibility for policies regarding hazardous waste while the management of non-hazardous waste rests primarily with the lower levels of government. However, the federal government may act in the area of non-hazardous waste when there is a need for uniform legislation and has, in practice, played an important role in shaping waste policies. Legislation follows a hierarchical approach giving priority to avoidance, re-use and recycling over incineration and landfill.

Following the discovery of contamination flowing from landfills to a major reservoir,[107] safety and environmental regulations concerning landfills were considerably tightened in the 1990s. As a result, the number of operating sites fell from 121 to 53 between 1993 and 1999. The remaining capacity however seems

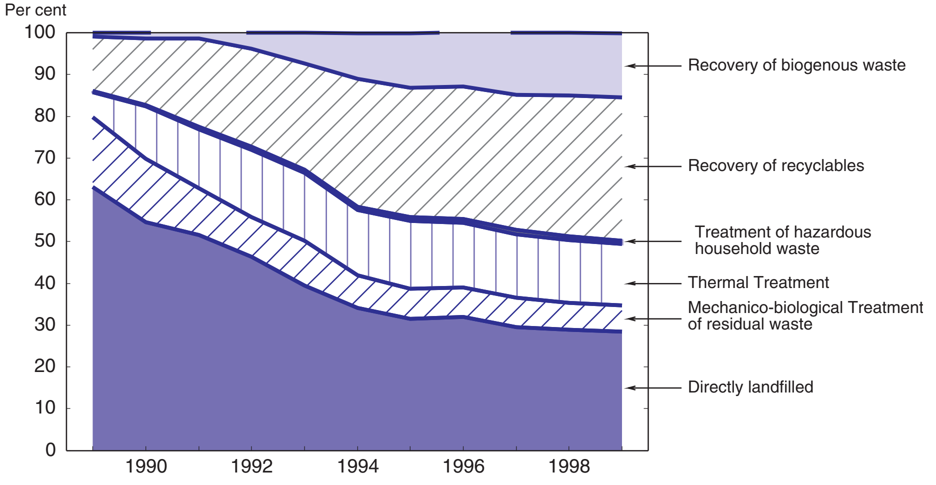
Table 20. **Performance indicators: waste**

	Level	Relative to private consumption	Recycling	Composting
	Kg per capita, latest available year[1]	Grams per US$, 1995 PPPs	Per cent of total, latest available year[1]	
Australia	. .	. .	. .	. .
Austria	**548**	**45.5**	**24**	**40**
Belgium	534	47.0	37	15
Canada	. .	. .	. .	. .
Czech Republic	334	54.2	. .	. .
Denmark	626	57.4	25	14
Finland	464	49.0	. .	. .
France	524	46.4	10	8
Germany	549	46.0	41	. .
Greece	371	42.7	8	1
Hungary	444	85.7	0	0
Iceland	718	52.7	9	2
Ireland	615	49.5	8	1
Italy	497	40.1	7	10
Japan	406	34.6	13	. .
Korea	364	50.3	41	. .
Luxembourg	643	38.7	0	12
Mexico	315	63.5	2	0
Netherlands	613	53.3	23	24
New Zealand	. .	. .	. .	. .
Norway	617	51.2	22	9
Poland	316	64.0	0	2
Portugal	437	50.7	4	5
Slovakia	316	58.2	2	5
Spain	464	48.0	5	18
Sweden	452	47.5	25	8
Switzerland	655	41.8	32	14
Turkey	385	101.4	0	1
United Kingdom	558	44.8	9	2
United States	764	35.7	22	6
OECD average	501	42.3	17	7
EU average	526	45.6	18	10

1. 2000 for Ireland.
Source: OECD, Eurostat. For Spain: national submissions.

sufficient to avoid any major shortfall in the next two decades. By 2004, all waste deposited in landfills will have to be pre-treated to ensure that it is almost free of organic carbon (to avoid methane emissions) and not capable of producing polluted water runoffs, so adding considerably to the cost of this form of treatment. A cost-benefit study did justify this policy through putting a very high value on GHG emissions that are avoided with these measures (€ 230 per ton of carbon equivalent)

Figure 25. **Recycling and treatment of municipal waste**
1989-1999



Source: Federal waste management Plan 2001.

and through adding the cost of completely restoring sites to their natural state.[108] In 1998, user costs were also boosted by the introduction of a landfill tax which by 2001 had risen to € 44 per ton of untreated waste landfilled on sites equipped with liner and gas collection facilities, an amount that, on the realistic assumption of an international price of € 20 per ton of carbon equivalent for avoided GHG emissions,[109] exceeds estimates of the external costs for modern landfill sites by a significant margin. These external costs also include the risk of contamination caused by, for example, leaky liners. The relatively rare sites with neither of these measures in place are charged a tax of € 104 per ton. By 1999, such tax receipts represented 2.5 per cent of waste disposal costs. They are earmarked to fund the cleaning of contaminated soils from older landfills. Tax rates have gradually been raised in order to provide incentives to give priority to the prevention and recovery of waste over landfilling. However this policy puts a disproportionate price on modern landfill facilities since this decontamination expenditure relates to externalities from older landfills that are unconnected to current externalities. In fact, tax rates are set to increase while externalities are reduced quickly in the run-up to the 2004 deadline that requires that all waste going to landfill shall be pre-treated.

Extended producer responsibility is a key element of Austria's policy to encourage waste prevention and to implement recycling. Companies are obliged to take back and recycle minimum shares of the materials included in packages. In addition, there are absolute caps on the amount of the various packaging materials that can be landfilled, with the exception of beverage containers. For these, a uniform rate of recovery and re-use is imposed, so markedly simplifying previous systems. This move was accompanied by a voluntary agreement with the industry which committed itself to recycle at least half of the PET bottles put on the market as of 2004 although the associated recycling would cost three times more than incineration with energy recovery according to a study commissioned by the European Commission.[110] Most packers and bottlers delegate their recycling responsibility to *Altstoff Recycling Austria* (ARA), a non-profit organisation, in exchange for a contribution based on the weights of the materials used in packages (Table 21). With few exceptions, these charges remain the highest in Europe, even if the average fee has declined from € 291 per ton in 1996 to € 189 in 2002. but these tariffs also cover the collection costs borne by municipalities and private collectors, which is not the case in the figures reported for other countries such as France and Italy.

Table 21. **Comparison of "Green Dot" fees for various packaging types in 2000**[1]

		Kg	Fees for various types of packaging in € x 10^{-3}						
			Austria	Germany	Belgium	Luxembourg	Portugal	Spain	France
Glass bottle	(1 litre)	0.35	**30.52**	28.46	6.77	5.99	0.52	2.40	0.75
Tetrabrick	(1 litre)	0.027	**5.47**	25.28	6.14	5.69	0.27[2]	2.25	2.99[2]
PET bottle	(1 litre)	0.03	**32.90**	45.12	10.44	8.59	1.20	3.53	3.47
Aluminium can	(33 cl)	0.014	**6.92**	13.65	2.40	2.00	0.52	0.76	0.45
Steel can	(33 cl)	0.03	**11.97**	11.61	1.74	1.24	0.52	0.93	0.42
Cardboard box		1	**202.76**	190.64	37.68	31.23	9.98	15.47	74.09[3]

1. These fees do not include VAT. The extent to which services are financed by the quoted fees varies across countries.
2. A paper-cardboard tariff is applied (main material).
3. A 10 per cent rebate is awarded to cardboard packaging containing more than 50 per cent recycled material.

Source: European Commission, 2001.

These developments, and others such as the requirement on all companies with over 100 employees to appoint a waste management officer, have come at a growing cost to the economy. By 1999, total disposal costs had risen to 0.7 per cent of GDP from 0.3 per cent a decade earlier. Municipalities recover the costs of managing waste by means of specific charges that they may freely set within the constraint that the receipts shall not exceed twice their expenditure on waste management. The overall degree of cost recovery of current expenditure was 82 per cent in 1998.[111] Most municipalities charge households and businesses through schemes that rely on either the weight or volume of disposals. The prices charged and services provided vary from town to town, with the dearest municipality charging five times more than the cheapest. This reflects differences in cost resulting from the use of different waste collection methods, suggesting scope to improve efficiency.

Conclusions

The orientation of policy towards recycling and recovery has succeeded in reducing the amount of municipal waste that ultimately goes to landfills but at an increasing marginal cost. The treatment of the remaining third of municipal waste going to landfill will add further to costs. Moreover, once new landfill waste is almost free of organic carbon, and sites well-regulated, the high landfill tax will not reflect the relatively low level of the externalities associated with modern landfills. The extended producer responsibility (EPR) system does internalise the cost of disposing of packaging but, unless recycling is seen to be a goal in its own right, the costs of this system need to be limited by reference to alternative methods of disposing of waste. Indeed, policy should consider whether the extent of recycling should not be set more often by market forces than by quantitative targets. In addition, municipal waste disposal costs need to be carefully benchmarked.

Helping developing countries to move to a sustainable development path

Notwithstanding their considerable progress in improving living standards since the 1960s, developing countries have about a quarter of their population still living in extreme poverty. Economic growth in developing countries is necessary, but not sufficient, to provide the resources for alleviating poverty. Although an essential pre-condition for development, notably establishing the institutions needed for a well-functioning market economy, rests with developing countries themselves, OECD countries have a major role to play in assisting them to do so, most notably giving them access to markets and providing them with effective aid for poverty alleviation. The main issues are the degree of openness to exports from low-income and least developed countries and the effectiveness of development assistance.

Performance

Imports from least-developed and other low-income countries to Austria are close to the OECD average, both in terms of their share in total imports and growth over the 1990s (Table 22). There have, however, been contrasting developments across different commodity groups. Between 1995 and 2001, imports of manufactured goods from low-income countries (LICs) have grown at an annual rate of 14 per cent on average, with a particularly rapid increase in such imports from the least-developed countries (LDCs) (albeit from a very low base). Between 1995 and 2001 Austrian imports of agricultural products from LDCs contracted.[112]

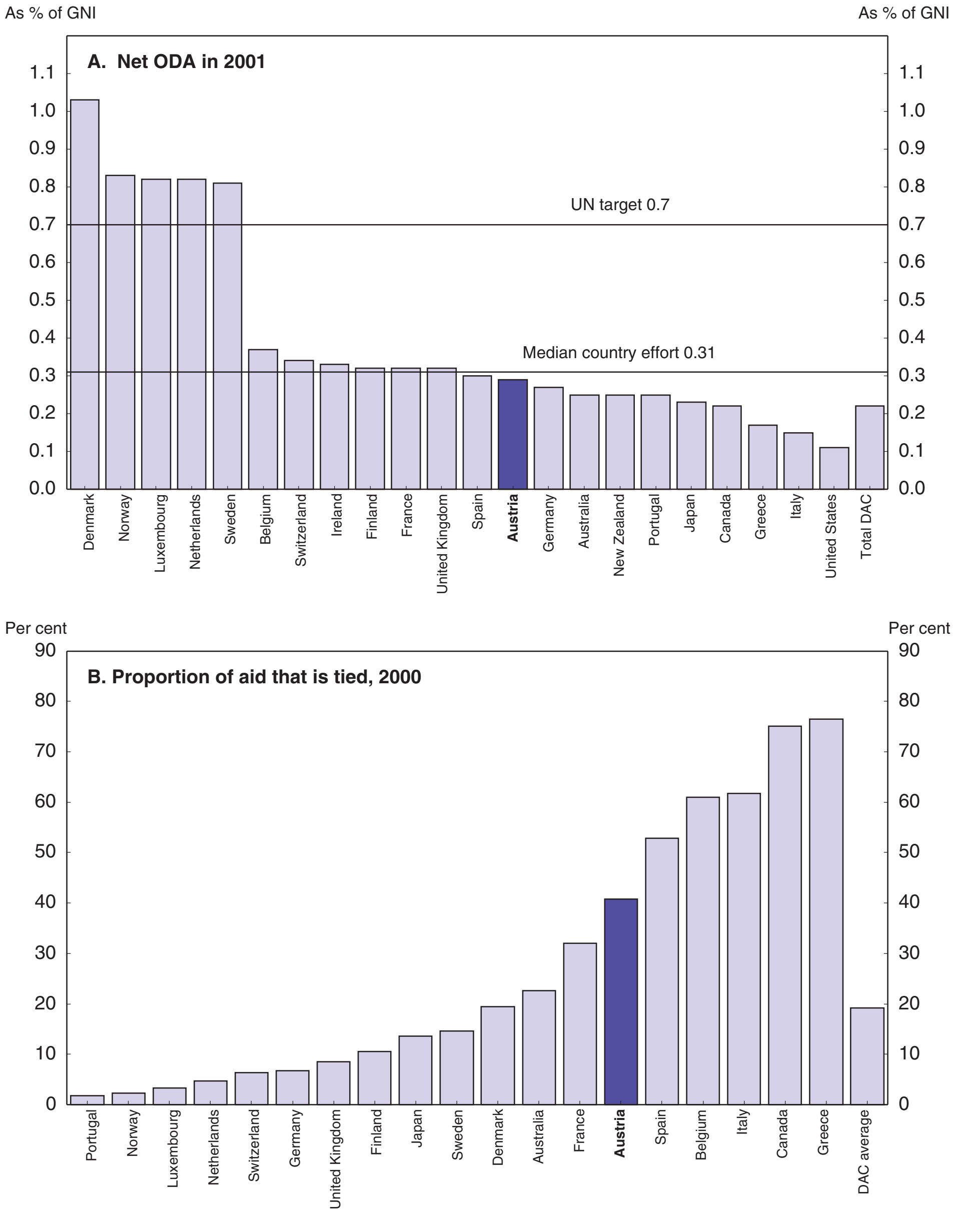
Table 22. **OECD imports from least-developed and low-income countries**

	Least-developed countries			Other low-income countries		
	Share in total imports percentage	Average nominal growth (dollar terms) growth, per cent	Share of manufactures in total percentage	Share in total imports percentage	Average nominal growth (dollar terms) growth, per cent	Share of manufactures in total percentage
	2000	1990-2000	2000	2000	1990-2000	2000
Australia	0.2	8.6	76.0	2.9	12.6	75.2
Austria	**0.2**	**9.5**	**82.3**	**1.1**	**7.8**	**78.7**
Belgium	1.6	5.7	87.2	4.1	7.7	84.2
Canada	0.1	5.9	79.7	1.0	11.8	79.4
Czech Republic	0.0	4.4	36.4	0.2	15.0	70.4
Denmark	0.3	0.3	73.3	1.6	4.9	80.9
Finland	0.5	18.9	26.9	1.5	12.1	48.9
France	0.4	1.3	75.2	1.9	6.5	84.1
Germany	0.4	43.0	72.0	2.1	5.9	72.4
Greece	0.5	4.4	59.3	2.2	8.6	65.2
Iceland	0.1	21.8	88.7	0.8	21.5	94.1
Ireland	0.3	3.8	33.4	1.0	7.0	60.2
Italy	0.3	–0.8	44.4	1.5	6.7	45.0
Japan	0.3	–3.0	35.3	4.7	5.7	59.7
Korea	0.1	–2.1	45.3	3.1	7.0	61.9
Mexico	0.0	–2.8	72.0	0.2	3.9	87.5
Netherlands	0.4	5.2	56.1	2.7	6.2	53.9
New Zealand	0.1	0.9	48.2	2.3	13.5	85.1
Norway	0.7	–12.8	92.8	1.7	–6.4	85.4
Poland	0.2	2.4	22.3	2.3	10.9	43.6
Spain	0.4	2.5	30.0	2.7	9.4	55.9
Sweden	0.2	9.2	87.8	0.9	6.1	87.0
Switzerland	0.1	–4.0	50.0	1.0	6.0	71.2
Turkey	0.2	0.6	52.7	4.8	13.9	65.4
United Kingdom	0.3	5.8	76.4	2.3	6.8	77.5
United States	0.4	9.3	87.8	2.8	12.9	84.4

1. The country groupings are as defined by the Development Assistance Committee of the OECD.
Source: OECD International Trade Database.

Relative to national income, Austria's development assistance is very close to the median effort amongst countries that are parties to the Development Assistance Committee (Figure 26). Austria is also bound by the EU Barcelona target for development assistance of 0.33 per cent of GDP. The recipients of Austrian official development aid (ODA) have on average much higher per capita income than beneficiaries of such aid from other OECD countries. The structure of the aid programme is marked by a relatively high share of tied aid and concentration on aid for education and health.

Figure 26. **Net ODA relative to GDP and by managing institution**



Source: OECD.

Policies

Trade policy in Austria is set in the context of policy instruments that are uniform across the European Union. In 1999, average trade weighted bound tariffs for industrial goods were slightly higher in the European Union than in the United States and Japan, irrespective of whether or not preferential trading arrangements are taken into account. The situation for the least-developed countries was more favourable and is becoming somewhat more advantageous with new initiatives. Under the EU Generalised System of Preferences programme and the Cotonou agreement with African, Caribbean and Pacific countries, developing countries are granted tariff concessions on manufactured goods. Indeed, only 3 per cent of the least developed countries' exports face tariffs of above 5 per cent, while another 2 per cent of exports face a tariff of between zero and 5 per cent. Moreover, these tariffs have been eliminated under the EU Everything-But-Arms initiative, though for three sensitive products, *i.e.* bananas, rice and sugar, liberalisation is being delayed until 2006 or 2009.[113] However, products from other developing countries still face tariffs and a number of textiles and clothing products are subject to import quotas at the EU level. In accordance with the Agreement on Textiles and Clothing, these quantitative restrictions will cease at the end of 2004, after which textiles and clothing will be subject to tariffs of 9 and 7 per cent, respectively for countries not included in preferential trading regimes. The European Union, though, has been pursuing negotiations to completely eliminate tariffs on these products on a bilateral basis, if partner countries also lower their own tariffs.

In contrast to the industrial sector, many agricultural products faced tariffs of above fifteen per cent in 1998. In this group, consisting mainly of meat, dairy products, cereals and sugar, the average most-favoured nation (MFN) tariff is over 40 per cent.[114] The European Union has a number of agreements granting preferential access to developing and Central and eastern European countries. These agreements have the impact of lowering the actual tariff paid markedly below the MFN rate. For high tariff products, the average actual tariff rate is 25 per cent, against an average for the MFN rate of over 41 per cent. For all agricultural products, preferential tariffs have the impact of lowering the actual tariff to 9.7 per cent, relative to an MFN tariff of 16.5 per cent (*op. cit.*), with 40 per cent of imports entering under preferential regimes. Most of the gain from preferential treatment, in terms of tariff revenue foregone, is concentrated on a few products – notably fresh and dried fruits that account for almost one-third of foregone revenue. Community-wide subsidies also protect the EU agricultural industry from imports and such support has declined only modestly since the mid-1980s (Table 23). The Austrian authorities have lent qualified support to the progressive liberalisation of support measures to agriculture, stressing the importance of the multifunctional character of the sector.

Table 23. **Producer support estimates and their components: 2000 and 1987**

	Total PSE	Market price	Domestic subsidies	Output	Input	Land based	Historical entitle-ment	Other forms of support
2000								
Australia	5.6	1.4	3.3	0.2	2.8	0.1	0.3	0.9
Canada	19.5	10.0	6.3	1.4	1.3	1.5	2.2	3.2
EU	**38.3**	**22.5**	**14.5**	**2.0**	**2.5**	**9.7**	**0.2**	**1.3**
Japan	64.1	58.3	4.6	1.8	2.8	0.0	0.0	1.2
Korea	72.6	69.6	1.8	0.0	1.8	0.0	0.0	1.2
New Zealand	0.7	0.4	0.3	0.0	0.3	0.0	0.0	0.0
Switzerland	71.4	42.2	26.2	2.8	4.0	8.0	11.3	3.0
United States	21.9	7.0	13.4	4.1	3.0	1.6	4.7	1.5
1987								
Australia	7.9	3.3	2.9	0.0	2.9	0.0	0.0	1.7
Austria	**40.7**	**38.9**	**1.4**	**0.7**	**0.7**	**0.2**	**0.0**	**0.2**
Canada	35.8	17.8	17.3	6.8	5.0	5.5	0.0	0.7
EU	45.0	38.7	6.2	2.5	2.5	1.2	0.0	0.2
Japan	67.3	61.0	4.4	1.7	2.7	0.0	0.0	1.9
Korea	69.5	68.6	0.5	0.0	0.5	0.0	0.0	0.3
New Zealand	8.9	2.4	6.2	0.0	6.2	0.0	0.0	0.3
Switzerland	73.0	59.5	11.6	1.0	6.2	4.4	0.0	1.9
United States	27.0	13.7	12.6	1.5	3.8	7.2	0.0	0.7

Source: OECD PSE Database and Dimaranan (2003).

Reforms of agricultural policy could raise living standards in developing countries. The abolition of all agricultural trade and subsidy barriers within OECD countries would help raise total income of developing countries, but the extent of the gains would differ across country groups. Existing food exporters (notably in Latin America) would be the main beneficiaries of such reforms. By contrast, a number of developing countries might face small losses as a result of increases in food prices,[115] as might a number of countries that already have preferential trading agreements with developed countries. Indeed, lower-income developing countries appear to gain little in absolute terms from across-the-board reduction in agricultural support in developed countries alone.[116] Within developing countries, the rural sector, where poverty is concentrated, would gain most whereas losses would fall on urban populations.[117] However, changes in agricultural policies are likely to take place in the context of multilateral agreements covering services, manufactures and agricultural products and involving tariff concessions by developing countries themselves. In such a context, no region would experience any loss in welfare.[118] In addition, a multilateral reform would be likely to result in dynamic changes to the pattern of production in developing countries, especially if development assistance is focussed on building the capacity to export.

Within the European Union, further measures to base agricultural support on farmers' income rather than on their production would be a step in the direction of liberalising markets and would bring benefits to developing countries. The EU Agenda 2000 programme envisaged such restructuring of aid.[119] In the Common Agricultural Policy reform for Sustainable Agriculture of June 2003 it was decided to partially end supporting products in favour of supporting producers with the introduction of a partially or fully decoupled system of payments per farm.[120] Even with an unchanged envelope of total aid to agriculture, such a programme should improve the allocation of resources while improving the efficiency of income transfers.[121] Such an orientation offers the possibility of targeting the transfers to less well-off farmers or to smaller units. The Austrian authorities have managed to move domestic support measures for agriculture to less trade-distorting measures.

The Austrian strategy for sustainable development states that the key objective for sustainable development is to fight poverty. Nonetheless, least-developed countries received only 22 per cent of Austria's ODA in 1999-2000, down from 25 per cent in 1989-1990. Indeed, the average income of Austrian development assistance partners was only just exceeded by those of Spain and Greece. The main cause of this bias is the extent of assistance given to selected countries in the Balkans and in eastern Europe. However, efforts have been made since to redirect flows to LDCs. A potential weakness of ODA is the high share of tied aid, depriving the recipients of the choice to search for more efficiently provided goods and services.

Significant changes have been undertaken to improve the effectiveness of aid. The most important one is the reorientation of bilateral aid, in particular for South East Europe, towards governance and social services, like education and health, all of which now represent 43 per cent of Austrian aid. This has been achieved to the detriment of traditional investment projects which account for only 2 per cent of Austria's ODA, down from 48 per cent in 1980. This decision is a consequence of the systematic review of the projects financed by bilateral aid. Building infrastructure or fostering industrial development through grants or concessional loans has indeed often resulted in the produced goods and services being offered on a free basis or at prices that do not cover costs, with thus neither the incentive nor the financial resources to maintain and expand the investment. In January 2004 an Austrian Development Agency will be created which could enhance the efficiency of aid delivery. Other new promising initiatives endeavour to foster export capacity particularly for small and medium-sized enterprises in developing countries that enjoy tariff-free access into the European Union but have difficulty in meeting technical and administrative requirements. These efforts to develop export capability are still in their infancy in official development co-operation and represent relatively low amounts. However, experimental projects have already been carried out in this area, in partnership with private initiatives. For example, Austrian aid helped a non-governmental organisation to enable organic growers in El Salvador to get their products labelled according to standards recognised on the Austrian market. Similar projects have been undertaken by Austrian-financed Cleaner Production Centres.

The dispersion of ODA credits across various agencies may constitute an obstacle to optimising its allocation with regard to development priorities. Room for improving development outcomes in recipient countries seems to be available as regards outlays that occur outside the department for development co-operation and that are accounted for as ODA flows. The resources diverted to the higher education of LDC nationals in Austrian universities would most likely be more effective in terms of development if devoted to primary education in recipient countries.

Conclusions

The openness of Austria to products from developing countries depends essentially on measures agreed at the EU level. The EU's Everything-But-Arms programme, that exempts least-developed countries from tariffs and quotas, is a welcome step even if some of the gains will be from trade diversion. For other developing countries, agricultural products still face barriers. The EU has decided to continue reforming the Common Agricultural Policy by moving to policies that focus on farm income rather than impacting on market prices. Official development assistance can help developing countries take full advantage of lower tariffs, provided that related programmes are given sufficient funding and programmes are redesigned to assist exporters. Following the positive shift away from physical infrastructure towards social services and institution building, the effectiveness of ODA ought to be further reinforced by a re-allocation of ODA funds in favour of lower income countries and a reduction in the extent of tied aid.

Notes

1. Austria joined the EU in 1995.
2. Austria's export share to Germany increased from 37 per cent in 1988 to 39 per cent in 1993.
3. The countries under consideration are Denmark, Belgium, the Netherlands, Sweden and Ireland, the same as those considered in Figure 3 above.
4. See OECD (1998a, 2001a).
5. A decomposition of the evolution of labour force participation rates by the Secretariat shows that between 1990 and 2000 the change in the age distribution reduced the Austrian participation rate by some 0.8 per cent.
6. Between 1990 and 2002 the registered unemployment rate for persons aged 55 and older increased from 7.1 per cent to 11.2 per cent for males and from 6.0 per cent to 11.5 per cent for females. Over the same period the total unemployment rate rose from 5.4 per cent to 6.9 per cent (definition excluding self employed).
7. According to the statistics of the Austrian Social Security Association the entry age into old age retirement stood at 62.2 and 59.4 years for males and females, respectively.
8. The average effective age of retirement is based on labour force survey data and derived from the observed decline in participation rates over a 5-year period for successive cohorts of workers aged 40 and over.
9. In the employment statistics, people who do not work in the second phase of an A*ltersteilzeit* spell are counted as employed.
10. See Nickell, S. and S. Nunziata (2000).
11. See OECD (2001a).
12. OECD (2003b).
13. Gross spending on research and development in Austria has increased continuously from the beginning of the 1980s. The Austrian government is targeting to increase gross R&D spending to 2.5 per cent of GDP by 2006, and endorses the EU target of 3 per cent by 2010. On the issues involved, see Sheehan, Jerry and Andrew Wyckhoff (2003), Pilat *et al.* (2002) and. Aiginger, Karl (2003).
14. With respect to tertiary education see OECD (2001a).
15. Spending on A*ltersteilzeit* totals 28 per cent in terms of outlays for "activating" labour market measures in a broad sense, with activating "passive" unemployment benefits added to spending on active labour market measures.
16. See Breuss, Fritz (2001).
17. See OECD (1999).

18. The number of federal civil servants was reduced from 166 491 (end of 1999) to 155 173 (end of 2002). The number of federal school and university staff increased from 59 809 (end of 1999) to 59 889 (end of 2002). For schools and universities compensatory saving measures such as lower payments for special tasks of teachers were introduced. The number of tenured civil servants of spun-off organisations, excluding Post and Telekom Austria, increased from 3 226 (end of 1999) to 3 901 (end of 2002).
19. See OECD (2002a).
20. Subject to the targeted fiscal balance, additional spending is admissible if it is covered by additional revenues.
21. Legal procurement procedures are set out in the Federal Procurement Act and are subject to control by the Federal Procurement Office (FPO). Tender provisions regulate the procurement of works contracts, supply contracts and service contracts by public authorities and certain related entities from the private enterprise sector, notably in network industries. During tendering procedures involving a federal authority every tenderer can call upon the FPO to protect his interests. The FPO may issue a decree either to stop the tendering procedure or to cancel decisions of the tenderee. In order to ensure the transparency of tendering procedures, tenderees also have to discharge extensive duties of notification towards the European and national procurement authorities.
22. See Schneider, Martin (2002).
23. See Doubek, Claudia (2002).
24. See Doubek, Claudia (2002) *op. cit.*
25. Changes in the allocation of responsibility for social assistance payments can be achieved via a contract between the federal government and the states in accordance with paragraph 15a of the federal constitutional law.
26. Older people living in nursing homes can be charged with up to 80 per cent of their pension by the nursing institution. The remainder is financed out of social assistance benefits.
27. For an account of the arrangement governing employment and remuneration of teachers, see Rossmann, Bruno and Pia Netuschill (2002). The paper takes stock of the state of administrative reform in Austria between 2000 and 2002.
28. See Aufgabenreformkommission (2001).
29. The findings of the Convent are planned to feed into the negations for the next tax sharing arrangements between the federal government, the states and the communities. The next tax sharing agreement will come into effect from 2005 onwards.
30. See McLure, C.E. (2000) and Oates, W.E. (1999).
31. These figures, based on CEEP (2000), conform well to earlier estimates contained in the OECD's International Regulation Database (see Nicoletti *et al.*, 1999). Information in this database also suggests that the size of the public enterprise sector in Austria is large, both in size and scope, by OECD standards.
32. Gonenc *et al.*, 2001; OECD, 2002c.
33. For Austria, Gugler (1998) provides evidence that internal rates of return amongst public enterprises are well below rates in private firms even when the effects of various background factors have been controlled for.
34. The steel industry was, and remains, characterised by high mark-ups by international comparison and cost-plus regulation often discouraged innovation efforts. Moreover it

had become the norm that managers were appointed not only for their formal qualifications but also with an eye to their political orientation (Aiginger, 1998).

35. Some caution is warranted here, though. In addition to governments' determination to divest, the size of such proceeds is influenced also by overall share prices at the time of privatisation. The 5½ per cent of GDP is the total of proceeds in each year since 1990 relative to GDP in the corresponding year (see OECD, 2002). According to Aiginger (1998) divestments of central government assets worth some 2 per cent of GDP were made during the second half of the 1980s, but in some of the largest transactions the ownership was transformed to other public-sector entities (the Austrian National Bank in the case of the central mint and local governments and public companies in the case of the *Verbund* energy company).

36. Both scenarios differ in assumed employment rates. The baseline scenario, which yields a more favourable spending path, assumes that the employment rate increases from 67 per cent in 2000 to 76 per cent in 2035, while the less favourable scenario assumes that the employment rate increases to only 72 per cent. See Kommission zur langfristigen Pensionssicherung (2002).

37. This measure re-installs the situation prevailing until 1997, when the rate was lifted to its present level.

38. See OECD (2003c).

39. European countries that qualify for investment consist of the EU and the EFTA. Eligible stock market capitalisations must not exceed 30 per cent of GDP. This advantages holdings of Austrian stocks whose capitalisation is low by international comparison.

40. For an account of company based pension funds see Url (2003).

41. Administrative costs are limited to a maximum of 3.5 per cent of contributions plus a maximum of 1 per cent of administered funds. Additional expenses have to be stated in the contract.

42. At present, part-time employment can be distributed over an admissible time span of up to 6½ years such that the employees work full-time in the first years and cease working in the remainder of this period. Working time reductions up to 60 per cent of the previous level qualify for financial support. At least 50 per cent of the income loss due to working time reductions is compensated by the government. The scheme can be utilised by males and females from 55 and 50 years onwards, respectively. If part-time employment is taken in blocks of full-time and no work, participants in the scheme are statistically accounted as employed during the no-work phase.

43. Econometric evidence for Austria indicates a significantly negative effect of the duration of extended eligibility periods for receiving unemployment benefits on the transition out of unemployment for the long-term unemployed, both male and female. Moreover, longer benefit duration might also lead to higher unemployment entry. See Winter-Ebmer. (2003). The relevance of this relationship is also evident from various studies for other OECD countries. For references see OECD (2003d).

44. See OECD Directorate for Employment, Labour and Social Affairs, Review of family-friendly policies in Austria, Ireland, and Japan, DELSA/ELSA(2003)5/ANN2. For a omprehensive analysis of the Austrian child care system see the main text of this document.

45. Re-entry rates into the labour force appear to be positively related with the level of earnings prior to the non-participation spell. See Lutz (2003).

46. For example, for a couple with primary and secondary earnings equalling 100 per cent and 33 per cent of the earnings of an average production worker (APE) and two children aged one and four years, full-time child care costs amount to 25 per cent of the APE.
47. For school children, out of school hours care includes the care provided by all day schools.
48. See OECD (2003e).
49. Between 1997 and 2000 investment in child care facilities was increased.
50. The long run elasticity of real wages to unemployment has been found to be significantly higher in Austria than in other countries, notably Germany, France and Italy. See Roeger and in't Veld (1997).
51. For blue-collar workers per capita wages in Austria decline in the age group 60 and older. However, employment rates for this group almost collapse. Hence, the earnings profile might be subject to a selection bias in that only people working either fewer hours or on less well paid jobs stay in employment.
52. See OECD (1998b). In most other OECD countries wage profiles (based on 1995 figures) are less steep and hump shaped with earnings peaking at around age 50. Controlling for educational attainments of cohorts the tendency of age-earnings profiles to slope downward late in working life weakens but is not reverted.
53. The inter-sectoral wage dispersion appears to be relatively stable, see Mesch (2002), and Hofer *et al.* (2001). At the same time, high labour cost differentials across sectors appear to be weakly related to relative labour demand patterns. In particular, intersectoral cost differences have been found to be largely unrelated to labour qualification, see Pollan (2001). Similarly, empirical evidence suggests that for most sectors in manufacturing negative employment growth coincides with substantial growth in earnings. See Mesch (2002) *op cit.* The author finds a coincidence of positive income growth with an increase in employment for only two manufacturing sectors out of 11 over the period from 1980 to 1994. Wage flexibility was found to be low by international comparison. See Hofer and Weber (2002).
54. Empirical evidence for the metal industry suggests that Austrian enterprises have less scope than German and Italian firms in differentiating pay and setting incentives. See Auer *et al.* (1997).
55. See Auer and Welte (2001). There have also been conflicting views between employers and unions about the distributional consequences of allocations to employees for the purpose of supporting vocational training.
56. The transition to the new severance pay system affects labour costs differently across sectors, as previously exempted branches, like those with high seasonal fluctuation of workers, are now liable for severance pay. This will require some adjustment in relative wages across sectors.
57. There is a general tendency to put blue collar workers more on a par with salaried employees, and this has led to some tightening of EPL for blue collar workers. For example, in the iron and metal industry the notice period for dismissals was lengthened to equal that of salaried employees. Notice periods for blue collar workers are laid down in collective agreements between the social partners and hence differ between industry sectors. By contrast, notice periods for salaried employees are harmonised and coded in the labour law. Since 1999 a working group of the social partners negotiates on a harmonisation of regulations.

58. See OECD (2001c). Major features of ongoing university reform have been considered in the 2001 *Economic Survey on Austria*.
59. For evaluation studies of active labour market programmes, see OECD (2001a) and Weber and Hofer (2003).
60. In-depth analyses of product market competition in Austria have been included in earlier *Surveys* (1990, 1994 and 2001). However, because political and analytical attention to competition issues and regulatory reform has increased considerably only over the past decade, the availability of cross-country evidence was scarcer when these studies were undertaken.
61. Parallel imports of products that are protected by intellectual property rights consist of genuine products (as opposed to counterfeits) which are sold without the consent of the rights owner in a country.
62. This study also argues that Austria stands to gain considerably from the imminent enlargement of the EU. Simulations presented in Breuss (2001) show that the size of these gains can be expected to be larger than in any of the other current EU member states. See Box 1 above.
63. Trend MFP growth has edged down by ¼ percentage point in the course of the 1990s.
64. In addition, various more narrowly focused laws exist, such as the Local Supply Act (*Nahversorgungsgesetz*) and those regulating competition in network industries. The Federal Procurement Act (*Bundesvergabegesetz*) aims at ensuring competition in public tenders.
65. The CCom consists of eight professional members, half of whom are appointed upon a proposal by the social partners.
66. Mergers must be notified to the Cartel Court if the combined relevant turnover of the involved undertakings is above € 300 million worldwide and above € 15 million in Austria, and if the total turnover of each of at least two participating undertakings is above € 2 million.
67. Certain agreements have been exempted by a Regulation issued by the Ministry of Justice, including agreements concerning joint purchasing and joint R&D.
68. Agreements may be considered de minimis. This is the case if parties have a combined market share of fife per cent on the national level or even up to 25 per cent in a local sub-market.
69. The Cartel Act is not explicit about the criteria to be employed in the assessment of this, but states that the justifiable interests of both the binding and bound enterprises as well as those of consumers must be taken into consideration.
70. As part of the preparation of its 1997 Green Paper on vertical restraints the European Commission conducted a survey of member states' policy in this area, which provided information also on the practical application of the rules (European Commission, 1996). For Austria, this study revealed that in 1994 some 800 agreements were notified and that not a single one of these resulted in any action. In fact, the Cartel Court had not decided any cases concerning vertical restraints at that time.
71. Approximation of Austrian law concerning restrictive agreements to EU rules also would be advisable to fully realize the benefits of decentralised enforcement of EU law under Regulation 1/2003.
72. Still, insofar as the relevant conduct affects intra-Community trade, the exemptions under the Cartel Act are limited by the potential application of EU law.

73. Some have argued that transparency suffers from a preference on the part of the FCA to settle cases on the quiet without the involvement of the Cartel Court (Böheim, 2003).
74. The recent E*con*G*as* joint venture is a case in point. This case, which was the first to be reviewed under the new merger control regulation, involved the incumbent federal energy company, OMV, and five of the regional utilities. The new company, E*con*G*as*, has a market share well above the 30 per cent threshold that is considered to constitute a dominant position. Nonetheless, both the FCA and the PP withdrew their initial applications for examination on the basis of certain concessions from the involved companies. As a result, the case was settled without an examination by the Cartel Court and with no accompanying press release from the FCA that could motivate the clearance.
75. Criminal sanctions for collusive tendering were maintained, probably reflecting that such practice has been blatant and widespread in the past, notably in the construction sector.
76. It must be emphasised, though, that a leniency programme would need to be attuned to other elements of the enforcement regime. In particular, a lenient treatment is likely to be less potent if the perceived risk of disclosure is low in the first place, or if the sanctions that could be envisaged by infringers are disproportionately small compared with the gains from unlawful conducts.
77. No information is available on prices paid by large-scale consumers since these are typically set in bilateral contracts. However, price reductions have been particularly large in this segment according to the assessment of E-Control.
78. This might reflect, in part, price discrimination by incumbents in order to fend off entry and consumer switching in those segments of the market where the price elasticity is highest. In Austria, however, pre-liberalisation prices for business customers were much higher than for households, and the greater decline for the former group has only meant a convergence to the relative price levels seen elsewhere.
79. It seems uncertain whether the latter restriction is compatible with the non-discrimination rules under EU law.
80. For example, when co-signing the deal the responsible minister emphasised the importance of having found a "red-white-red" solution.
81. According to estimates provide by AC Nielsen, concentration is considerably higher, the two largest retail groups – REWE and SPAR – having a market share of two-thirds.
82. For example, increasingly efficient marketing and inventory management methods and larger trade areas facilitated by easier access to individual transportation are forces that work towards concentration and larger units.
83. Kelly and Gosman (2000) find evidence that in the United States high buyer concentration tends to reduce manufacturers' profitability in competitive industries but not in sectors with weak upstream competition. Beyond the objective of short-term cost-minimisation, the rise in own brands could be another, more strategic, reason for retailers to squeeze suppliers' profit margins if possible. If they succeed, such practices are likely to be detrimental to competition.
84. The "non-specialised stores" part of the distribution sector is the one where economies of scale and scope are likely to be most important, as it includes large-format outlets such as hypermarkets and department stores. This segment is considerably smaller in Austria than elsewhere and less than half the size in Finland, Ireland and

Norway. The obverse to this is that the "specialised non-food stores" segment (excluding pharmacies) is relatively larger than in other countries. In this branch, as well as in specialised food stores, productivity is comparably high in Austria. As for food stores, this is due, in part, to a high penetration of (German owned) discount chains.

85. Environmental considerations could be addressed in general zoning regulations.

86. The Shop Closing Act foresees that provincial governments may grant privileges to family-operated stores (maximum weekly opening time of 80 hours), shops in tourist resorts and shops in areas where more than half the population work outside the area. In addition, shops in railway stations, airports, theatres and petrol stations are exempted or operate under less restrictive regulations. In its general sales promotion the VIVA group of convenience stores, which are attached to some 160 of the OMV petrol stations, is offensively presenting itself as an around-the-clock supplier of a limited range of groceries – including fresh bread on Sunday mornings when the Shop Closing Act – with a few exemptions – prevents even bakeries to be open (*www.omv.at*). This is somewhat ironic given the fact that OMV is controlled by the government.

87. For example, in a recent investigation the Danish Competition Authority (2000) concluded that RRPs were more widespread than had been thought previously. In specialised non-food stores, RRPs applied to more than half the lines. There was a significant positive correlation between the prevalence of RRPs and high prices by international standards. The study estimated an unfavourable welfare effect of ½-1 per cent of GDP.

88. The principle of regional exhaustion was stated in the European Court of Justice's (ECJ) ruling in the so-called Silhouette case. This case involved the importation into Austria, and hence the Community, of sunglasses first sold by the Austrian company Silhouette in Bulgaria. The company brought an action against the parallel importer for breaching its trademark rights in Austria, and the ECJ upheld the contention.

89. The previously required certificates of qualification were abolished altogether for wholesale and retail trade. Moreover, the scope for fulfilling qualification requirements *via* accredited practical experience was extended and steps were taken towards introducing a one-stop shop principle for setting-up new firms.

90. There is some variation in the findings of different studies, though. One study (European Observatory for SMEs, 1997) reports an average entry rate between 1988 and 1996 of almost 9 per cent in Austria, only slightly lower than the simple average for all EU countries and higher than in for example Finland and Belgium. In contrast, the European Commission (2000b) finds the start-up rate in Austria to be well below average, and lower than in Finland and Belgium. Both of these studies rely on national data, where cross-country comparability may be relatively weak. Scarpetta *et al.* (2002) provide comparable data on enterprise demography for 10 OECD countries over the period 1989-94. While Austria is not included, the smallest entry rates found in this study are larger than those from the Austrian Chamber of Commerce reported above in Figure 8. Comparable data for nine EU countries (not including Austria) were published in early 2003 by Eurostat (Hult, 2003). Enterprise birth rates (1998-2000) were in the range of 7 to 11 per cent across the nine countries.

91. A recent Eurostat study of business demography in nine EU countries indicates that the typical two-year survival rate is around 75 per cent (Hult, 2003).

92. Such geographical restrictions also apply to driving schools. Before 1 October 2002 learners were bound to pass the driving test in their local police jurisdiction, which meant that they were also geographically restricted in their choice of driving schools.

While this has now been changed, regulations prevail that limit driving instructors' right to supply their services outside narrowly delimited local areas. Also, recently introduced rules significantly raised the number of lessons required to pass a test for becoming a driving instructor, thereby increasing entry costs. Regulations such as these clearly impair competition and lead to higher prices. According to studies by the Chamber of Labour, driving-school fees are some 20 per cent higher in Austria than in Germany.

93. Given the dependence on hydro-electricity, emissions depend on rainfall. This factor was responsible for a significant part of the fall in emissions from the electricity sector between 1990 and 1999.
94. IEA (2003).
95. WIFO (2001), quoted in BMLFUW (2002).
96. Capros *et al.*, (1999).
97. IEA (2002) and Criqui *et al.*, (2002).
98. There would be additional transitory costs related to the required structural change.
99. As shown in the 2001 *Survey*, this policy would be very expensive.
100. IEA (2000).
101. Taxes paid by households reached € 174 per ton of oil equivalent (toe) for fuel oil, € 118 per toe for natural gas and € 428 per toe for electricity in 2000 (IEA, 2002).
102. OECD (2001a).
103. Capros *et al.*, (1999).
104. Indeed, if taxation of fuels were equalised on the basis of carbon content, then the taxation of gasoline and diesel could be reduced by 80 per cent with no increase in emissions, on the basis of sectoral cost curves.
105. European Commission (2001).
106. OECD (2002e).
107. Several landfills were affected, notably the *Fischer* and *Berger* sites. The latter was completely renovated at a cost of EUR 20 per ton.
108. A cost-benefit study has been commissioned to review the decision to ban the landfill of untreated waste by 2004 (*Umweltbundesamt*, 2001). The study compares the total costs, including externalities, of all available methods to dispose of waste. For landfills, the study adds to the externalities a risk factor, which is equal to the cost of cleaning the site if it were to prove to be contaminated. Under this scenario, landfill is costlier than all other methods of disposal.
109. IEA (2001).
110. RDC (2001).
111. Eurostat (2002).
112. OECD (2002), and OECD International Trade by Commodity Statistics electronic data base.
113. Welfare gains flowing from the reduction in tariff barriers by the European Union as a whole are estimated to exceed 1 per cent of GDP in countries such as Malawi and Tanzania (UNCTAD *and Commonwealth Secretariat*, 2001).
114. Gallezot (2002).

115. In the presence of a large degree of distortion in developing country agricultural markets, the small terms-of-trade loss could be transformed into a welfare gain, even if the domestic distortions are not ended.
116. Anderson *et al.*, (2001); Roberts *et al.*, (2002).
117. OECD, (2003).
118. EC (1999). This result is conditional on the particular assumptions used in the simulations, notably that it is the imperfectly competitive sectors that exhibit increasing returns to scale.
119. Fischler (2001), Agricultural Policy for the Future Changing Concerns, Changing Objectives. Speech to the 29th North American/European Union Agricultural Conference, Salzburg, 19 October 2001.
120. European Commission (2002).
121. The key element of the new, reformed CAP is introducing a single farm payment for EU farmers, independent from production, although limited coupled elements may be maintained to avoid abandonment of production. Further details about the reform can be found at *http://europa.eu.int/comm/agriculture/mtr/index_en.htm*.

Bibliography

AEEG (2002), *Relazione annuale sullo stato dei serivizi e sull'attività svolta, Annual Report*. Rome.

Aiginger, K, R. Wieser and M. Wüger (1999), "Marktmacht im Lebensmitteleinzelhandel", *Monatsberichte* 12/1999, WIFO, Vienna.

Aiginger, K. (1998), "The Privatisation Experiment in Austria", in *Privatization in the European Union: Theory and Policy Perspective*, Routledge.

Anderson, K., B. Dimaramam, J. Francois, T. Hertel, B. Hoekman, W. Martin (2001), "The Cost of Rich and Poor Country protection to Developing Countries", CIES Discussion Paper, No. 01/36, Adelaide, September.

ARA (2001), "Die Leistungen des Ara Systems", *Der Report* 2001, Vienna.

Auer, M. and H. Welte (2001), Collective agreements on flexible pay in the manufacturing sector in Austria: A successful mechanism of organised decentralisation of industrial relations?, presented at the IIRA 6th Congress Working Europe: Visions and Realities, Oslo, June 25-29, 2001.

Auer, M., G. Baumgartner and S. Salzgeber (1997), Tarifvertragliche Entgelstrukturen im Vergleich. Eine Analyse der Entgeltnormen in Tarifverträgen der deutschen, italienischen und österreichischen Industrie, ZfP 1/97, 73-94.

Aufgabenreformkommission (2001), Bericht der Aufgabenreformkommission, mimeo, Wien.

Böheim, M. (2003), "Austrian competition policy: quo vadis"? *Austrian Economic Quarterly* 4/2002.

Boylaud, O. (2000), "Regulatory reform in road freight and retail distribution". OECD, *Economics Department Working Papers* No. 255. Paris.

Breuss, F. (2001), "Macroeconomic effects of EU enlargement for old and new members". WIFO *Working Papers*, 143/2001.

Breuss, F. and F. Schebeck (1999), "Costs and benefits of EU eastern enlargement for Austria". *Austrian Economic Quarterly*, 1/1999

Breuss, Fritz (2001), "Towards a political economy of zero budgeting in Austria", Empirica 28/1.

Bundesministerium für Land- und Forstwirtschaft, Umwelt- und Wasserwirtschaft (2002), "Strategie Österreichs zur Erreichung des Kyoto-Ziels", *Vortrag an den Ministerrat*, Vienna, June.

Capros, P., L. Mantzos, L. Vouyoukas, K. Delkis, D. Petrelis and V. Panos (1999), "Analysis of energy system changes to reduce CO_2 emissions in 2010 for Austria", *Report to the DG Environment of the European Commission*, National Technical University of Athens, March.

CEEP (2000), "The development of enterprises of public participation and of general economic interest in Europe since 1996", CEEP *Statistical Review*.

Clemenz, G. (2002), "Market Barriers and Competition – The Example of Shop Opening Hours" in H. Handler and C. Burger (eds.), *Competition and Competitiveness in a New Economy*, Austrian Ministry for Economic Affairs and Labour, Vienna.

Council of The European Union (2003), "CAP Reform – Presidency Compromise", Document 10961/03, Brussels, June.

Criqui, P., O. Blanchard and A. Kitous (2002), "Après La Haye, Bonn et Marrakech: le futur marché international des permis de droits d'émissions et la question de l'air chaud", *Cahier de Recherche* No. 27, Institut d'Économie et de Politique de l'Énergie, Grenoble.

Danish Competition Authority (2000), "Konkurrence i detailhandelen". In *Konkurrenceredegørelse* 2000 (Annual Competition Survey, 2000), Copenhagen.

Dimaranan, B., T. Hertel and R. Keeney (2003), "OECD Domestic Support and Developing Countries", GTAP *Working Paper* No. 19, January.

Dobson, P.W., R. Clarke, S. Davies and M. Waterson (2001), "Buyer Power and its Impact on Competition in the Food Retail Distribution Sector of the European Union". *Journal of Industry, Competition and Trade*,1:3, pp. 247-281.

Doubek, Claudia (2002), "Reformbedarf in der Siedlungswasserwirtschaft", in: Rossmann, Bruno (2002), *Finanzausgleich – Herausforderungen und Reformperspektiven*, Kammer für Arbeiter und Angestellte für Wien, Vienna.

E-Control (2002), *Annual Report* 2001, Vienna.

European Commission (1996), *Survey of the Member State National Laws Governing Vertical Distribution Agreements*. Brussels.

European Commission (2000a), *European Economy Supplement* B, No. 5, May, Brussels.

European Commission (2000b), "Benchmarking Enterprise Policy", SEC(2000)1842, *Commission Staff Working Document*.

European Commission (2001), "Commission proposes ratification of Kyoto Protocol and emissions trading system", *Press Release*, Brussels, 23 October.

European Commission (2001), "European Packaging Waste Management Systems", *Report by Argus to the Directorate General Environment*, February, Brussels.

European Commission (2002a), *Internal Market Scoreboard. Scoreboard* No. 11. *Ten Years Internal Market without frontiers*. Brussels.

European Commission (2002b), "Second benchmarking report on the implementation of the internal electricity and gas market". *Commission Staff Working Paper* SEC(2002) 1038. Brussels.

European Commission (2002c), *Economic Reform: report on the functioning of community product and capital markets*. COM(2002) 743. Brussels.

European Commission (2002d), "Eighth Report on the Implementation of the Telecommunications Regulatory Package". *Commission Staff Working Paper* SEC(2002) 1329. Brussels.

European Observatory for SMEs (1997), *Fifth Annual Report*.

EUROSTAT (2002), *Cronos Database*, Luxembourg.

Federal Ministry of Agriculture, Forestry, Environment and Water Management (2001), "Federal Waste Management Plan 2001", Vienna.

Felderer, B., M. Fink, C. Helmenstein and I. Paterson (1998), *Re-Regulierung der Freien Berufe. Eine komparative Analyse der Regulierungssysteme der rechts- und wirtschaftsberatenden Freien Berufe in Österreich und drei weiteren europäischen Ländern*. Institute for Advanced Studies, Vienna.

Gallezot, J. (2002), "Accès au marché agricole et agro-alimentaire de l'UE : le point de vue du négociateur à l'OMC et celui du douanier", *Économie rurale*, No. 267, Société française d'économie rurale, No. 267, Paris, January-February.

Gonenc, R., M. Maher and G. Nicoletti (2001), "The implementation and the effects of regulatory reform: Past experience and current issues". OECD *Economic Studies*, No. 32. Paris.

Gugler, K. (1998), "Corporate ownership structure in Austria", *Empirica*, Vol. 25, No. 3.

Gugler, K., S. Kalss, A. Stomper, and J. Zechner (2001), "The Separation of Ownership and Control in Austria", in: F. Barca and M. Becht (eds.), *The Control of Corporate Europe*, Oxford University Press, 2001

Hauth, A. (2001), "Unternehmensgründungen in Österreich. Gründungsintensität und Überlebensquoten", *Wirtschaftspolitische Blätter*, 4/2001.

Hofer, H. and A. Weber (2002), "Wage mobility in Austria 1986-1996", *Labour Economics*, 9, pages 563-577.

Hofer, H., Ch. Pichelmann and U. Schuh (2001), Price and quantity adjustments in the Austrian labour market, *Applied Economics*, 33, pages 581-592.

Hult, M. (2003), "Business demography in 9 Member States", *Statistics in focus*. Theme 4-9/2003. Eurostat.

IEA (2000), "On the Rebound: the Interaction of Energy Efficiency, Energy Use and Economic Activity", IEA/SLT(2000)14.

IEA (2002), *Beyond Kyoto: Energy Dynamics and Climate Stabilisation*.

IEA (2002), *Energy Prices and Taxes*, 3rd quarter.

IEA (2003), "The Austria 2003 Review", *Energy Policies of IEA Countries*.

Kartellrecht (2002), *Wettbewerbsgesetz. www.kartellrecht.at/Wettbewerbsgesetz.html*

Kelly, T. and M.L. Gosman (2000), "Increased Buyer Concentration and Its Effects on Profitability in the Manufacturing Sector". *Review of Industrial Organisation*, Vol. 17, pp. 41-59.

Kommission zur langfristigen Pensionssicherung (2002), *Gutachten über die langfristige Pensionssicherung in den Jahren 2000 bis 2050*.

Lutz, Hedwig (2003), "Auswirkungen der Kindergeldregelung auf die Beschäftigung von Frauen mit Kleinkindern", *Wifo Monatsberichte* 2/2003.

Mayer, Brown, Rowe and Maw (2002), *Global Trade Protection Report* 2002.

McLure, C. E. (2000), "Tax assignment and subnational fiscal autonomy", *International bureau of fiscal documentation bulletin*, December.

Meijl, H. van and F. van Tongeren (2001), "Multilateral Trade Liberalisation and developing countries: A North South perspective on agriculture and processing sectors", *Paper presented to the 77th EAAE Seminar*, Helsinki, August.

Mesch M.(2002), "Die Branchenlohnstruktur in Österreich 1980-94. Daten und Auswertungen aufgrund der Einkommensstatistik der Sozialversicherung", *Materialien zu Wirtschaft und Gesellschaft* Nr. 81, Abteilung Wirtschaftswissenschaften und Statistik der Kammer für Arbeiter und Angestellte für Wien, November 2002.

Ministry of Economic Affairs and Labour (2002), *Structural reforms on the product and capital markets (Cardiff report)*, Austria 2002.

Nash, C., P. Bickel, R. Friedrich, H. Link and Louise Stewart (2002), "The Environmental Impact of Transport Subsidies", *Background paper for the OECD Workshop on Environmentally Harmful Subsidies*, Paris, 7-8 November.

Nguyen-Hong, D.(2000), "Restrictions on Trade in Professional Services". *Staff Research Paper*, Australian Productivity Commission.

Nickell, S. and S. Nunziata (2000), "Employment patterns in OECD countries", *Centre for economic performance*, Discussion paper 448.

Nicoletti, G., A. Bassanini, E. Ernst, S. Jean, P. Santiago and P. Swaim (2001), "Product and labour market interactions in OECD countries". OECD *Economics Department Working Paper* No. 312. Paris.

Nowotny, E. (1998), "Privatisation, Deregulation, Reregulation – Experiences and Policy Issues in Austria". *Journal for Institutional Innovation, Development and Transition*, Vol. 2.

Oates, W. E. (1999), "An essay on fiscal federalism", *Journal of Economic Literature*, Vol. 37.

OECD (1990), *Economic Survey Austria*, Paris.

OECD (1994), *Economic Survey Austria*, Paris

OECD (1998a), *Economic Survey Austria*, Paris.

OECD (1998b), Work-force ageing in OECD countries, in *Employment Outlook*, Paris.

OECD (1999), *Action Against Climate Change: The Kyoto Protocol and Beyond*, Paris.

OECD (1999), *Economic Survey Austria*, Paris.

OECD (2000), "Austria", *The* DAC *Journal*, Vol. 1, No. 2, Paris.

OECD (2001a), *Economic Survey Austria*, Paris.

OECD (2001b), OECD *Science, Technology and Industry Scoreboard. Towards a Knowledge-based Economy*. Paris

OECD (2001c), *Education Policy Analysis: Education and Skills*, Paris.

OECD, (2001d), *Market Effects of Crop Support Measures*, Paris.

OECD, (2001e), *Agricultural Policies in Emerging and Transition Economies: Special Focus on Non-Tariff Measures*, Paris.

OECD (2001f), "Development Co-operation 2001 Report", *The* DAC *Journal*, Vol. 3, No. 1, Paris.

OECD (2001g), "Business benefits of trade facilitation", TD/TC/WP(2001)21/FINAL.

OECD (2002a), *Economic Survey Switzerland*, Paris.

OECD (2002b), *Energy Policies Austria*: 2002 *Review*. IEA, Paris.

OECD (2002c), "Product market competition and economic performance" in OECD *Economic Outlook* No. 72. Paris.

OECD (2002d), "Developments in local loop unbundling". Paper presented for the Working Party on Telecommunication and Information Services policies. DSTI/ICCP/TISP(2002)5/REV2. Paris

OECD (2002e), *Economic Surveys: Germany*.

OECD, (2002f), *Agricultural Polices in* OECD *Countries: A Positive Agenda for Reform*, Paris

OECD, (2002g), *The Medium-Term Impacts of Trade Liberalisation in* OECD *Countries on the Food Security of Non-Member Countries*, Paris, June.

OECD (2002h), "Overview of non-tariff barriers: findings from business surveys", TD/TC/WP(2002)38.

OECD (2002i), *Agriculture and Trade Liberalisation*.

OECD (2002j), *International Trade by Commodity Statistics* 1996/2001, Volume 2002, Issue 3.

OECD (2003a), *Communications Outlook*, 2003. Paris.

OECD (2003b), *ICT and Economic Growth: Evidence from OECD Countries, Industries and Firms*, Paris, forthcoming.

OECD (2003c), *Transforming disability into ability – policies to promote work and income security for disabled people*, Paris.

OECD (2003d), *Economic Survey of Germany*, Paris.

OECD (2003e), Directorate for employment, labour and social affairs, *Review of family-friendly policies in Austria, Ireland, and Japan*, DELSA/ELSA(2003)5.

OECD (2003f), *Farm Household Income Issues in OECD Countries*, Paris, January.

Pilat, Dirk, Frank Lee and Bart van Ark (2002), "Production and the use of ICT: a sectoral perspective on productivity growth in the OECD area", OECD *Economic Studies* No. 35.

Pollan W. (2001), "Lohndrift und Lohnunterschiede in der Industrie seit 1981", WIFO *Monatsberichte*, 3/2001.

Prusa, T. and S. Skeath (2002), "The economic and strategic motives for antidumping filings", *Weltwirtschaftliches Archiv*, Vol. 138, No. 3.

RDC (2001), "Evaluation of costs and benefits for the achievement of reuse and recycling targets for the different packaging materials in the frame of the packaging and packaging waste directive 94/62/EC", RDC-*Environment and Pira International*, May, Brussels.

Roberts, I, B. Buetre, and F. Jotzo (2002), *Agricultural Trade Reform and Special Treatment for Developing Countries in the WTO*, ABARE Report, Canberra September.

Roeger, W. and J. in't Veld (1997), "QUEST II. A multi-country business cycle and growth model", *Economic Papers*, 123, European Commission DG II, Brussels.

Rossmann, Bruno and Pia Netuschill (2002), "Die Reform der öffentlichen Verwaltung in den Jahren 2000 bis 2002 – Versuch einer Evaluierung", Kammer für Arbeiter und Angestellte.

Schneider, Martin (2002), "Local fiscal equalisation based on fiscal capacity: the case of Austria", *Fiscal Studies* 23/1.

Sheehan, Jerry and Andrew Wyckhoff (2003), *Targeting R&D: Economic and Policy Implications of Increasing R&D Spending*, DSTI/DOC(2003)8.

Stockenhuber, P. (2002), "Cross Border Mergers in Company Law and Competition Law: removing the final barriers. The Austrian Perspective". Submitted for FIDE – XX. *Congress*, London, 30 October – 2 November 2002. *www.fide2002.org/pdfs/cbmaustria.pdf*

Umweltbundesamt (2001), *Bewertung Abfallwirtschaftlicher Massnahmen mit dem Ziel der Nachsorgefreien Deponie*, Wien.

United Nations Conference On Trade And Development And The Commonwealth Secretariat (2001), *Duty and Quota-Free Market Access for LDC Countries: an Analysis of Quad initiatives*, London and Geneva.

Url, Thomas (2003), "Die Entwicklung der betrieblichen Altersvorsorge in Österreich", WIFO *Monatsberichte* 4/2003.

Weber, Andrea and Helmut Hofer (2003), "Active job search programmes a promising tool", *Institut für höhere Studien, Economic series* No. 131.

Winter-Ebmer, R. (2003), "Benefit duration and unemployment entry – A quasi experiment in Austria", *European Economic Review* 47.

OECD PUBLICATIONS, 2, rue André-Pascal, 75775 PARIS CEDEX 16
PRINTED IN FRANCE
(10 2003 16 1 P) ISBN 92-64-01896-4 – No. 53221 2003
ISSN 0376-6438