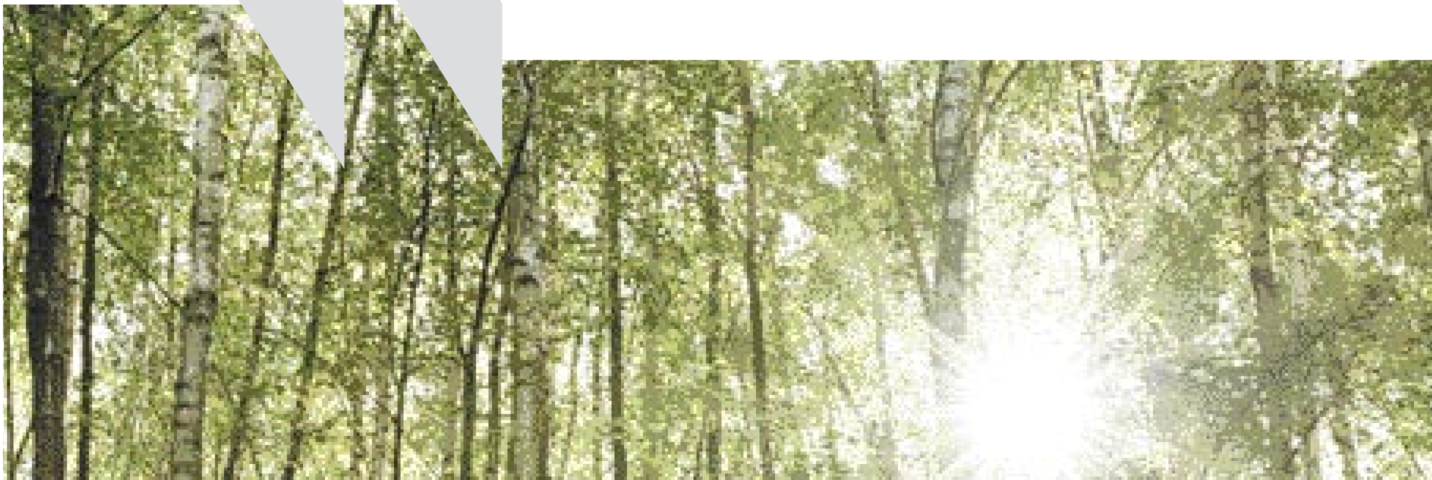
OECD Economic Surveys

Austria



OECD

OECDPUBLISHING

Volume 2005/8 – July 2005

OECD
Economic Surveys

Austria

2005

OECD

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

The OECD is a unique forum where the governments of 30 democracies work together to address the economic, social and environmental challenges of globalisation. The OECD is also at the forefront of efforts to understand and to help governments respond to new developments and concerns, such as corporate governance, the information economy and the challenges of an ageing population. The Organisation provides a setting where governments can compare policy experiences, seek answers to common problems, identify good practice and work to co-ordinate domestic and international policies.

The OECD member countries are: Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The Commission of the European Communities takes part in the work of the OECD.

OECD Publishing disseminates widely the results of the Organisation's statistics gathering and research on economic, social and environmental issues, as well as the conventions, guidelines and standards agreed by its members.

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.

Publié également en français

Table of contents

Boxes

Tables

Figures

OECD ECONOMIC SURVEYS: AUSTRIA – ISBN 92-64-01104-8 – © OECD 2005

BASIC STATISTICS OF AUSTRIA, 2004

LAND

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

PEOPLE

Population (1 000)	8 033	Labour force[1] (1 000)	4 433
Inhabitants per km^2	96	Employment[1] (1 000)	4 186
Natural increase in population, 2003 (1 000)	0	Agriculture (%)	13
Net immigration, 2003 (1 000)	36	Industry (%)	22
		Services (%)	65

PRODUCTION

GDP, current prices (billion euros)	235	Origin of value added (%)	
GDP per capita (1 000 USD in current prices)	36	Agriculture	2
Gross fixed investment per capita		Industry	31
(1 000 euros)	6	Services	67

GOVERNMENT

Public consumption (% of GDP)	18	Composition of Federal Parliament:	Seats
General government total revenue (% of GDP)	49	Socialist Party	69
Public debt (% of GDP)	64	Austrian People's Party	79
		Freedom Union	18
		Greens	17
		Last general election: November 2002	

FOREIGN TRADE

Exports of goods and services (% of GDP)	51	Imports of goods and services (% of GDP)	46
Main exports 2003 (% of total merchandise exports):		Main imports 2003 (% of total merchandise imports):	
Machinery and transport equipment	42	Machinery and transport equipment	40
Manufactured goods	36	Manufactured goods	31
Chemicals and related products	10	Chemicals and related products	11

CURRENCY

Irrevocable conversion rate (1 euro)	13.7603	Euros per USD:	
		Year 2004	1.24
		April 2005	1.29

1. Domestic concept.

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

Executive summary

The Austrian economy has demonstrated the capacity to take advantage of positive external developments. Important challenges remain, however, in two areas:

- *Fiscal performance needs to be improved despite substantial progress in securing the sustainability of government finances: government debt is still relatively high, fiscal consolidation also incorporates significant one off measures and fiscal federal relations are often inefficient.*
- *Trend growth is still held back by low labour force participation of older workers – also a potential source of future growth deceleration, high seasonal inactivity, relatively weak productivity growth in the services and a sub optimal environment for innovation activities.*

Increasing the efficiency of the public sector

Significant expenditure cutting measures – which are not yet fully specified – will be needed to reach the government target of a balanced budget by 2008. The introduction of a medium term budgeting framework would help to strengthen the necessary prioritisation and output orientation of the budgeting process so as to avoid the economic costs of ad-hoc measures. Fiscal sustainability calculations should be regularly carried out for all levels of government. Further tax reforms should focus on base broadening in exchange for statutory rate cuts.

Reforming fiscal federal relations

Sub-central levels of government rely largely on shared taxes, for which the federal government has full legislative responsibilities, and on federal government transfers. A large proportion of municipalities' and states' tax and transfer revenues are earmarked to specific spending programmes, often in terms of extra-budgetary funds, and there is widespread co-financing of spending items between the states and the municipalities. A complicated system of revenue redistribution reduces transparency. Reforms should focus on improving the revenue structure of lower levels of government. Dispersed decision making, notably in the health care system, but also as regards supra-regional infrastructure planning, should be harmonised and the scope for co-operation in service provision strengthened.

Raising labour force participation of older workers and reducing seasonal inactivity

Labour force participation needs to be increased by more effectively curbing early retirement and terminating the fiscal subsidisation of seasonal inactivity. Employers should fully finance the costs of early retirement on account of onerous work while invalidity pension schemes are in urgent need of reform.

Improving the environment for innovation

A well educated labour force is key for an innovation-minded economy. Austria is spending a lot for its education system, but the outcomes are falling short of performance in many other countries.

OECD ECONOMIC SURVEYS: AUSTRIA – ISBN 92-64-01104-8 – © OECD 2005

International experience suggests that a combination of national standards with a higher degree of school accountability for outcomes and a larger degree of freedom as concerns educational instruments and employment of teachers would help. Competition should be strengthened. As concerns start-ups of enterprises, the focus should be shifted from granting tax concessions to the improvement of general framework conditions, such as lowering barriers to entry and administrative burdens on entrepreneurial activity.

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 19 April 2005. 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 29 April 2005.

The Secretariat's draft report was prepared for the Committee by Eckhard Wurzel, Andrés Fuentes and Maria Antoinette Silgoner under the supervision of Andreas Wörgötter.

The previous Survey of Austria was issued in December 2003.

This Economic Survey may not include an examination of certain policies that are relevant to the country but fall within the competence of the European Community. While some of these policies may be examined in the Survey of the Euro Area, other policies may not be examined by the EDRC, as the European Commission currently maintains that the Economic Surveys should be limited in their coverage. No limits apply to the policies that can be covered in the Economic Surveys of other OECD countries.

The Commission and the Member States of the European Union are working actively on ways of reviewing EC and EU wide policies within the context of the EDRC.

ISBN 92-64-01104-8
OECD Economic Surveys: Austria

Assessment and recommendations

Maintaining Austria's strong economic performance requires further structural reforms

Overall, the Austrian economy is maintaining its position among the top performing European economies. Austria's capacity to take advantage of positive external developments contributed to this outcome. Nevertheless important challenges remain. First, recurrent use of one-off consolidation measures with a relatively high level of public sector debt-to-GDP ratio suggest that there is the need to reform budgeting procedures, including fiscal federal relations – the in-depth structural theme of this *Economic Survey* – in order to make the government sector more efficient and deliver high quality public services at a lower cost to society. Second, relatively low labour force participation rates of older workers will increase the burden of ageing on the Austrian economy. Hence, further reforms are needed to boost labour force participation and employment while at the same time encouraging productivity growth, notably by fostering competition and providing a better environment for innovation activities.

The general government deficit has drifted up to 1.2% of GDP in 2004

The general government deficit, having re-emerged after a small surplus in 2001, deteriorated further in 2004, reaching 1.2% of GDP (Maastricht-definition), and overshooting the government's objective set out in its Stability Programme by 0.5% of GDP. While adverse cyclical factors diminished in 2004, rising unemployment and sluggish domestic demand continued to weigh on the budget. The cyclically adjusted balance deteriorated by 0.1% of GDP as subdued outlays for personnel and increases in indirect taxes and social charges were out-weighed by reductions in personal and corporate income tax and accelerating outlays for the government's investment stimulation package. The debt-to-GDP ratio has not fallen much and is still high at around 65%.

And the deficit is set to rise further in 2005 and 2006

The general government deficit is set to rise further in 2005 and 2006, both on account of revenue shortfalls as well as earlier spending commitments. Major reductions in corporate and personal income tax, amounting to about 1% of GDP, will only be partially offset by spending restraint and higher revenues elsewhere. Childcare benefits are set to increase. Some progress can be expected concerning total general government spending which is expected to grow less than nominal trend GDP in 2005, as ongoing public sector reforms continue to moderate outlays for personnel. Moreover, one-off revenues, *inter alia* from the sale of real estate, higher co-payments for pharmaceuticals and increases in the tobacco

OECD ECONOMIC SURVEYS: AUSTRIA – ISBN 92-64-01104-8 – © OECD 2005

tax and in social charges for pensioners bring relief to the budget mainly from the revenue side. In sum the deficit is projected to be just below 2% of GDP in both 2005 and 2006.

Public sector efficiency needs to be increased

The government appropriately aims at balancing the general government budget by 2008, envisaging a reduction in the spending-to-GDP ratio of 4 percentage points of GDP. Resuming fiscal consolidation by spending restraint is necessary to validate the recent tax reductions and to cope with the challenges of ageing. However, not all of the measures that are required to attain this outcome are yet in place. Consolidation needs to be achieved via policies designed to increase public sector efficiency in order to raise the growth and employment potential of the Austrian economy. Although public sector reform ranks high on the government's policy agenda, and several measures taken in the recent past will reduce resource absorption by the public sector, further reform is necessary.

Budgetary procedures should allow for better medium-term prioritisation

Achieving fiscal consolidation through public sector reform requires a rigorous approach to evaluating and prioritising public sector spending. There is significant scope for developing the budgeting framework at the different levels of government into a fundamental tool for improving public sector decision making.

- At present, no medium term budget framework is available that accounts for envisaged future developments of spending and revenue items.
- The budgeting framework lacks focus on policy outcomes.
- Systematic evaluation of the costs and benefits of policy programmes is not performed and important information is often not available at the different levels of government.
- A number of future spending commitments such as the states' future pension obligations for public sector employees remain unrecorded.
- Transparency is hampered by the fact that some accounting rules are not fully harmonised between the different government levels.

Hence, facilitating the setting of spending priorities by policy makers suggests fundamental revisions to the budgeting framework at all levels of government. *A medium-term budget framework should be introduced at all levels of government in the same systematic way as in the annual budgets, with an accounting of envisaged budgetary appropriations detailed enough to make transparent the causes for spending and revenue pressures. Long-term fiscal pressures should also be made transparent by providing fiscal sustainability calculations. Moreover, the budget layout should be simplified and budgetary appropriations should be linked directly to functional programmes. The information base for cost benefit analysis of spending and revenue programmes needs to be improved, and the accounting framework should be fully harmonised across government levels.*

The system of revenue allocation across governments needs to become more efficient

The Constitutional Convention (*Österreich Konvent*) has recently fostered debate on constitutional reform, *inter alia* with respect to improving fiscal federal relations. Sub-central levels of government rely largely on shared taxes, for which the federal government has full legislative responsibilities, and on federal government transfers. A large proportion of municipalities' and states' tax and transfer revenues are earmarked to specific spending programmes, often in terms of extra-budgetary funds, and co-financing of spending items between the states and the municipalities is widespread. A complicated system of revenue redistribution reduces transparency. There is much scope to improve the efficiency of revenue allocation across governments:

- Earmarking of revenues, extra budgetary funds and co financing arrangements substantially increase the complexity of federal fiscal relations, raise administrative costs, introduce distortions and reduce accountability. *Earmarking of revenues should be given up, and extra budgetary funds should be fully integrated into the budget of the respective government. Co financing should be strictly limited to cases where clear externalities are present and local provision is nonetheless preferable, and be based on output rather than input indicators.*
- While the system of revenue redistribution across municipalities helps to reduce the dispersion in living standards, its complexity makes the extent of compensation hard to assess, and the municipalities' own tax revenues can be subject to very high levies. *The redistribution mechanism for municipalities should be simplified and the extent of redistribution reduced. One option would be to eliminate the wide range of vertical redistribution and achieve redistribution via horizontal transfers between municipalities for each state.*
- Some regional centres servicing bordering municipalities are being funded less well than other similarly sized municipalities. *The provision of such services should be taken into account in the distribution of tax revenues of local governments.* Demand for local services relating to education, social facilities and health care varies by demographic group. *Hence, the demographic composition of the population, such as the proportions of the elderly, young children and immigrants, should be used a priori as additional criteria in determining the sharing of tax revenue of sub national levels of government.*
- Moreover, sub national governments should rely more on tax revenues under their own control with real estate taxation a likely candidate for this purpose. *To this end, valuation of real estate for tax purposes at the level of municipalities should be updated more frequently and unified across sectors in line with market valuations. At the level of the states, consideration should be given to introducing genuine taxing powers that replace the states' levy on the municipalities. Allowing the states to incorporate a limited flat income tax component into the income tax schedule would be an option.*

Economies of scale in service provision should be utilised

Many municipalities in Austria are very small, incurring on average much higher administrative costs per capita than larger municipalities. Hence, there is a need to exploit returns to scale of community size in the provision of government services so as to control costs and debt accumulation. From an economic perspective, voluntary mergers of

OECD ECONOMIC SURVEYS: AUSTRIA – ISBN 92-64-01104-8 – © OECD 2005

municipalities would be a preferable option as mergers allow the benefits of increasing returns to scale to be reaped while preserving accountability to local voters. Widening co-operation between municipalities through the joint provision of services is a second option. At present, legal hurdles prevent the establishment of associations of municipalities across different states. *These barriers should be abolished*.

Fragmented decision-making should be better integrated

Key areas of public sector activity are subject to joint decision making between various layers of government. This is true, *inter alia*, for spending responsibilities in health care and to some extent also in pension systems and unemployment-related income support. Split responsibilities across different administrations appear to seriously impede the suitable evaluation of spending programmes and programme selection. A spectacular example of the adverse consequences of the lack of integration of policies across various levels of government is the "*Semmering Tunnel*", favoured by the federal government because it would make rail transport more efficient, while also increasing environmental sustainability of transport as such, but blocked by local government on grounds of local nature protection. *The legal environment for large infrastructure projects should be reformed in a way which takes account of all interests involved while allocating the final responsibility to the higher government level.*

The health care system is notable for the dispersion of decision making

Revisiting the allocation of tasks within the government sector is likely to have a large potential to improve public sector efficiency and generate sizeable savings in the general government budget. An example of the sub-optimal allocation of tasks is the health care system, where the states play a dominant role in decision making for hospital services while provision of these services is financed jointly by all layers of government and the social security system. The separation of spending and financing responsibilities has weakened incentives to achieve cost reductions, inducing states, *inter alia*, to maintain hospital capacity at inefficient levels. Fragmented funding responsibilities also generate incentives to shift services for patients treated by hospitals to practicing physicians and *vice versa*. To raise efficiency in health care provision, the federal and state governments have created a new system of health care agencies. While this setting marks progress in bringing together the various government institutions involved in financing services, the assignment of responsibilities remains largely unchanged. *Financing and spending responsibilities for both the hospitals and practicing physicians should be assigned to one government institution, giving it the role of an active purchaser of health services. To this end the health care agencies could be developed further and given effective decision-making powers to terminate contracts with health care providers. An alternative option for reform would be to assign financing and spending responsibilities for both health care sectors fully to social insurance*. In both cases health agencies could play an important role in capacity planning and co-ordination and quality control.

Further tax reform should focus on reducing distortions

The tax reform of 2004/05 implies substantial reductions in statutory and effective corporate tax rates, which – if combined with fiscal consolidation on the spending side of public budgets – will help to improve Austria's international competitiveness and support economic activity more generally. Progress has also been made in simplifying the income tax schedule. However, tax laws – personal and corporate income taxation as well as value added taxes – are still subject to many special rules and exceptions that reduce the transparency of the tax system and distort economic activity. *Hence, future tax reform should focus on simplifying the tax system and reducing economic distortions by significantly reducing tax expenditures and preferential access to benefits, in exchange for lower statutory rates.* A more transparent tax system associated with lower statutory rates would also contribute to maintaining the attractiveness of Austria for foreign investors.

Progress in pension reform should be secured by further reducing incentives for early retirement

Earlier progress in pension reform was followed up by a further step in 2004, the *Allgemeines Pensionsgesetz* (General Retirement Income Act, APG). Overall, the reform package marks substantial progress in securing the sustainability of general government finances and improves incentives for working longer or searching for a job. Subject to transition periods, this step largely harmonised hitherto separate occupational pension schemes and established individual pension accounts while aiming at actuarial fairness for some part of voluntary deviations from the statutory retirement age. However, the reform also introduced a new channel into early retirement for those engaged in onerous work ("heavy workers") and reinstated early retirement from age 62 for workers with at least 37.5 insurance years. *Consideration should be given to make binding the envisaged demographic correction mechanism for pension benefits, which is only vaguely specified in the current setting.* Moreover, reform should continue to further reduce incentives for early retirement:

- The new pension law aims at actuarial fairness for persons eligible for earlier or later retirement on account of an insurance record of 37.5 years. However, there still appears to be a bias in favour of early retirement and against activity beyond the statutory retirement age for employees with a very long insurance record and those engaged in onerous work. *All types of old age pensions should be made actuarially fair around the statutory retirement age, while the impact on labour supply should be monitored carefully.*
- While the newly introduced early retirement scheme for "heavy workers" aims at some compensation for above average physical or mental stress during working life, the definition of such workers appears ambiguous and the scheme provides no incentives to improve work conditions. *Thus, the scheme should be revised. As a minimum, employers of "heavy workers" should be requested to make a financial contribution to the scheme that fully covers the additional costs.*
- In general invalidity benefits are granted only in cases of complete disability. However, workers with a certain uninterrupted work history in a regulated trade qualify for full invalidity benefits if their work capacity is considered to be insufficient to continue

OECD ECONOMIC SURVEYS: AUSTRIA – ISBN 92-64-01104-8 – © OECD 2005

working in that trade. *Instead, such persons should be encouraged to actively search for employment in other occupations that are acceptable on medical grounds and should be offered appropriate assistance by the labour offices.*

- The relatively high and apparently rising number of disability benefit recipients suggests that there is scope for reform of the system, which should strengthen the incentives of employers for avoiding work related accidents and sicknesses and increasing the motivation of persons concerned to stay in the labour market. *As a first step, due consideration should be given to the disability pension reform proposals of the respective Working Group of the previous Pension Reform Commission and these proposals should be adapted in the light of recent international experience.*

Pension schemes for the states' civil servants are in urgent need of reform

Phased harmonisation of pensions for federal civil servants with the rules of the general scheme is a major element of the new pension legislation. However, the often more generous pension schemes for civil servants of the states and communities are not yet harmonised. *Lower levels of government are urged to provide regularly updated information about their implicit future spending liabilities and to develop systematic fiscal sustainability calculations. The pension schemes for civil servants of the states and municipalities should be harmonised with the rules of the APG scheme. Harmonisation also requires that special early retirement programmes are terminated and more efforts are made to relocate redundant public sector workers.*

More needs to be done to foster labour force participation and employment

Progress has been made in moving towards more efficient activation of the unemployed. However, there remains considerable scope to improve further the efficiency of the placement system and foster labour supply and demand. The following issues deserve particular attention:

- Access to the scheme that subsidises part time employment for older employees has been made more restrictive and inflows have decreased significantly. *The scheme should be monitored closely and phased out if it reduces labour supply.*
- Complete withdrawal of childcare benefits above a certain income level of the parent discourages female labour supply as was outlined in the 2003 *Economic Survey. Instead, reductions in support should be phased. Moreover, to make Austria's generous childcare support system more compatible with incentives to work, part of the childcare benefits could be provided as childcare vouchers, partly replacing current means tested cash benefits. The tax credit for single earner households should be abolished. Extending the supply of full day schooling could also help to foster female labour force participation.*
- Earnings are subject to very high effective taxation once social assistance recipients take up employment, since the states reclaim the benefits paid in the past. This discourages benefit recipients from searching for a job. *Reclaiming social assistance by the states needs to be terminated. Moreover, for benefit recipients who are able to work, the social assistance and unemployment assistance schemes should be combined into one means tested income replacement*

scheme in order to reduce administrative overheads and facilitate better activation of the jobless. In the same vein, means testing and work availability testing should be strict.

- Seasonal employment, notably in tourism and construction, is effectively cross subsidised via unemployment insurance claims while being out of work. *One option to reduce cross subsidisation would be to link employers' unemployment insurance contributions to their dismissal record so that firms with lower dismissal rates contribute less (experience rating). At the same time, better activation – also by encouraging the use of flexible working time models – and measures to combat abuse are needed.*

Broad reforms to raise the performance of the secondary education system are necessary

Austria is among the top countries within the OECD with respect to annual expenditures per pupil in primary and secondary schooling. The teacher-to-student ratio is also above average. Despite high input levels the schools' performance in the OECD PISA exercise for 15-year-old students was only close to the OECD average for most indicators revealing important areas for reform:

- Schools are relatively tightly regulated and differentiation of students by school types based on specific levels of performance takes place at a relatively young age. Moreover, while some progress has been made in developing quality standards for educational attainment in certain areas, uniform educational standards are absent. Full day schooling is not the general rule. *Nationwide standards for schooling attainment that are regularly evaluated should be introduced, while leaving schools more freedom in determining suitable ways to reach their targets. Full day schooling should be extended.*
- The social background of parents is playing a big role in the choice of schooling, implying considerable scope to improve participation in higher education by disadvantaged social groups and regions, and to raise the performance of the school system with respect to social inclusion. In particular, *German language training for children with an immigration background needs to be intensified.*
- A high degree of dispersion of competencies across the different layers of government hampers reform of the education system. *Financing and spending responsibilities for schools should be aligned at one level of government.*

The substantive progress in university reform needs to be firmly anchored

Tertiary education is likewise costly for public budgets, while suffering from long study duration and high drop-out rates. Returns to tertiary education appear to be very low by international comparison, and graduation rates are among the lowest within the OECD despite significant improvement since 1991. New legislation, in effect since January 2004, can be expected to raise the efficiency of the university system in several important respects. Part of university financing will be made performance-related (indicators are yet to be worked out) and tuition fees now accrue to the students' university. Internationally comparable degrees – Bachelor, Master and Doctor – are now compulsory for all new study fields. Granting lifelong tenure for professors has been terminated for new personnel and universities can now freely contract with business. Not all of these features have been fully implemented yet, and special attention should be paid to the following issues:

- The new responsibilities and increased autonomy increases the demand for appropriate management skills at Austria's tertiary education institutions. Broadening the membership of governing bodies to include external members is a positive step, but it needs to be supported by leadership development and management training for senior managers. *The government should monitor whether the universities develop appropriate management capacity in the transition to increased autonomy.*
- *In linking university funding to indicators, output related indicators should be preferred over input related indicators.*
- Under the new legislation universities can borrow funds from the credit market if they overdraw their budget. They are also allowed to engage in equity participations in enterprises or found their own business. This could lead to excessive risks. *Hence, admissible commercial activities should be narrowly defined. Also, in order to exclude moral hazard on the side of the universities and ensure competitive neutrality, the government should firmly exclude bailing out universities in financial difficulties.*
- Tuition fees can play an important role in raising performance related elements of university finance, but account only for a very small fraction of funding in the current system. The introduction of a small tuition fee in Austria did not have adverse effects on the social composition of students. The impact of tuition fees should be further monitored and evaluated, also in comparison with international experience and *consideration should be given to allowing universities to increase the share of fee financing, complemented by an income contingent loan scheme for students.*

Framework conditions for risk capital markets need to be made friendlier

Well-functioning markets for equity and venture capital (VC) are indispensable for enterprise establishment and the financing of innovation projects. A large share of private VC investment in Austria is channelled through special VC funds (*Mittelstandsfinanzierungsgesellschaft, MFG*), which are subject to preferential tax treatment. While this framework might have been initially effective in creating a basic VC market, restrictive quantitative rules for admissible investments are not conducive to increasing the supply of risk capital and hamper investors' ability to diversify risk. This is similarly true also for rules applying to pension and insurance funds. *Restrictive quantitative investment rules should be relaxed. Instead, regulation could follow the "prudent person" principle*, which focuses on the overall risk diversification of the portfolio. Also, *rather than giving tax preferences to a particular legal form of investment funds, equity and venture capital participations should be made subject to roughly the same tax regime with low taxation of the returns of capital across all types of investors, including business angels and partnerships. A special capital duty on share issue (Gesellschaftssteuer) should be dropped, and preferential treatment of retained profits should be abolished.*

Administrative hurdles for entrepreneurial activity need to be further reduced

Creation of new firms is very important for productivity growth and innovation. Considerable progress has been made in recent years in reducing regulatory overheads hampering the creation and growth of firms. However, there is still much scope for lowering barriers to firm creation. In many trades, notably in the crafts sector, eligibility for setting up a firm is dependent on the owner having obtained a certificate of qualification. The costs of creating a limited liability firm are higher than in other high income countries -

- Certain levies for enterprises are difficult to assess and are associated with considerable fixed costs, making them particularly costly for young or small firms. Examples include local taxes on certain installations, such as advertisement signs or shop portals (*Luftsteuer*), and the tax on credit contracts (*Kreditgebühr*), which can fall due a second time if a new owner takes over an enterprise with credit contracts. Thus, further efforts need to be made to reduce the administrative costs of setting up enterprises. *This should include revisiting some tax items whose revenues are often relatively small. To the extent that certification is wanted in order to safeguard certain levels of quality, it should pertain to employees rather than owners.*
- Professional services, for example of architects, engineers and accountants, are subject to a complex set of regulations, comprising both statutory provisions and significant elements of self regulation. There is considerable leeway in professional services for discontinuing some existing provisions or reforming them so as to minimise their distorting effect on competition. *For example, recommended fee schedules, issued by the relevant associations, should be prohibited. Exclusive rights granted to liberal professions should be narrowed and compulsory chamber membership for these professions terminated.*
- Shop opening hours regulations have been relegated to the states (*Länder*). No state has fully exhausted the available scope for liberalisation. *The states are encouraged to use the opportunities of the framework legislation more fully.*

The general competition framework can be improved further

The previous *Economic Survey* concluded that much progress had been made in aligning the Austrian competition framework with the mainstream, although the current institutional arrangements appear to be overly complex. Further measures to strengthen law enforcement have been taken in the meantime or are being prepared, such as a better staffing of the Federal Competition Authority (FCA) and the introduction of a leniency programme to strengthen law enforcement. This process should continue. *The institutional set-up should be simplified, giving more decision powers to the FCA. In particular, investigative powers should be transferred from the Cartel Court, which does not itself have the resources to conduct in-depth investigations, to the FCA.The introduction of criminal sanctions for hard-core cartels should be considered.*

OECD ECONOMIC SURVEYS: AUSTRIA – ISBN 92-64-01104-8 – © OECD 2005

Further regulatory reform and privatisation in network industries is called for

Finally, further progress is required in network industries where regulatory barriers and a high degree of state ownership are an impediment to greater competition. In particular:

- In the *electricity sector*, regional market concentration is high and few electricity suppliers make offers outside their regions in which they dominate the market. Retail pricing is not fully transparent, as incumbents often provide information on prices without separating network charges from the price of the electricity. Rules requiring majority government ownership lead to substantial entry barriers. *Network access prices should be further reduced and transparent retail electricity prices required. Rules requiring public ownership should be abolished.*
- In the *telecommunications sector* markets have become more competitive in recent years. Currently decisions by the regulator can be put on hold until a court decision is achieved. *This practice invites frivolous appeals which should be stopped by giving the regulator effective means to impose a decision with immediate effect.* To make the regulatory framework more credible *Telekom Austria should be fully privatised*. This would help to ensure that no perceptions of a conflict of interest on the part of the government arise.

ISBN 92-64-01104-8
OECD Economic Surveys: Austria

Chapter 1

Economic issues and policy challenges

The Austrian economy was able to take advantage of various positive external developments, notably eastern enlargement of the European Union. Export competitiveness was strengthened, however mainly in areas with a traditional comparative advantage. While the labour market functions well overall, tensions become visible through high seasonal unemployment, high youth unemployment by historical standards and a growing, although still small incidence of long-term unemployment. Government debt is still relatively high and fiscal consolidation relies to some extent on one-off measures. Productivity growth is too much dependent on capital deepening and obstacles to labour force participation hold down trend growth. The key challenges for the Austrian economy to maintain its good economic performance include making the government sector more efficient, reforming federal fiscal relations, boosting productivity growth and removing obstacles to higher labour force participation.

Average growth performance over the last 10 years has kept Austria in the top quintile of European countries with respect to the level of GDP per capita, while falling short of growth in the best-performing high-income countries within the OECD. The economy has been successful in taking advantage of the opportunities resulting from a series of substantial changes in its external environment in the course of the 1990s. Austria won rapidly market share in Central and Eastern European countries (CEECs) in the course of the 1990s, while membership in the European Union and subsequently in the European Monetary Union further intensified the regional integration of the Austrian economy. These developments contributed to one of the strongest manufacturing productivity growth rates among OECD countries, while the unemployment rate remained among the lowest. Much of the positive impact of these events is, however, fading, and economic growth has been weakening in recent years. Moreover, productivity growth has been uneven, with services performing less well than manufacturing. There is thus scope to revitalise the growth potential, a process which will be essential to weather the economic challenges resulting from population ageing. While important reform steps have been undertaken to put Austrian fiscal balances on a sustainable track, more ambition is needed in raising efficiency within the public sector so as to reduce high overall government spending, ensure the sustainability of government finances and create room for further tax reductions.

This chapter first situates the Austrian economy in terms of the current business cycle. This is followed by a description of the key challenges facing Austria in order to maintain its good economic performance:

- making the government sector more efficient;
- reforming federal fiscal relations;
- boosting productivity growth; and
- removing obstacles to higher labour force participation.

A protracted cyclical downturn is coming to an end

Austria underwent a sustained period of low economic growth from 2001 onwards, as with many countries of the euro area, with domestic demand contracting in 2001 and 2002. Economic growth totalled 0.8% in 2003. Subdued world trade growth, and stagnating activity in Germany, which absorbs about a third of Austrian exports, held back activity, although an expansionary fiscal stance pushed economic growth above the euro area average. After two years of decline, private investment grew strongly in spite of low capacity utilisation in manufacturing, boosted by temporary tax subsidies. While increases in social spending supported disposable income, adverse labour market conditions damped consumer confidence, resulting in modest consumption growth.

Driven by strong external demand GDP growth reached 2% in 2004. Investment grew strongly, albeit over most of the year at a reduced pace, helped by temporary investment subsidies that were extended until the end of 2004, as well as increasing capacity utilisation, as manufacturing output expanded vigorously, and credit growth accelerated.

 OECD ECONOMIC SURVEYS: AUSTRIA – ISBN 92-64-01104-8 – © OECD 2005

Private consumption recovered to some extent, benefiting from some income tax reductions, but rising unemployment, which weighed on consumer confidence, and possibly increased private provision for old age, raised private household savings. Higher oil prices pushed up inflation, lowering growth of real disposable incomes. HICP inflation rose throughout 2004, reaching 2.5% in December and averaging 2.0% over the year, slightly below inflation in the euro area. Notwithstanding the rise in inflation, wage growth in 2004, as well as collective wage settlements for 2005, have remained moderate.

Export performance has been strong but continues to rely on established comparative advantage

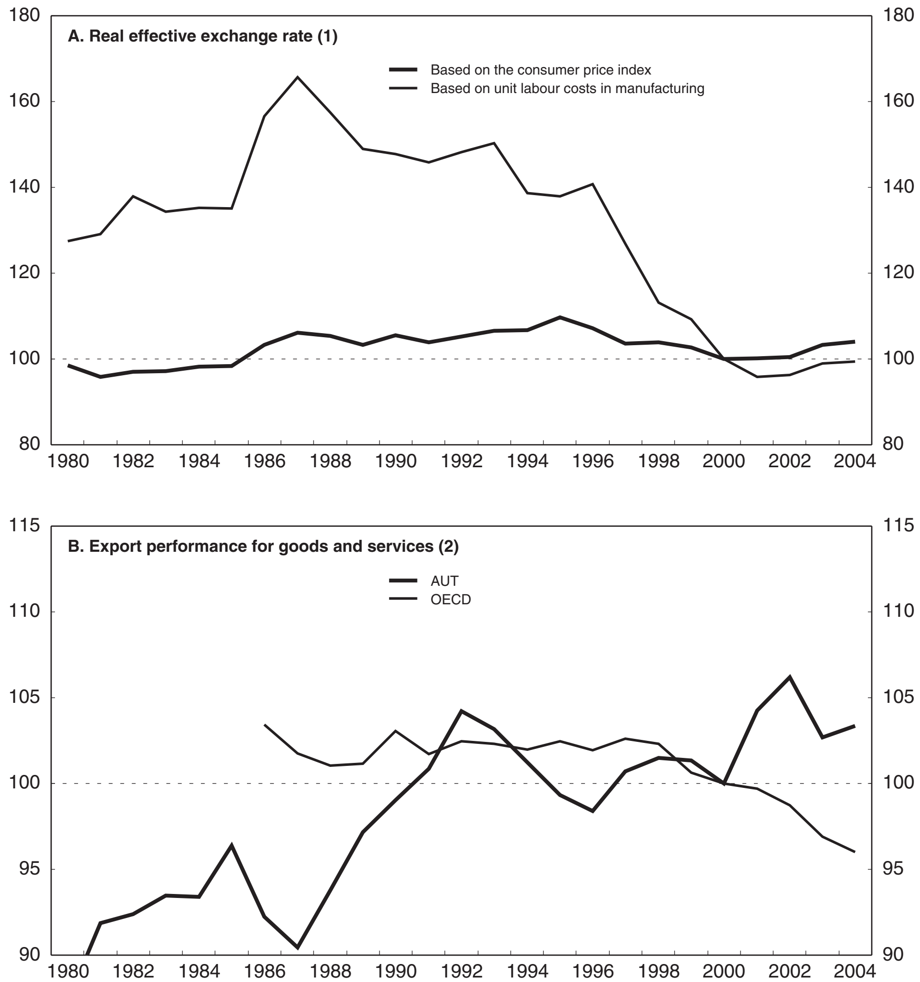
On the back of a trend improvement in competitiveness in recent years (see Figure 1.1), exports of goods rose strongly in 2004. Austrian supplies of intermediate goods to German exporters surged and Austrian exporters continued to benefit from strong demand growth in the neighbouring new EU member countries. Membership of these countries in the EU is providing an additional stimulus to trade and productivity as a result of the elimination of remaining barriers to trade and the phasing out of hurdles to factor mobility, allowing firms to boost productivity through further specialisation and through optimisation of production locations (see the 2003 *Economic Survey*). Rapid trade expansion between Austria and the CEECs has been accompanied by a substantial increase of Austrian FDI flows into CEECs over several years as well as immigration into Austria, which is supporting economic growth.

Further eastern enlargement of the EU might add to Austrian export dynamics. However, as economic integration with neighbouring countries to the east is already advanced, exports are unlikely to sustain the brisk expansion seen over most of the last decade. Indeed, empirical evidence suggests that trade volumes of neighbouring CEECs with Austria have attained levels that would be expected given their geographical proximity and income levels.[1] Trade growth already slowed from the high rates in the 1990s (Table 1.1) and Austrian exporters lost market shares, as neighbouring CEECs have been diversifying their trade links. Moreover, Austria's net comparative advantage in manufacturing *vis-à-vis* the CEECs, as reflected in mutual trade flows, declined, notably in machinery, as the neighbouring CEECs increased their own exports of machinery to Austria. While this development reflects the catch-up process of countries in Eastern Europe, there is some indication that demand for R&D-intensive Austrian products is high in these countries. However, Austria has been slower than other countries in developing R&D intensive industries and remains a net importer of R&D intensive products (see Chapter 4).[2]

Exports to fast-growing distant markets, notably in Asia, remain relatively low. For example, the share of Austrian exports going to China amounts to 1.1% of Austrian total exports, compared to 2.7% in Germany. This may to some extent reflect the industrial composition of exports. Indeed, Austrian exports to Asian countries are relatively strong in technology-intensive industries, in which Austrian exports are relatively weak overall, such as in optical, measurement, and medical apparatus or chemical products, whereas some sectors which make up a relatively large share of Austrian exports, such as electric machinery and textiles make a relatively small contribution to exports to Asian countries.[3] Export growth to Asia has also not gained much ground in recent years. Indeed, over the past 10 years, the Austrian share of OECD exports to China declined.[4]

Figure 1.1. **External competitiveness and export market share**

2000 = 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.

Source: OECD Economic Outlook Database and Sources and Methods.

The import content of Austrian exports increased from 33% in 1995 to 40% in 2000. Nonetheless, exports net of intermediate products used in the production of exported goods made a positive contribution to economic growth, growing by more than 8% annually on average between 1995 and 2000 in nominal terms, considerably outpacing nominal GDP growth. Hence, increasing intermediate imports were more than offset by additional export growth in this period. Outsourcing thus does not appear to have undermined export performance, but has contributed to maintaining the competitiveness of a strongly export oriented manufacturing sector.

Table 1.1. **Commodity trade by region**

	1991	1995	2002	2003
	% of total exports			
Exports to:				
Europe	85	84	84	83
Euro area	62	58	54	52
Germany	39	38	32	31
Italy	9	9	8	9
France	4	4	4	4
Other EU	11	16	19	18
United Kingdom	4	3	5	4
Eastern	5	10	12	12
Switzerland	6	5	5	5
Russian Federation	0	1	1	1
Croatia, Romania	0	1	2	3
Asia-Oceania	8	7	8	7
Japan	2	1	1	1
China	1	1	2	1
America	6	4	7	7
United States	3	3	5	5
Africa	2	1	1	1
Statistical discrepancy	0	4	0	2
Total	100	100	100	100
	% of total imports			
Imports from:				
Europe	81	87	83	82
Euro area	65	71	62	61
Germany	43	48	41	41
Italy	9	8	7	7
France	4	5	4	4
Other EU	8	11	15	15
United Kingdom	3	3	3	2
Eastern	3	6	10	10
Switzerland	4	4	3	4
Russian Federation	0	1	1	1
Croatia, Romania	0	0	1	1
Asia-Oceania	11	6	10	9
Japan	5	2	2	2
China	1	1	2	2
America	6	4	6	5
United States	4	3	5	4
Africa	2	1	1	1
Statistical discrepancy	0	2	0	2
Total	100	100	100	100

Source: OECD, *International Trade Statistics* (merchandise trade).

Unemployment remains relatively low in the wake of the growth slowdown

The economic slowdown raised unemployment in 2003, although the rise was less pronounced than in the euro area, in part on account of wage moderation which helped maintain employment gains despite weak economic growth. Expansion of training measures for the unemployed also helped to limit the rise in unemployment. Employment growth accelerated in 2004 due to buoyant inflow into self employment. Job creation

Table 1.2. **Labour market development**

	2000	2001	2002	2003	2004
	Annual growth, %				
Dependent employed	0.8	0.5	0.2	0.9	0.5
Natives	0.4	0.2	0.1	0.5	0.1
Foreigners	4.4	3.0	1.6	4.8	3.4
Small jobs	3.9	4.3	3.3	2.5	2.6
Persons in PES training courses	7.4	10.6	12.1	17.1	2.8
Apprenticeship market					
Job seekers	–0.6	11.2	12.8	16.2	–1.9
Job offers	18.7	11.0	–5.9	–4.2	–10.5
Standardised unemployment rate[1]	3.7	3.6	4.2	4.3	4.5
Registered unemployment rate[2]	5.8	6.1	6.9	7.0	7.1
Aged below 25	5.2	5.9	7.0	7.4	7.2
Aged 25-54	5.6	5.8	6.5	6.6	6.8
Aged above 55	10.8	10.5	11.3	11.3	10.2

1. According to European Union concept, per cent of labour force.
2. The registered unemployment rate is registered unemployed as a per cent of dependent labour force (employees registered with the social security agencies plus the registered unemployed).

Source: Public Employment Service (PES); Social Security Association (*Hauptverband der Sozialversicherung*); Eurostat.

occurred notably in the service sectors, which now account for more than 60% of employment, while employment in manufacturing and construction declined.

Despite employment growth, unemployment continued to rise in 2003 and 2004 (Table 1.2), as an increasing inflow of foreign workers has been delaying the favourable impact of the recovery on unemployment. Thus, the OECD expects unemployment to fall substantially only in 2006 (see Box 1.1). The proportion of long-term unemployment in total unemployment rose in 2003, in part reflecting the protracted nature of the downturn, which reduced hiring. The increasing proportion of older persons in the working age population tends to increase the share of long-term unemployment in total unemployment, as the incidence of long-term unemployment is considerably higher among older unemployed workers. Nonetheless, long-term unemployment remains low in Austria in international comparison, in part on account of high seasonal unemployment.

Table 1.3. **Labour force participation rate**

%

	Males and females aged 55-59			Males and females aged 60-64		
	Austria	EU15	OECD	Austria	EU15	OECD
1994	43.9	53.8	59.9	14.5	23.7	36.2
1995	45.8	54.4	60.3	14.8	23.6	36.3
1996	44.2	55.5	61.1	12.5	23.9	36.6
1997	43.1	56.0	61.7	10.8	24.3	37.3
1998	43.7	56.6	61.9	10.7	23.8	37.1
1999	45.1	57.1	62.4	11.6	24.3	37.1
2000	44.2	57.6	62.3	12.5	24.7	36.9
2001	46.0	58.2	62.4	13.2	25.5	37.7
2002	47.4	59.6	63.6	12.4	26.3	38.7
2003	53.1	60.1	64.2	12.1	26.9	39.2

Source: OECD National Labour Force Survey database.

Box 1.1. **The OECD's short term projections for Austria**

Recovery should resume at a moderate pace in the second half of 2005. Export growth will slow in 2005, reflecting more subdued world trade expansion than in 2004, while consumption will provide a larger impetus to activity as income tax cuts will raise disposable incomes. Although low interest rates, increasing capacity utilisation, and corporate tax reductions provide a favourable background, private investment plans are subdued for 2005, as temporary investment subsidies have been terminated. Strengthening world trade will support activity in 2006, with GDP growth accelerating to 2¼ per cent, slightly above potential growth, which may allow the unemployment rate to begin to fall. The effect of higher oil prices on inflation is expected to fade in 2006.

Table 1.4. **Demand, output and prices**

	2003	2004	2005	2006
	Percentage changes, volume (2000 prices)			
Private consumption	0.6	1.5	1.8	2.2
Government consumption	0.6	1.1	0.7	1.1
Gross fixed capital formation	4.4	4.8	2.6	3.1
Final domestic demand	1.5	2.2	1.8	2.2
Stockbuilding[1]	–0.1	–0.3	0.2	0.0
Total domestic demand	1.8	0.9	2.1	2.2
Exports of goods and services	1.6	9.0	5.1	8.0
Imports of goods and services	4.0	5.7	5.7	8.5
Net exports[1]	–1.0	1.8	–0.1	0.1
GDP at market prices	0.8	2.0	1.9	2.3
GDP deflator	1.6	1.9	2.2	1.7
Memorandum items:				
Harmonised index of consumer price	1.3	2.0	2.4	1.7
Private consumption deflator	1.1	1.8	2.3	1.7
Unemployment rate	5.5	5.6	5.6	5.5
Household saving ratio[2]	8.9	9.2	9.5	9.4
General government financial balance[3]	–1.3	–1.3	–2.0	–1.9
Current account balance[3]	–0.5	0.3	0.2	0.3

1. Contributions to changes in real GDP (percentage of real GDP in previous year), actual amount in the first column.
2. As a percentage of disposable income.
3. As a percentage of GDP.

Source: OECD Economic Outlook 77 database.

Youth unemployment, while also low in international comparison, has risen relatively strongly in recent years, reflecting *inter alia* a decline in the supply of apprenticeships offered by enterprises (*Lehrstellen*). Youth unemployment declined in 2004 and so did the demand for apprenticeships. However, despite the acceleration of employment growth in 2004, the firms' offers of apprenticeships declined strongly (Table 1.2).

Seasonal unemployment accounts for a substantial share of registered unemployment in Austria. Seasonal variations in the number of registered unemployed are more pronounced than in other European countries[5] and are particularly strong among workers in the tourism and construction industry, which play a relatively important role in the Austrian economy. The share of construction in the economy's total value added at about

8%, is one of the highest among OECD countries. This is almost matched by tourism, which contributes a further 7% to total value-added, also one of the highest shares.[6] Unemployed individuals who had previously worked in the construction and tourism industry accounted for about a quarter of registered unemployment in 2004, about twice their corresponding share in employment.

While participation of workers above 55 years of age increased in 2003, this rise reflects to some extent cohort effects, as larger cohorts are beginning to enter the age group of workers above 55 years of age, and such workers have considerably increased their participation in comparison with older generations (Table 1.3). Employment of older people also increased in recent years. While early retirement within the pension scheme for private sector workers has diminished slightly, effective early retirement has increased through other programmes which has contributed to a decline in the unemployment rate of workers above the age of 55 in 2004 (see Chapter 2).

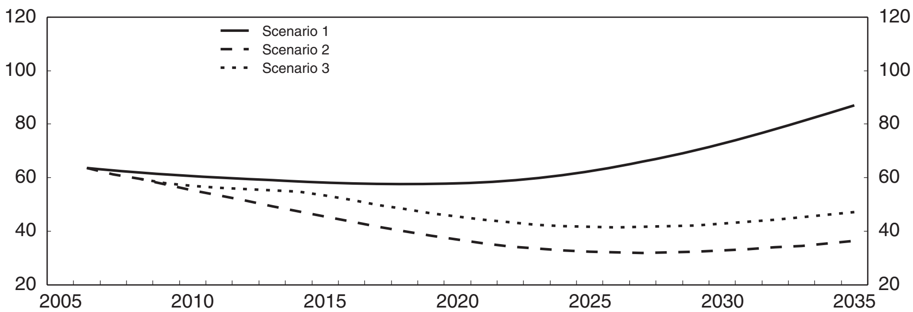
Maintaining good economic performance requires further policy initiatives

Public sector efficiency needs to be increased

General government debt would rise strongly if no further consolidation efforts were made. Using the OECD's structural deficit projection for 2006 (1.4%) as a starting point, illustrative computations by the OECD suggest that future increases in ageing-related spending combined with interest dynamics could raise debt levels from some 65% presently to about 90% in 2035 (scenario 1 in Figure 1.2). The simulation is based on the government's long-term projections of outlays for pensions, health care and long-term care, assuming that other primary spending items as well as revenues remain constant as a share of GDP and that the real interest rate totals 3%.[7] The government aims at balancing the general government budget by 2008, which would be associated with a reduction in the spending-to-GDP ratio by 4 percentage points. The simulation suggests that achieving this target is necessary to arrive at a debt ratio below the current level in 2035 (scenario 2). If the spending reductions targeted to achieve budget balance in 2008 are permanent and not

Figure 1.2. **Projections of general government debt**[1]

% of GDP



1. Scenarios:
   1. OECD debt projection for 2006 and government projections for ageing-related spending.
   2. Debt reduction until 2008 according to the government's Stability Programme and government projections for ageing-related spending.
   3. Debt reduction until 2008 according to the government's Stability Programme and temporary fiscal slippage.

Source: OECD calculations.

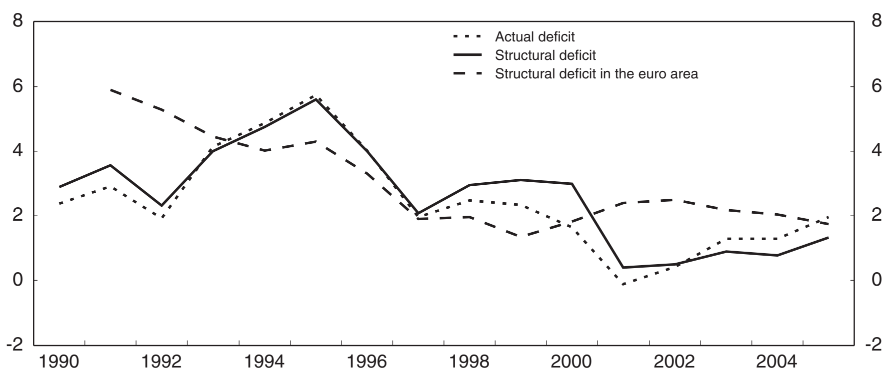
offset subsequently by increases of government spending relative to GDP or by tax reductions without commensurate spending cuts, the debt-to-GDP ratio would fall until around 2030, rising to levels around 35% in later years. By contrast, a temporary slippage of the structural primary balance by 1.5 percentage points, as occurred between 2001 and 2005, which would subsequently be reversed within 3 years, would result in a debt ratio that is 13 percentage points higher (scenario 3).

However, projections of future government spending commitments are associated with a high degree of uncertainty, not least because a comprehensive medium and long-term budgeting framework is missing. For example, projections of pension liabilities of sub-national governments are virtually absent. Also, spin-offs of government entities into the private sector have reduced the transparency of liabilities, now located outside the general government sector, for which the government will ultimately be responsible. For example, the debt of government-financed hospitals, which are recorded in the business sector in the national accounts, has increased in recent years. Moreover, the government's projection appears to be based on optimistic assumptions about the evolution of labour force participation. While the assumption is that the participation rate of workers aged 15-64 will increase, OECD projections, which take into account the reforms introduced in 2003, suggest that aggregate participation rates would drop by a significant margin by 2025 due to ageing.[8] Subsequent reforms in 2004 were not designed to tackle further early retirement, while the take-up of effective early retirement channels outside the old-age pension scheme has recently increased. Such channels have not been included in the official spending projections. Health spending is projected to rise only slowly relative to GDP, but technological progress and increasing demand for health care services have already raised health care spending relative to GDP in most OECD countries, even in the absence of spending pressures directly associated with ageing.

Looking back to the 1990s, episodes of fiscal consolidation were succeeded by rapidly rising deficits thereafter, unlike the situation in the EU as a whole (Figure 1.3). This reflects the fact that previous consolidation policies relied to a large extent on one-off measures

Figure 1.3. **Fiscal consolidation patterns of general government**[1]

% of (potential) GDP



1. Actual deficit is expenditure minus revenue divided by GDP. Structural deficit is expenditure minus revenue (each cyclically adjusted) divided by potential GDP. Projection for 2005.

Source: OECD Economic Outlook Database and Sources and Methods.

rather than structural policies that would have implied lasting consolidation gains.[9] Moreover, when fiscal balances improved, new social entitlements were installed. This pattern resembles the recent evolution of general government finances. While a small surplus was reached in 2001 the budget then slipped back into a deficit, with the structural deficit projected to rise to 1.4% of GDP in 2005. Indeed, while significant progress has been made in recent years in generating permanent savings via public sector reform, one-off measures played a significant role in bringing down the deficit at the beginning of the decade (see the 2003 *Economic Survey*). Moreover, structural balances deteriorated due to the income tax reductions and new discretionary spending, notably on family benefits and, recently, subsidies for private investment.

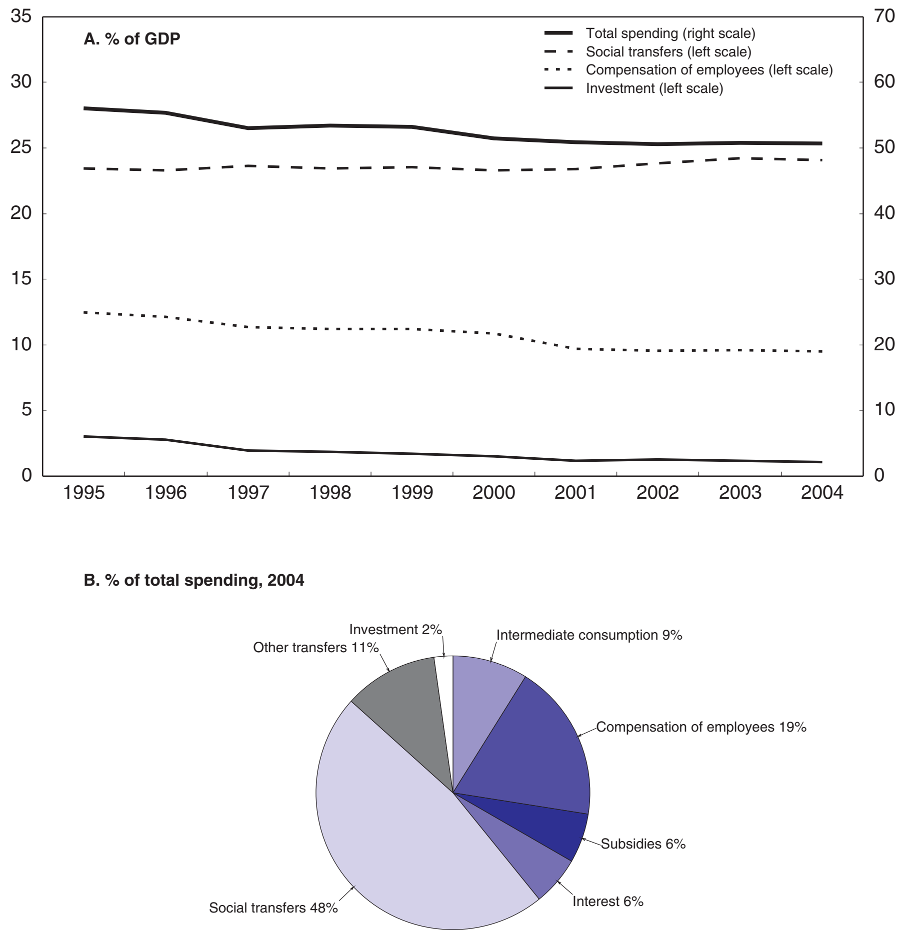
The investment tax credit-granted between 2002 and 2004 to firms whose equipment investment outlays exceeded average investment spending in the preceding three years was intended as a counter-cyclical measure to boost economic activity. Its effectiveness is questionable however. While the fiscal cost of the scheme rose steeply in 2004 firms increasingly appeared to find ways to qualify for the subsidy without having to raise investment outlays. In particular, creation of subsidiaries appears to have enabled firms to qualify for the tax credits for all of the subsidiary's investment outlays. The subsidy is also likely to have distorted the timing and structure of investment plans at a considerable fiscal cost, favouring current over future investment and equipment investment over other types of investment spending. Also, owing to low interest rates, the user cost of capital was low in 2003 and 2004 by historical standards, even without the subsidy.[10] Moreover, measures to encourage investment in physical capital are not an effective tool to strengthen long-term growth performance. The capital intensity of labour has grown more quickly than total factor productivity in Austria in recent years.[11] As a result, the productivity of additions to the capital stock may have declined, which would reduce incentives to invest in the future. Overall, total factor productivity growth, rather than capital accumulation, should be fostered to maintain or improve growth performance.

The level of general government spending, at some 50% of GDP, places Austria in the highest group in the OECD. Social spending makes up a large proportion of government spending, with generous outlays for pensions and family benefits relative to other OECD countries (Figure 1.4). While the level of government activity is a matter of social choice, the risk of the inefficient allocation of resources and a distortionary impact arising from government interventions increases with the size of the government sector. Overall, the expansionary fiscal policies of recent years now need to give way to lasting fiscal consolidation associated with policies designed to increase public sector efficiency so as to raise the growth and employment potential of the Austrian economy. While progress in public sector reform has been made in the past, there remains much scope to improve the efficiency of the public sector in various areas. Pension obligations of states for their civil servants are opaque and the state systems are not yet harmonised with the rules of the general pension scheme. Making personal and business taxation less distortionary is also a task that should rank high on the reform agenda. These challenges are investigated in Chapter 2.

As yet, central and sub-central governments have not established medium-term budgeting frameworks that account for envisaged future developments of public sector spending and revenue items, hampering prioritisation of government spending based on programme evaluation. Key areas of public sector activity are subject to complex fiscal relations across the layers of government. This is true, *inter alia*, for spending

 OECD ECONOMIC SURVEYS: AUSTRIA – ISBN 92-64-01104-8 – © OECD 2005

Figure 1.4. **Trends in general government spending**



Source: OECD, *National Accounts*.

responsibilities in the health care and pension systems and unemployment related income support, as well as for the generation of revenues and their distribution across the states and municipalities. Revisiting the distribution of tasks and funding principles across the layers of government is likely to have a very significant potential to improve public sector efficiency and generate sizeable savings in the general government budget. These challenges are investigated in Chapter 3.

There remains scope to raise productivity to levels of best-performing OECD countries

Austria's economy-wide labour productivity growth was close to average performance of high income EU countries in recent years (Table 1.5). However, in some countries – such as Sweden, Ireland, Finland or the United States – productivity expanded more rapidly while labour utilisation did not fall short of that in Austria. In addition, a lower level of hourly labour productivity contributes significantly to explaining the income gap *vis-à-vis* the United States (Figure 1.5).

Furthermore, while productivity growth per worker in manufacturing has outperformed most OECD countries in the 1990s, services productivity growth was among the lowest (see Figure 1.6). Indeed, manufacturing benefited more strongly than services from the more intense international competition that emerged in the 1990s, given that services are less internationally tradable and often subject to regulations that thwart competition (see 2003 *Economic Survey*). Productivity growth in services was particularly low in some ICT producing services, such as post and communications, as well as business services and renting of machinery and equipment.[12] ICT using services, such as retailing and financial services, experienced average productivity growth in comparison to other OECD countries, and productivity growth in these sectors appears to have decelerated.[13]

While innovation performance, which is a source of total factor productivity gains, has been improving over the 1990s, available evidence indicates that this has not been sufficient to prevent a decline in total factor productivity growth.[14] Framework conditions for innovation and productivity growth should be improved in order to enable the Austrian economy to reap fully the benefits from fiercer international competition and globalisation. At the same time regulatory reform is necessary to strengthen performance in the more domestically oriented sectors, notably in services where weak performance is widespread, as considered in detail in the 2003 *Economic Survey*. Various challenges come into play. Firms' access to risk capital is likely to play an important role in the development of new, innovative products or processes, which by their nature tend to be risky activities. Some regulations, such as investment rules for investment funds and rules of taxation, need to be adapted to spur growth of risk capital markets. A regulatory stance conducive to product market competition induces firms to adopt new production technology more rapidly in order to increase productivity. While progress has been made in recent years to reduce administrative overhead, hurdles to enterprise foundation need to be lowered further as newly founded firms are important contributors to innovation, in particular in research-intensive fields such as ICT and bio-technology. Professional services are tightly regulated, with entry barriers in some fields among the strictest in the European Union. There is also scope for easing access in the regulated trade sector.

Previous *Economic Surveys* described in some detail progress made in general competition legislation and in sector-specific competition enforcement, for example in the telecommunications and electricity sectors. Regulatory reform needs to continue in order to strengthen competition enforcement and further open network industries to competition. The supply of well-trained and highly qualified labour is a key contribution to innovation performance, productivity growth and employability. Austria's secondary education system appears to under-perform relative to the resources spent. Tertiary education is likewise costly for public budgets, while suffering from long study durations and high dropout rates. New legislation, implemented in 2004, can be expected to raise the efficiency of the system, but a number of issues, such as performance-related university

Table 1.5. **Output, employment and productivity growth rates**

1996-2003, annual averages

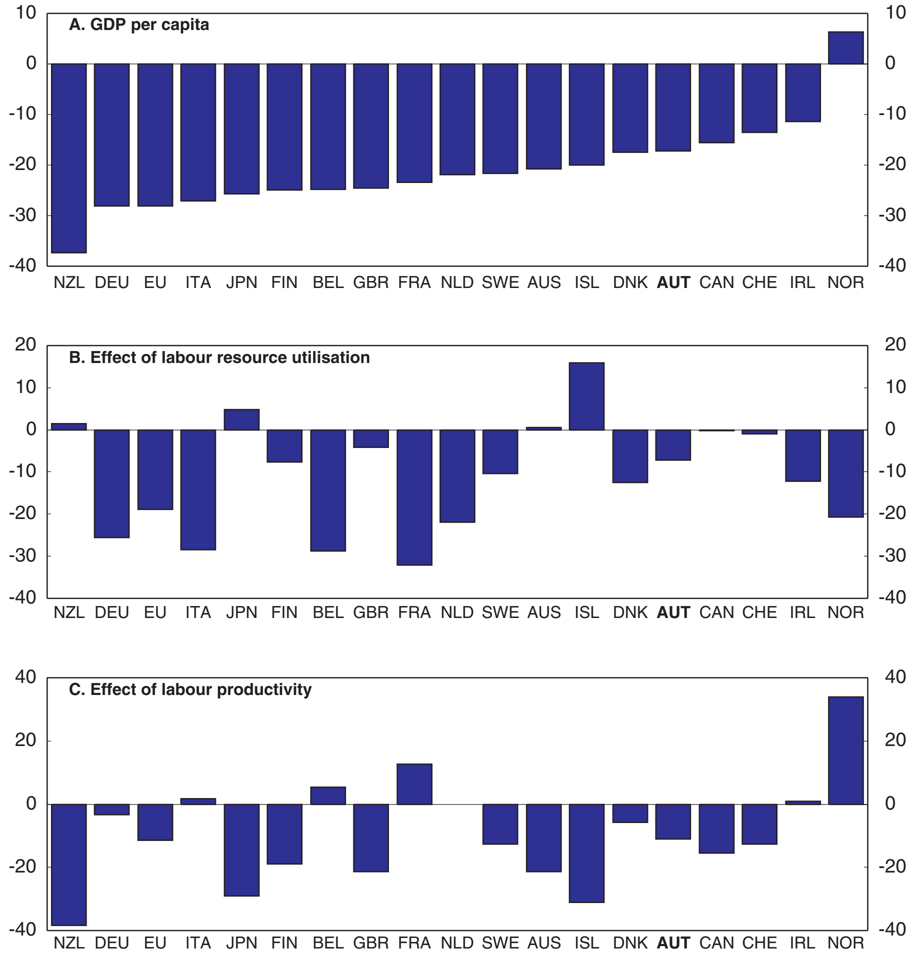
	Austria	France	Germany	United States	Finland	Belgium	Denmark	Ireland	Netherlands	Sweden	Group of 5 countries[1]
Real GDP	**2.1**	2.2	1.2	3.2	3.6	2.0	2.0	7.7	2.4	2.6	2.8
Population	**0.3**	0.4	0.1	0.9	0.3	0.3	0.4	1.2	0.6	0.2	0.5
Real GDP per capita	**1.9**	1.8	1.1	2.3	3.3	1.8	1.7	6.6	1.8	2.4	2.3
Labour input (hours per population)	**0.2**	–0.3	–0.5	0.0	0.8	0.6	0.3	1.4	1.4	0.1	0.6
Working age population (share of total population)	**0.2**	0.0	–0.2	0.3	0.0	–0.1	–0.2	0.7	–0.1	0.2	0.0
Labour force participation (share of working-age population)	**0.3**	0.5	0.6	0.1	0.3	0.5	0.2	1.3	1.0	0.0	0.6
Employed (share of labour force)	**0.0**	0.2	–0.2	–0.1	0.9	0.2	0.2	1.0	0.4	0.4	0.4
Hours worked per employed	**–0.3**	–1.1	–0.6	–0.3	–0.4	–0.1	0.1	–1.5	0.1	–0.5	–0.4
Labour productivity	**1.7**	2.1	1.5	2.3	2.5	1.2	1.4	5.2	0.5	2.3	1.7

1. Belgium, Denmark, Ireland, the Netherlands and Sweden.

Source: OECD, Annual Analytical Accounts, Main Economic Indicators Databases.

Figure 1.5. **The sources of real income differences, 2002**[1]

Gap with respect to US, %



1. Labour resource utilisation is measured as total number of hours worked divided by population. Labour productivity is measured as GDP per hour worked. For each variable v, the gap of country i with the USA is calculated as 100[v(i) – v(usa)]/v(usa). Because some gaps are large, values in panel A are not always the sum of those in panels B and C. Only when approximate gaps are calculated using natural logarithms, does this relationship hold, based on gdp/pop = (hrs/pop)(gdp/hrs). EU excludes Luxembourg.

Source: OECD, *Economic Policy Reforms: Going for Growth* (2005).

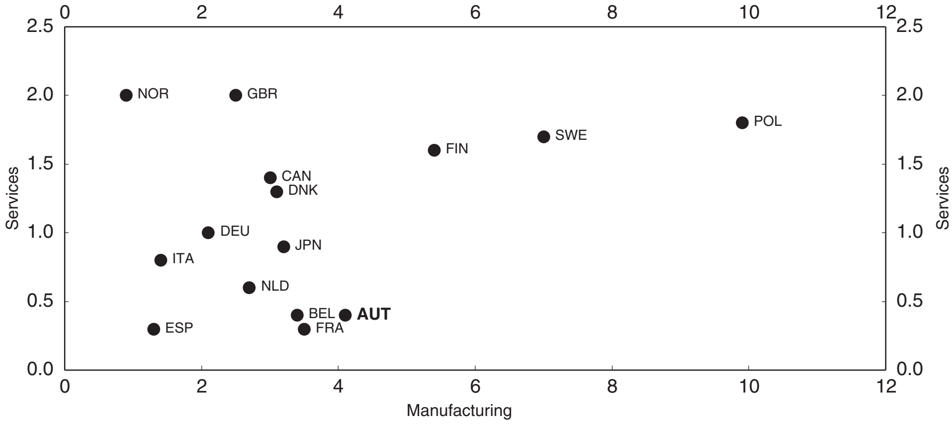
funding, need further clarification to fully develop their beneficial effects. These challenges are considered in Chapter 4.

... and obstacles to higher labour force participation need to be removed

In comparison to other high income countries in Europe, growth in labour utilisation has been held back by relatively weak expansion of labour force participation, notwithstanding increasing labour supply of foreign workers, due to both immigration and eased access of foreign nationals resident in Austria to the domestic labour market. As in

Figure 1.6. **Productivity growth in manufacturing and services, 1992-2002**[1]

%



1. Average annual growth in value added per total employment. Services are ISIC classes 50-99.

Source: OECD, STAN Database.

other countries, hours worked per employed person declined in Austria (see Table 1.5). Mainly this reflects the increasing share of part-time employment, including jobs with very few hours worked, in total employment.[15] Even so, hours worked per employed person are lower than in most high-income OECD countries.[16] Low participation rates among older workers have contributed to a relatively weak increase in participation rates in recent years. Although the proportion of persons aged above 55 years within the working age population has begun rising recently participation rates among older workers are still among the lowest in the OECD (Table 1.3). Simulations indicate that labour force participation would fall by 8% by 2025 – reducing the labour force by almost 10% – if participation rates, notably among older workers, will not rise substantially (Table 1.6).[17] National projections indicate, however, a substantial increase in participation rates of persons aged 50 and older until 2030.

Table 1.6. **Projected changes of participation, population and the labour force (15 years and over)**

	Change in participation rate, % points[1]				Total growth, % in:	
	Total change	*of which*			Population aged 15 and over	Labour force
		Demographic effect	Cohort effect	Other		
2000-2025	–7.7	–8.0	0.3	–0.1	–4.7	–9.2
2025-2050	–5.1	–4.7	–0.3	–0.1	–5.8	–15.3

1. The "demographic effect" denotes the impact of the change in the age composition of the population on the participation rate, given current participation patterns. The "cohort effect" denotes the effect of new cohorts entering the population of working age. "Other" effects include the impact of adjustment of unemployment towards the NAIRU on labour supply decisions, the impact of projected fertility changes on labour supply, as well as the impact of recent pension reforms (2000, 2003), which are projected to increase participation rates by 0.4% by 2025.

Source: Burniaux *et al.* (2004).

Issues concerning labour force participation and employability have been considered in detail in the 2003 *Economic Survey*. Recently, progress has been made in moving towards more efficient job placement and activation of the unemployed. However, fostering employment needs to continue to rank high on the policy agenda, not least against the background of adverse demographic developments. The challenge is to adapt the tax and transfer system in order to reduce disincentives both to labour supply and demand. This needs to include further institutional reform so as to abolish remaining incentives for effective early retirement within the old age and invalidity pension schemes and in income support targeted at older employees who reduce their working time. The lack of harmonisation of the pension systems for the states' and municipalities' civil servants with the general pension scheme reduces labour mobility and induces governments to consider early retirement as a suitable instrument to scale down the workforce in the public sector. At the same time, dispersed responsibilities in the government sector for means-tested income support for the unemployed and very high effective taxation of earnings for recipients of social assistance depress incentives to take up employment. High seasonality of unemployment in some sectors poses additional challenges for the design of unemployment benefits, so as to avoid cross-subsidisation of activities in some sectors by other sectors. While the recent phase of personal income tax reform interrupted the trend of rising taxation of earnings, the tax wedge on labour remains high, largely on account of high social charges. This reinforces the case for further reform of social transfer systems, notably in the pension and health care systems. There is also scope for making the system of child support more conducive to female labour supply. All of these issues interact with the challenges in public sector reform that are considered in Chapters 2 and 3 of this report. Furthermore, institutional reform designed to increase the efficiency of secondary and tertiary education, as discussed in Chapter 4, is also important in improving the employability of the workforce.

Notes

1. Bussière *et al.* (2004).
2. According to Stankovsky and Wolfmayr (2004), the share of Austrian technology-intensive exports to East European countries in total exports to East European countries exceeds the share of Austrian technology-intensive exports in total Austrian exports.
3. See Stankovsky and Wolfmayr (2004) for evidence on the geographic and industrial composition of exports.
4. Stankovsky and Wolfmayr (2004).
5. Seasonal variations in registered unemployment are considerably larger than in Germany, Denmark and Sweden.
6. OECD (2003a).
7. The government's projections, incorporating all measures of the 2004 reform, have been taken for pension outlays for private sector employees and for federal-government tenured civil servants. For tenured sub-national government employees it is assumed that pension outlays will grow in line with pension spending for private sector employees as projected prior to the 2004 pension reform. For 2005 pension spending for sub-national government employees is estimated as the difference between published total pension spending (BMSG, 2004) and pension spending for private sector and federal government employees. Economic growth is assumed to follow the OECD's medium-term baseline scenario until 2015. In the following years, growth is assumed to follow the projection in the government's Stability Programme, which foresees growth declining to about 1.6% by 2035.
8. See Burniaux *et al.* (2004).
9. See the 2001 *Economic Survey of Austria*.
10. See Schratzenstaller *et al.* (2003).

11. In the period between 1996 and 2002 total factor productivity grew by an estimated 0.8% while the capital intensity of labour grew by 3.6%. The output gaps in 1996 and 2002 were of similar size, minimising the impact of capacity utilisation on the assessment of total factor productivity growth.
12. See Wölfl (2003). Sectoral service productivity growth rates are per worker, so may be affected by changes in hours.
13. OECD (2004b).
14. OECD (2004c).
15. See OECD (2004a), which provides evidence on these trends over longer time periods.
16. OECD (2004a).
17. See Burniaux *et al.* (2004).

Bibliography

BMSG (Federal Ministry for Social Security, Generations and Consumer Protection) (2004), *Bericht zur Sozialen Lage* 2003-2004.

Breuss, F. (2001), "Towards a Political Economy of Zero Budgeting in Austria", *Empirica* 28/1.

Burniaux, J., R. Duval and F. Jaumotte (2004), "Coping with Ageing: A Dynamic Approach to Quantify the Impact of Alternative Policy Options on Future Labour Supply in OECD Countries", *Economics Department Working Papers,* No. 371, OECD, Paris.

Bussière, M., J. Fidrmuc and B. Schnatz (2004), Trade Integration of the New EU Member States and Selected South Eastern European Countries: Lessons from a Gravity Model, Austrian National Bank, *mimeo*.

Kaufmann, S. and M.T. Valderrama (2004), "Die Rolle der Kreditvergabe in kapitalmarkt- und bankendominierten Finanzsystemen", in: Geldpolitik und Wirtschaft, Austrian National Bank, Q2/04, pp. 97-104.

OECD (2001), *OECD Economic Surveys: Austria*, Vol. 2001/3, OECD, Paris.

OECD (2003a), *STI Scoreboard*, OECD, Paris.

OECD (2003b), *OECD Economic Surveys: Austria*, Vol. 2003/16, OECD, Paris.

OECD (2004a), *OECD Employment Outlook,* OECD, Paris.

OECD (2004b), *Information Technology Outlook*, OECD, Paris.

OECD (2004c), *Understanding Economic Growth: A Macro-level, Industry-level and Firm-level Perspective*, OECD, Paris.

Schratzenstaller, M., *et al.* (2003), Erst Evaluierung der Konjunkturbelebungsmaßnahmen seit 2001, *WIFO Monatsberichte 10-2003*.

Stankovsky, J. and Y. Wolfmayr (2004), Interessante Absatzmärkte und Exportpotentiale für die österreichische Industrie, *WIFO Monatsberichte* 6/2004, pp. 473-490.

Wölfl, A. (2003), Productivity Growth in Service Industries: An Assessment of Recent Patterns and the Role of Measurement, *OECD DSTI Working Paper*, No. 7, OECD, Paris.

ISBN 92-64-01104-8
OECD Economic Surveys: Austria

Chapter 2

Fiscal policy issues

Fiscal policy faces considerable challenges in the short and medium term. The Stability Programme envisages achieving budget balance by 2008, requiring 4% of GDP expenditure cuts, which are not yet fully specified. Government debt is relatively high and significant ageing-related spending pressures will remain ahead. A medium-term budgeting framework is missing and fiscal-sustainability calculations are not available. The tax system is complicated and rates are high. The government introduced a major pension reform in two steps and is streamlining public administration on many fronts. Tax reform reduced corporate tax rates and the tax burden for households. Further reforms should primarily aim for making the government sector more efficient and improve budgeting procedures, make public administration reform more effective, complete pension reform, start with disability benefit reforms and reduce distortions of the tax system.

Box 2.1. **Policy assessment on fiscal policy**

Budgetary procedures should be improved

- Output-oriented budgeting could be applied more widely. The impact of group taxation on tax revenues and firm behaviour needs to be monitored. A medium term budgeting framework should be introduced and fiscal sustainability calculations carried out at the beginning of each government period for all levels of government.
- Earmarking of the extra-budgetary Family Burden Equalisation Fund (FLAF) should be given up, and the Fund should be fully integrated within the federal budget.
- The government should also take the opportunity to offer more stable, less distortive revenue sources for lower levels of government in exchange for some currently used levies.

Budgetary savings from administrative reforms should be made more effective

- Consideration should be given to: widening the definitions of admissible reassignments of civil servants (see the 2003 *Economic Survey of Austria*); establishing a temporary work agency for public sector workers; and offering outplacement services for such persons.

Completing pension reform

- The pension schemes for civil servants of the states and municipalities should be harmonised with the rules of the general scheme. Lower levels of government are urged to provide regularly updated information about their implicit future spending liabilities and develop systematic fiscal sustainability calculations. Special early retirement programmes need to be terminated and more efforts made to reallocate redundant public sector workers.
- It should be monitored that the regulation that recipients of unemployment insurance or assistance benefits lose their benefit entitlement after one year if they are eligible for an early pension does not discourage older unemployed from actively searching for a job.
- Consideration should be given to make binding the envisaged demographic correction mechanism for pensions.
- All types of old age pensions should be made actuarially fair around the statutory retirement age, while the impact on labour supply should be monitored carefully. The subsidised old-age part-time employment scheme should be monitored closely and phased out if it reduces labour supply.
- The new "heavy workers" channel into early retirement should be revised. As a minimum, employers of "heavy workers" should be requested to make a financial contribution that fully covers the additional costs.

Disability benefits need to be reformed

- With respect to invalidity pensions it should be required that persons who are not able to work in one field need to accept work in another occupation that is acceptable on health grounds. Assistance by the labour office needs to be offered.
- As a first step, due consideration should be given to the disability pension reform proposals of the respective Working Group of the previous Pension Reform Commission. Proposals should be refined and adapted in the light of recent international experience by a new Disability Reform Commission.

Box 2.1. **Policy assessment on fiscal policy** *(cont.)*

The tax system should be made more efficient

- Tax reform should be continued by simplifying the tax system and reducing economic distortions via slashing tax expenditures, including preferential treatment for selected occupational groups so as to create room for further cuts in statutory tax rates. The impact of group taxation on tax revenues and firm behaviour needs to be monitored.
- An option to go further would be introducing a dual income tax system with a uniform flat rate for all types of capital income and progressive taxation of earnings.
- Caps on energy tax payments should be phased out. Energy tax rates should be adjusted such that sectors not participating in the mission trading regime pay higher energy taxes than other greenhouse gas producers.

Rising deficits require a new phase of fiscal consolidation

Government deficits have increased…

After having achieved a small surplus of the general government balance in 2001 the deficit re-emerged, gradually increasing to 1.3% of GDP (national definition)[1] in 2004, overshooting the medium-term deficit target in the 2003 Stability Programme by 0.5% of GDP. There were structural reasons for most of this deterioration, with the structural primary budget surplus declining by 0.8% of GDP. General government spending as a share of GDP fell by about 0.2 percentage point between 2001 and 2004, but the reductions were insufficient to compensate declining revenues. Lower interest payments on government debt accounted for the decline in expenditures, which was partly offset, by increasing social spending, notably on family subsidies.

In 2004 the cyclical factors that adversely affected public finances in previous years diminished, as economic growth rebounded and employment creation resumed. However, the rising number of unemployment benefit claimants continued to weigh on social spending. The cyclically adjusted general government budget remained broadly unchanged, reflecting offsetting discretionary measures on the revenue and the spending side. The first phase of income and corporate tax reductions, which became effective in 2004, was estimated to lower tax revenues by 0.3% of GDP, although increases in energy and fuel tax rates as well as in social security contributions partially offset revenues foregone. On the expenditure side, outlays for personnel grew moderately due to administrative reform and outsourcing, and pension spending was curbed. By contrast, childcare benefits continued to grow strongly. On the other hand, accelerating take up of subsidies for machinery and equipment investment boosted spending by ¼ per cent of GDP, considerably more than anticipated.

Increases in social and health care spending resulted in decreasing surpluses of sub-national governments. All levels of governments have increasingly resorted to shifting deficits to outsourced units, whose balances are not accounted within the general government sector, helping them to attain the budget targets of Austria's Domestic Stability Pact.[2] (See also Chapter 3 on fiscal federal relations.) Meanwhile, the social security system remained broadly in balance, although a small deficit emerged in 2004, reflecting rising health care costs and only modest growth in social security contributions.

... and will rise further, as tax cuts are not matched by spending reductions

The general government deficit will rise further in 2005, as tax revenues are expected to decline on account of major reductions in corporate and personal income tax. Total tax reductions implied by the 2004/2005 tax reform programme have officially been estimated at some € 2.5 billion, or 1% of GDP. About two thirds of this is associated with the 2005 reform step. The full impact in terms of revenues foregone will materialise from 2006 onwards, because corporations and self-reporting tax payers will only gradually adjust tax prepayments to the new conditions.[3] Spending reductions and measures to raise additional revenue will not fully offset the impact of the tax reductions on general government finances. Higher tax allowances for children and reductions in personal income taxes account for about two thirds of the tax reductions, with corporate tax relief accounting for the remainder statutory tax rate, which is only partly offset by a widening of the tax base (see below). With the level of government spending still high, households may be induced to some extent to save more in anticipation of higher future taxation, as empirical evidence on private household savings in Austria suggests.[4, 5]

General government expenditure growth is expected to remain below nominal trend GDP growth in 2005. Government payroll spending is expected to continue growing

Table 2.1. **Net lending of the general government**

€ billion[1]

	1999	2000	2001	2002	2003	2004	2005	2006
							Projections	
Current receipts	101	104	109	110	112	116	117	119
Total direct taxes	26	27	32	31	31	32	31	31
Households	22	23	25	25	25	25	25	26
Business	4	5	7	5	6	7	6	5
Total indirect taxes	30	30	31	33	33	34	35	36
Social security	34	35	36	36	37	39	40	41
Other current transfer received	11	11	8	8	8	9	8	9
Property and entrepreneurial income	1	1	3	3	3	2	3	3
Current disbursements	101	104	105	107	111	113	117	120
Government consumption	38	39	39	40	41	42	43	44
of which: wages and salaries	22	23	21	21	22	22	23	23
Interest on public debt	7	8	8	7	7	7	7	7
Subsidies	6	6	7	7	7	7	7	7
Social security paid	37	39	40	42	44	45	47	48
Other transfers paid	13	13	11	11	12	12	12	12
Net capital outlays	5	4	5	4	4	5	5	5
Gross investment	3	3	2	3	3	2	3	3
Net capital transfers	4	4	5	4	4	6	6	5
Consumption of fixed capital	–3	–3	–3	–3	–3	–3	–3	–3
Net lending[2]	–4.7	–3.5	0.2	–0.9	–2.9	–3.0	–4.8	–5.0
% of GDP	–2.3	–1.6	0.1	–0.4	–1.3	–1.3	–2.0	–1.9
Gross debt (Maastricht basis)	133	138	143	145	146	151	153	155
% of GDP	66.5	65.8	66.1	65.9	64.7	64.2	62.5	61.0
Structural budget balance	–6.1	–6.1	–0.9	–1.1	–2.0	–1.8	–3.3	–3.5
% of potential GDP	–3.1	–3.0	–0.4	–0.5	–0.9	–0.8	–1.3	–1.4

1. Except where indicated otherwise. Data is on a national accounts basis. For 1999 at euro conversion rate.
2. Government net lending figures in this table are those published in the national accounts. For 2004 the deficit is 0.1% of GDP lower than that notified to the Commission of the European Communities ("Maastricht deficit").

Source: Statistik Austria and OECD.

modestly at 2.1%, which, with a negotiated wage increase for government workers of 2.3% and a trend increase in government employment in long-term care and health care at the level of the states and the municipalities, will require further employment reductions. Cuts in the federal wage bill are expected from widening the application of new public management instruments,[6] cuts in teaching staff (reflecting declining pupil numbers and reductions in the number of weekly hours per class), and other measures designed to raise public sector efficiency.[7] However, social spending is expected to grow on account of the accelerated expansion of childcare cash benefit payments, including an increase in pension entitlements of recipients of the new benefits. Capital outlays are expected to rise only in line with inflation, although this remains to some extent due to increased outsourcing. All in all, the Secretariat therefore projects the government deficit (national accounts definition) to come in at some 2% of GDP in 2005 and 2006 (Table 2.1).

Meeting medium-term targets will require substantial further consolidation

Austria's EU Stability Programme of November 2004 foresees balancing of the general government budget by 2008 (Table 2.2). Most of the consolidation effort to reach this target is envisaged for the years 2007 and 2008. At the same time, the government aims at reducing the ratio of tax revenues (net of social charges) by some 3 percentage points to 40% of GDP in 2008. According to the new Domestic Stability Pact, negotiated between all layers of government for the period 2005-08, the states have to generate budget surpluses amounting in the aggregate to 0.6% of GDP in 2005 and 2006, slightly less than in the previous agreement. The surplus is scheduled to rise to 0.75% of GDP in 2007 and 2008.[8] Municipalities remain obliged to balance their consolidated budget. At the same time, transfers by the federal government to states and municipalities were raised by about € 200 million (0.1% of GDP) in a new tax sharing arrangement, which is also valid from 2005 to 2008. In addition, certain financial transactions will cease to count as revenues in the Domestic Stability Pact in 2007. Overall, the budget constraints on sub-national government have been eased slightly in 2005 and 2006, shifting consolidation efforts of the

Table 2.2. **Medium-term objectives for the general government**

National accounts basis, % of GDP[1]

	2003	2004	2005	2006	2007	2008
Budget deficit	–1.1	–1.3	–1.9	–1.7	–0.8	0.0
Revenues	49.5	48.7	47.5	46.2	46.0	45.8
Expenditures	50.6	50.0	49.5	48.0	46.7	45.8
Debt	64.5	64.2	63.6	63.1	61.6	59.1
Memorandum:						
GDP	0.8	1.9	2.5	2.5	2.2	2.4
			Net lending by level of government			
Central government	–1.7	–1.7	–2.4	–2.2	–1.4	–0.75
Länder (excl. Vienna)	0.5	0.3	0.4	0.4	0.5	0.55
Municipalities (incl. Vienna)	0.2	0.1	0.2	0.2	0.2	0.2
Social security funds	0.0	0.0	–0.1	–0.1	–0.1	0.0

1. Government deficit figures in this table are those notified to the Commission of the European Communities ("Maastricht deficit") which in 2004 is 0.1 % of GDP smaller in absolute magnitude than the government deficit figures published in the national accounts. Subsequent data revisions have reduced the deficit in 2004 to –1.2 % of GDP.

Source: Austrian Government, Stability Programme of November 2004.

sub-national government levels towards the later years of the Stability Programme (see Chapter 3 on fiscal federal relations). Back-loading of the consolidation objectives runs some risks. For example, there is uncertainty about growth prospects in 2007 and 2008. Should a downturn occur, political pressure may arise to take countercyclical fiscal measures. Indeed, anti-cyclical discretionary measures contributed to the rise in the government deficit in 2003.

The government foresees spending reductions of about 4% of GDP in the period up to 2008 to reach the balanced budget objective of the Stability Programme (Table 2.2). A substantial proportion of the decline in government spending relative to GDP is planned to come from reductions in spending on government consumption, with the projected decline amounting to 1.7% of GDP between 2004 and 2008. These reductions are to be brought about by curbing benefits in kind via health care reform, and reductions in personnel. They appear ambitious, however. Over the previous 4-year period reductions of federal government employment by 14 000 helped to bring consumption spending relative to GDP down by 0.3 percentage points. The current programme of administrative reform within the domain of the federal government will have run its course in 2006,[9] and is estimated to yield additional annual spending reductions, above those achieved until 2004, of only 0.1% of GDP. Similarly, efficiency gains from scheduled institutional reform in the health care sector are likely to be limited (see Chapter 3).

Many measures, required to continue public sector reform, still need to be decided. The federal government and the states have agreed to elaborate a programme of cost reductions in health care with a volume of 0.1% of GDP, which have yet to be concluded (see Chapter 3). The government also expects substantial savings in the long run if the states harmonised their pension systems with the general scheme (see below). Indeed, achieving further substantial savings in government administration will need to include the lower levels of government, as these carry out most administrative tasks associated with implementing federal legislation (see Chapter 3). The federal government has therefore reached an agreement with the states and the municipalities on the creation of a commission which will propose reforms that would generate savings from the reassignment of tasks across levels of government, following up on the constitutional convention (*Österreich Konvent*). For example, the federal government expects scope for savings from the adoption of reforms in the administration of schools, where decision-making is shared between states and the federal government. Measures that resulted in savings of administrative costs at the federal level could also be emulated by sub-national governments. However the specific measures which will be implemented are yet uncertain. Indeed, no consensus has been reached in the constitutional convention, in which all levels of government were represented, on how spending and financing responsibilities should be reallocated across levels of government. A new revenue sharing agreement with the states and municipalities was negotiated for the period 2005-08, with no fundamental changes to the financing arrangements for sub-national levels of government, which remain characterised by a high degree of cost sharing and earmarked transfers (see Chapter 3).

Hence, spending reductions might not be achieved as quickly as envisaged. Other factors add to the budgetary risk. First, economic growth is projected to exceed potential growth throughout all years until 2008. While OECD projections suggest that a significant negative output gap has accumulated during the growth slowdown after 2001, it is questionable whether the gap will translate into above-potential economic growth for a prolonged period. Second, revenue shortfalls stemming from the corporate tax reform, notably the new rules concerning the group taxation, may turn out to be higher than projected. While € 100 million revenues foregone annually on account of group taxation have been budgeted, there is a risk that losses could be substantially higher. Third, borrowing by entities which have been outsourced from the government sector, notably government-financed hospitals, might entail larger government transfers to these entities at a later stage, raising government expenditure in the future.

Overall, Austria has embarked on an ambitious programme to reduce the extent of government activities, increase the efficiency and quality of key government services, and reduce corporate and personal taxes. While many of the measures introduced to realise the results achieved so far go in the right direction, there remains room for increasing the robustness and effectiveness of Austria's fiscal policy. *Budgetary savings from administrative reforms should be made more effective by seeking alternatives to early retirement for redundant government employees. Consideration should be given to: widening the definitions of admissible reassignments of civil servants* (see the 2003 *Economic Survey of Austria*); establishing a temporary work agency for public sector workers; and offering outplacement services for such persons. Output-oriented budgeting could be applied more widely. The impact of group taxation on tax revenues needs to be monitored and firm behaviour. A medium term budgeting framework should be introduced and fiscal sustainability calculations carried out at the beginning of each government period for all levels of government. (See also Chapter 3 on fiscal federal relations.)

Recent pension reform marks substantial progress

The 2003 pension reform marked substantial progress in securing the sustainability of general government finances and improving incentives to work longer (see the 2003 *Economic Survey of Austria*). The reform was followed up by a further step in 2004. Subject to transition periods, the latter reform step largely harmonised hitherto different pension schemes for different occupational groups, introduced a new channel into early retirement for "heavy workers" while aiming at actuarial fairness of voluntary deviations from the statutory retirement age for persons with a relatively long insurance record, and established individual pension accounts. The 2003 reform foresaw that losses implied by the transition to the new pension parameters relative to the old system were capped at a maximum of 10% of the pension generated by the pre-reform system. This has been relaxed by the follow-up reform step in that maximum admissible losses in 2004 have been capped at 5%, with the cap increasing linearly by 0.25 percentage points per year to 10% in 2024. The new legislation came into force in January 2005. The transition to the new common rules of the unified system is being phased over several decades. Key features of the pension system after the reforms in 2003 and 2004 are summarised in Box 2.2.

Outlays for private sector pensions that are covered by the legislation of the APG amount to some 10½% of GDP. In the government's projections savings implied by the reform package, measured against the benchmark prior to the 2003 reform, will build up gradually. While annual spending until 2020 is projected to undercut the baseline scenario by less than a quarter per cent of GDP the wedge is projected to increase to half a per cent of GDP by 2025 and to widen further to 1½ per cent by 2050 (Figure 2.1). Most of the savings are due to the changes that were already legislated in the 2003 reform step. The measures introduced with the 2004 reform reverse some of the savings that would have been generated by the 2003 reform alone over the first two decades, but generate additional

Box 2.2. **Main characteristics of the harmonised general pension scheme**

Harmonisation of pension schemes

Until recently, different pension schemes for different occupational groups (workers, self-employed, farmers, and professional services) co-existed, each with specific contribution regimes and rules governing the accumulation of pension rights. In addition there are special schemes for civil servants of the federal administration and the states. The new General Pension Law (*Allgemeines Pensionsgesetz,* APG), effective since 1st January 2005, unifies legislation and harmonises the rules (up to remaining differences in contribution regimes, which are however budgeted) for all private sector occupations. Moreover, the scheme for tenured federal civil servants is harmonised with the APG regime. Separate pension schemes continue to exist, however, for public sector employees of the federal states.

The new APG regime is being phased in over a transition period of about 45 years. Persons who were born before 1st January 1955 (*i.e.* those now 50 or older) are not affected by post 2003 reform steps and receive pensions based on the parameters of the 2003 reform including the relevant transition rules and the modified, more generous cap on losses (see also the 2003 *Economic Survey*). New entrants are subject to the rules of the APG. For persons who are younger than 50 years and have already accumulated pension rights in the past, pensions are determined as a combination of both notional pensions derived from the rules of the 2003 pension reform with modified loss cap and pensions according to the rules of the APG.

Benefit regime

A central element of the APG is the establishment of notional individual pension accounts, designed to allow each insured to identify – after full transition to the new system – both his contribution history and acquired claims over the life cycle. For each month of a person's pension insurance spell pension contributions are made to the individual pension account by the relevant contributors (employees, employers, unemployment insurance, health insurance, federal government and Family Burden Equalisation Fund). As effective pension accruals are based on a mixture of different regimes over the transition period, pension accounts will only be fully effective after 2050.

The APG scheme is defined benefit. The contribution rate is 22.8% of the contribution (income) base for all insured. For dependent employees payroll contributions are shared in equal parts between employers and employees. Contributions by farmers and self-employed are scheduled to increase over the next ten years from 14.4 to 15% and from 15 to 17.5% of the income base, respectively, with the difference from the full contribution rate being paid out of the federal government budget. Contributions for unemployed and persons raising children are paid from unemployment insurance contributions and the Family Burden Equalisation Fund, respectively.

Pension claims at entry into retirement are proportional to average monthly earnings over the best 40 years of earnings. The annual accrual rate for pension claims is set such that the size of the pension amounts to 80% of life time income after 45 years of insurance contributions. Prior to the 2003 reform only the past 15 years (18 years for early retirement) of highest earnings were accounted for in the wage base. Annual pension adjustment is indexed to inflation (consumer price index) rather than the evolution of net wages as was the case prior to the APG reform. The statutory retirement age is 65 years. For persons with an insurance contribution record of at least 37.5 years, retirement is possible between 62 and 68, with a pension deduction or supplement, respectively, of 4.2% for each year of

OECD ECONOMIC SURVEYS: AUSTRIA – ISBN 92-64-01104-8 – © OECD 2005

Box 2.2. **Main characteristics of the harmonised general pension scheme** *(cont.)*

early (late) retirement (corridor pension). Those whose contribution record is longer (40 years for women, 45 years for men) are eligible for early retirement at a smaller discount rate. In addition to the corridor pension, a new early retirement scheme has been introduced for "heavy workers". In this scheme the minimum retirement age declines by three months per year of employment recognised as "heavy work", subject to a longer insurance record and without actuarially calculated discounts. The characteristics of "heavy work" still need to be determined. The government aims at a definition such that not more than 5% of new pensioners qualify for this status.

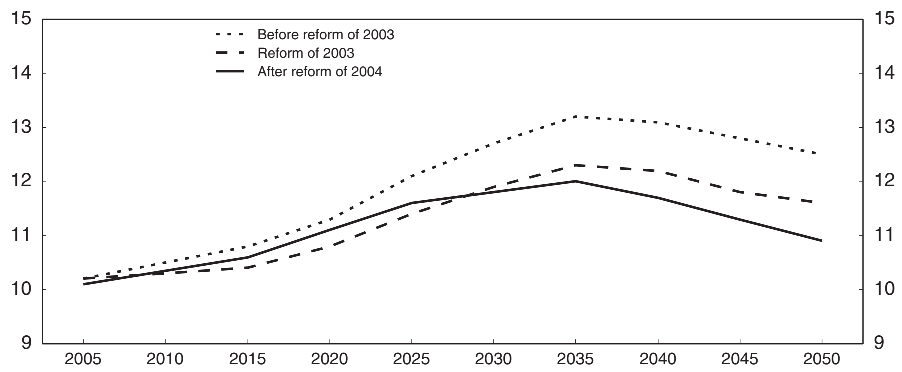
Sustainability requirement

Pension parameters are subject to adjustment if certain economic variables are likely to evolve less favourably than projected. First, the fiscal burden implied by upward revisions in residual life expectancy above age 65 is to be compensated via reduced benefits, higher payroll contributions and higher transfers to the pension system out of the federal government budget. Following each revision of the demographic projection a commission will make proposals on the precise implementation of adjustments (three-year intervals). Secondly, the commission will also make proposals for adjustments if updated projections for other key variables, such as productivity growth or labour force participation, are likely to imply higher fiscal burdens. While adjustment is legally required in the first instance this is not the case in the second.

savings thereafter. Indeed, the 2004 reform affects the finances of the pension system in diverging directions. On the one hand the increase in the generosity of the loss cap as well as the widening of the paths into early retirement – "heavy workers" scheme and corridor pension to the extent that current discounts are not actuarially fair – increase spending. On the other hand, more moderate valuation of pension rights and current pension adjustment are projected to reduce spending. While the former effect dominates over the next years the latter develops its full impact only later.

Figure 2.1. **Spending on pensions**[1]

% of GDP



1. Net of the schemes for public sector employees and without equalisation supplement. Data for 2010 interpolated by OECD.

Source: Federal Government; OECD.

Overall, the package of reform in 2003 and 2004 is projected to imply substantial long-term improvements in the fiscal stance of the pension system. It is scheduled to become most effective in reducing the fiscal pressure associated with demographic ageing within the period where the adverse fiscal effects of ageing are felt most. However, as uncertainties associated with long-term projections increase significantly with the projection span, more effective adjustment mechanisms would arguably have been preferable. The demographic correction mechanism, legislated to set in if the demographic distribution deteriorates even more than projected, is only vaguely specified, which could reduce its effectiveness. Similarly, the other correction mechanism is not binding at all. *Consideration should be given to make binding the envisaged demographic correction mechanism for pension benefits.* Also, even if the assumptions underlying the projections materialise, future fiscal pressures arising from pension obligations will remain high, with the spending ratio projected to increase by two percentage points of GDP over the level in 2005. The total fiscal pressure arising from pension obligations will be even higher as the pensions of civil servants of the federal government, the states and the municipalities are not included in these projections although they are subject to a similar ageing problem as those of the general scheme. Indeed, there is still scope for further improvements within the total Austrian pension system and this is considered next.

Complete harmonisation of public sector pensions is necessary…

The degree of harmonisation legislated in the APG between hitherto different private sector pension schemes marks considerable progress in fostering labour mobility and ends the possibility for interest groups to lobby more favourable pensions for their specific clientele. Pensions for civil servants that are not subject to the APG add another 3% of GDP to Austria's total outlays for pensions, which – at some 14.5% of GDP – stand at the upper end within the OECD. The 2004 reform package extends the rules of the APG to civil servants in the domain of the federal government, damping future fiscal pressures on the federal budget. However, this is not the case for the various pension schemes for civil servants of the states and communities, for which legislative responsibilities rest with the states. Indeed, up to now attempts by the federal government to achieve harmonisation of pension systems across the public sector have been of very limited success with few states signalling their readiness for reform along these lines.

The size of future pension obligations of sub-national governments is unclear as pertinent information is rarely published. There are also no systematic sustainability calculations available for the lower levels of government. Empirical evidence suggests that within the same education brackets life-time incomes of public sector employees exceed those in the private sector by significant margins,[10] biasing labour supply in favour of the public sector. Indeed, up to now accrual of pension rights is more generous in the public sector than in the private sector, implying marked differences in pension income in favour of civil servants. In particular, pension replacement rates at the level of the states are higher than those at the level of the federal administration. For the end of the 1990s, the notional rate of return on pension contributions during active life was estimated to be about 50% higher for civil servants than for private sector employees.[11] Net income of retired civil servants at the level of the states and communities was found to be rarely below 100% of salaries before retirement, implying replacement rates relative to average salaries over the working life well in excess of 100%.[12] Hence, generous pension schemes at the level of the states and communities expose public sector finances to more stress and produce significant disincentives for life-time labour supply. At the same time, the lack of complete harmonisation of pension schemes across all levels of government and with the private sector scheme hampers labour mobility within the public sector and between the public and the private sectors.

Moreover, special early retirement schemes were repeatedly introduced for civil servants at all levels of government and within public sector enterprises with the purpose of reducing the public sector workforce or changing its composition. Thus, the effective retirement age fluctuated since the beginning of the 1990s by several years (between 57 and 59 years for males and 54 and 58 years for females).[13] At present, the effective retirement age in the public sector stands at 58 and 57 years for males and females, respectively; for men this is one year below the pension entry age in the general scheme. *Lower levels of government are urged to provide regularly updated information about their implicit future spending liabilities and to develop systematic fiscal sustainability calculations. The pension schemes for civil servants of the states and municipalities should be harmonised with the rules of the APG scheme. Harmonisation also requires that special early retirement programmes are terminated and more efforts are made to reallocate redundant public sector workers.*

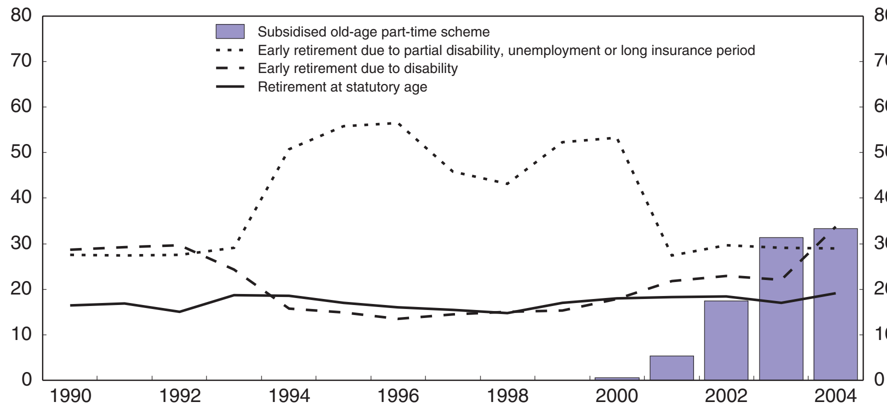
… and early retirement needs to be curbed further

As discussed in the previous *Economic Survey*, incentives to stay in the workforce at a higher age are low. Indeed, the implicit taxation of continuing work in Austria was found to be one of the highest in the OECD, while the effective retirement age is among the lowest.[14] The 2003 pension reform improved this situation by terminating the possibility to enter early retirement on account of unemployment and by raising discounts for early retirement on account of long insurance histories. Also, the discounts associated with the corridor pension introduced in the 2004 reform were set so as to achieve actuarial fairness. Earlier efforts to raise the effective retirement age indicate, however, that care needs to be taken that no other channels into early retirement act as substitutes for those that are being closed.

Indeed, when the early retirement scheme for reduced work capacity was phased out between 2000 and 2003 the overall inflow into handicap-related retirement (reduced work capacity and disability schemes) declined. However, at the same time, inflow into the disability scheme edged up, as the scheme is acting as a substitute for the incapacity channel.[15] The share of all early retirements in the total inflow into retirement – including retirement on account of disability – has fallen significantly in recent years but did not improve in comparison to the beginning of the last decade. Similarly, the average age of entry into retirement is little higher than it was at the beginning of the 1990s. Also, there appears to be a substitution between channels into early retirement in the pension system and other age-related transfers, notably the old-age part-time scheme (*Altersteilzeit,* AT). This scheme subsidises compensation of older people provided they reduce their working time from full-time to part-time employment, aiming to foster hiring of younger workers. Utilisation of the AT scheme increased strongly until 2003, following the retrenchment of early retirement in the pension system. To a considerable extent participants in AT have allocated "part-time work" such that they work full-time during the first years covered by the scheme and cease working during the remainder of this period. Recent legislation restrained the option to allocate working time this way, and inflows into AT have decreased significantly (Figure 2.2).

Figure 2.2. **Inflow into early retirement and stock within the subsidised old-age part-time scheme**

Thousands



Source: Public Employment Service and Main Association of the Social Insurers.

Against this background, some of the measures adopted in the 2004 reform should be amended. The newly introduced early retirement scheme for "heavy workers" aims at some compensation for above-average physical or psychic stress during working life and associated reduced life expectancy. Indeed, empirical evidence for both Austria and other OECD countries suggests that life expectancy differs across social groups by between four and seven years.[16] While it is appealing to account for this fact within the pension system, there are principle obstacles that could outweigh the benefits from such an approach. Empirical evidence on life expectancy by occupation is sparse. Assessments would have to undergo continuous adaptation as occupational characteristics are changing and new professions come into play. The ambiguities surrounding workable definitions of "heavy workers" have already induced sizeable parts of the Austrian workforce, including *e.g.* doctors, nurses and the entire police force, to claim "heavy workers" status. Incentives for professional groups to put pressure on the government for awarding them the status might pose a risk of permanent lobbying that could result in gradual extension of the group granted "heavy worker" status, undermining policies to curb early retirement. Moreover, as the scheme is financed out of social charges it is likely to weaken incentives to improve work conditions. Hence, *this new channel into early retirement should be revised. As a minimum employers of "heavy workers" should be requested to make a financial contribution to the scheme that fully covers the additional costs.* Such a move would introduce incentives to avoid "heavy work" conditions.

One further option would be to modify the design of the invalidity pension scheme in a way that sets incentives to improve work conditions and facilitates lifelong learning. Current regulations assume that a worker who has worked for at least 15 years in an occupation requiring a certification of qualification cannot be forced to shift to another job, which might be more suitable in the case of a partial reduction of work capacity. In such cases full invalidity benefit is granted if the remaining work capacity is not considered to be sufficient for the learned occupation. Eligibility for a full invalidity pension is lost if the worker accepts working in another field, even for a short period. This regulation undermines occupational mobility and poses a hurdle for lifelong learning and re-qualification. *This regulation should be phased out and it should be required that persons who are not able to work in one field need to accept work in other occupations that are acceptable on medical grounds. Assistance by the Public Employment Service needs to be offered.*

The Austrian system of invalidity benefits differentiates between work-related accidents and other reasons for reduced work capacity but does not include any experience rating or involvement of employers beyond the compliance with work-safety regulations. The relatively high and apparently also rising number of disability benefit recipients suggests that there is scope for reform of the system, which should strengthen the incentives of employers for avoiding work-related accidents and sicknesses and increasing the motivation of concerned persons to stay in the labour market. *As a first step, due consideration should be given to the disability pension reform proposals of the respective Working Group of the previous Pension Reform Commission. Proposals should be further refined and adapted in the light of recent international experience by a new Disability Reform Commission.*

While the new pension law aims at actuarial fairness for persons eligible for earlier or later retirement on account of a longer insurance record (37.5 years), there still appears to be a bias in favour of early retirement and against activity beyond the statutory retirement age for employees with a very long insurance record and those engaged in onerous work. Recipients of unemployment insurance or assistance benefits lose their benefit entitlement after one year if they are eligible for an early pension. It should be monitored that *this regulation does not discourage older unemployed from active job search.* As has been argued in previous *Economic Surveys* income replacement for the unemployed active job seekers should be dealt with within the unemployment benefit 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 effectively non-reversible. *All types of old age pensions should be made actuarially fair around the statutory retirement age, while the impact on labour supply should be monitored carefully. Moreover, the subsidised old-age part-time employment scheme should be monitored closely and phased out if it reduces labour supply.*

Spending programmes, notably family benefits, would also benefit from reform

Earlier phases of fiscal consolidation in Austria were frequently succeeded by new spending demands which contributed to rising government debt. Previous *Economic Surveys* have highlighted the need for institutional reform designed to better control and prioritise public sector spending. The evolution of family-related benefits highlights that such reform might yield substantial efficiency gains.

The Family Burden-Equalisation Fund (*Familienlastenausgleichsfonds*, FLAF) is earmarked to the financing of family related benefits, and accounts for the bulk of transfers in this area. Employers' pay-roll contributions account for more than 90% of the fund's revenues, with the rest being financed out of income tax revenues. In addition to the FLAF the states and the communities finance their own programmes of family support.

Following the establishment of the FLAF in the early 1970s solid economic growth boosted its revenues, leading to a tendency to produce surpluses. Both earmarking and the fact that the Fund is considered to be an important element of inter-governmental revenue sharing prevented pay-roll contributions from being cut in response. Instead, social spending was repeatedly extended, with new spending programmes covering a variety of items such as the financing of schoolbooks and public transport for pupils and apprentices, as well as certain benefits by the Public Employment Service and the pension and health insurance system. Since 2002 the FLAF finances the new family support system, which is associated with a massive extension of transfers to households (see the 2003 *EconomicSurvey*). The new family support system was introduced at a time when the FLAF had accumulated sizeable surpluses. Since then the phased extension of benefits made the Fund swing into a deficit, which is likely to total some 0.2% of GDP in 2005, net of further scheduled spending increases that are associated with the most recent round of pension reform (see above). Due to the latter – consisting of more generous accumulation of pension rights during child raising periods – the FLAF is bound to remain in deficit for the next years to come. This, in turn, is in conflict with the government's announced target to reduce the payroll contributions to the FLAF so as to cut non-wage labour costs. *Family benefits should be managed fully by the federal government. At the same time earmarking of the FLAF should be given up and the fund should be subject to prioritisation within the federal budget.* This would allow family benefit policies to be chosen in an unrestrained way within the wider field of government spending (see the 2003 *Economic Survey of Austria*).

Reaping the full benefits associated with tax reform rests on fiscal sustainability

The recent tax reform measures, which were phased in two steps in January 2004 and January 2005, mainly aim at increasing the attractiveness of Austria as a business location through a reform of the corporate tax system, easing the tax burden on labour, and improving the equity capital base of small and medium-sized enterprises (SMEs). Some measures have also been designed to support environmentally sustainable development. Major elements of both reform steps combined are summarised in Box 2.3 below.

Austrian personal and corporate income tax revenues relative to GDP are about OECD average (national accounts basis). However, with social charges added in – which are high by international comparison – the tax-to-GDP ratio exceeds the OECD average markedly. In the government's projections, the tax ratio (including social contributions) will drop from 43.1% of GDP in 2003 to 40.7% of GDP in 2006. The rapid reduction in the average tax burden – although helped by statistical effects[17] – will have to be validated by corresponding spending restraint to secure its sustainability. The tax reform will also imply a shift in the composition of tax revenues away from direct taxation. The share of direct taxes in total tax revenues is projected to decline from 49.5% in 2003 to 45.8% in 2005, while the share of indirect taxes is set to increase.[18]

Effective taxation has been lowered in the personal income tax…

Comparisons of tax-GDP ratios are of only limited information for disincentive affects for economic activity associated with taxation. Empirical evidence for other countries suggests that the size of the tax wedge between gross wages paid by employers and the workers' take home pay net of personal income taxes and social charges is negatively correlated with employment. Tax wedges for single earners in Austria are relatively high in comparison with many other OECD countries (Figure 2.3). The income tax reform marks some progress in this respect. The measures interrupt the long-term trend of a constantly increasing tax burden on labour incomes, although the average burden still exceeds the level at the beginning of the last decade.[19] The fact that earlier reductions in labour taxation were not sustained reinforces the need to secure the sustainability of the present tax cuts by reductions in government spending (Figure 2.4). Due to the widening of the

Box 2.3. **The tax reform package**

The tax reform package incorporates the following major elements:

Personal income taxation

- Increase in the standard tax credit and integration into the regular income tax schedule so as to abolish the erratic pattern of effective marginal tax rates in the pre-reform system. The latter resulted from the interaction of statutory tax rates with the phasing-in-and-out rules for the standard tax credit under the previous system. The number of tax brackets was reduced from five to four (statutory marginal tax rates: 0%, 38.33%, 43.6% and 50%). Yearly gross incomes of € 15 770 for employees, of € 10 000 for self-employed and of € 13 500 for pensioners are tax exempt.
- Preferential taxation of retained profits by sole proprietorships and business partnerships was introduced so as to promote the formation of equity capital in SMEs. Retained profits up to a maximum yearly amount of € 100 000 subject to a minimum retention of seven years are taxed at half the personal average income tax rate.
- Following a decision by the constitutional court, the taxation of cross-border capital incomes (previously subject to personal income taxation) was brought in line with that of domestic capital incomes (25%);
- Other measures include:
  - Introduction of tax-deductibility of installation costs and basic charges for broadband internet access (phased out at end of 2004) and of tuition fees;
  - Increases in: the commuter tax allowance (*Pendlerpauschale*) by 15%; the limit for the deductibility of church taxes; the tax credit for sole earners (*Alleinverdienerabsetzbetrag*) and lone parents (*Alleinerzieherabsetzbetrag*) (widening of the tax credit with the number of children); and the amount that spouses can earn before the partner loses the sole earners tax credit.

Corporate tax reform

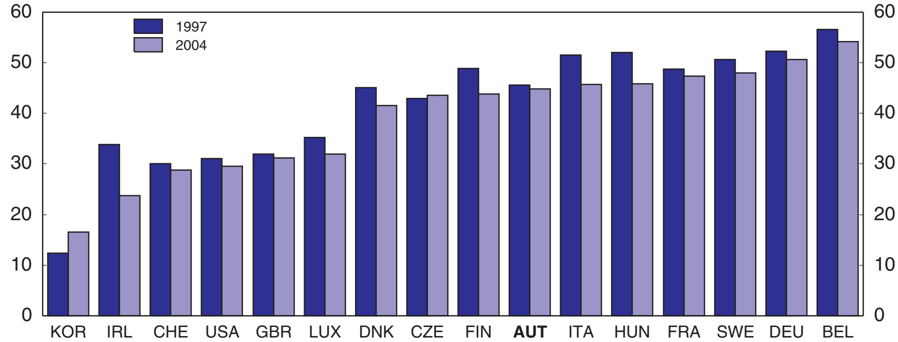
- Reduction of the statutory corporate tax rate from 34 to 25%. One third (100 000) of Austrian enterprises are incorporated. A small portion of the tax losses are compensated by a simultaneous broadening of the tax base (abolition of the interest deduction on the increase of equity capital and of the possibility for corporations of a tax-neutral transfer of realised hidden reserves). Widening of the tax-deductibility of actuarial reserves for insurance companies.
- Introduction of group taxation allowing a group headquartered in Austria to deduct losses incurred elsewhere from domestic profits as long as the losses are not written off in the source country. A repayment obligation of past tax savings is due in case of liquidation or sale of a foreign group member.
- Introduction of preferential tax treatment for the purchase of domestic shares acquired to integrate a firm into a group (50% of the purchase price can be written off over 15 years).

Indirect taxation

- Increase of the mineral oil tax (by 42%) and natural gas (by 51%);
- Implementation of a coal tax (€ 0.05 per kg); reduction by 68% of the tax on diesel used for agricultural purposes;
- Reductions and abolition of taxes for alcoholic beverages and sparkling wine, respectively.

Figure 2.3. **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*.

standard tax credit, the tax reductions are more pronounced for low-income recipients. Indeed, the number of tax payers is projected to decline by 350 000 compared to 2003. This is likely to improve incentives for labour force participation. However, the lowest tax rate of 38% remains very high by international comparison, posing a hurdle for extending working hours.[20] The widening of earning limits for spouses of recipients of the tax credit for sole earners might also have some positive impact on female participation.[21] Overall, however, the sole earner tax credit discourages labour supply. Similarly, the new tax credit granted for children in single earner households also discourages labour supply.

At a rate of 50%, the top statutory tax rate also appears high by international comparison (EU-15 average: 46%, average of the 10 new EU member states: 35%). On the

Figure 2.4. **Wage tax burden on labour**

Wage tax revenues as % of total wages

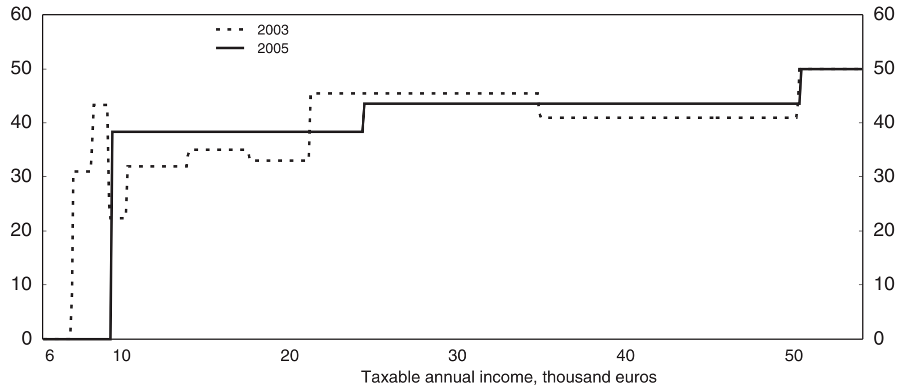
Source: WIFO calculations using data from the Ministry of Finance. Projections for 2004 and 2005 are by the Ministry of Finance.

other hand, as far as employees are concerned, there are notional 13th and 14th months' salaries that are taxed at a lower rate,[22] which reduce the top effective tax rate to 43%. Nevertheless high top marginal tax rates may discourage human capital accumulation and reduce the attractiveness of Austria for highly qualified employees from abroad. Regarding partnerships, high top rates may also create incentives to relocate businesses abroad, especially in close border regions.

Given the high reliance of the Austrian tax system on social security contributions, reductions in social charges, to be generated by reform in social transfer systems, are required for further reductions in tax wedges (see above in this Chapter and Chapter 4 below). The replacement of the basic income tax credit by the widening of the tax free basic income allowance also abolishes the erratic behaviour of effective marginal tax rates that was caused by the interaction of statutory tax rates and the phasing-in-and-out rules for the standard tax credit (Figure 2.5). This increases the transparency of the tax system. However, there is considerable scope to further level the playing field of the income tax system, as considered further below.

Figure 2.5. **Effective marginal income tax rates**[1]

Tax payable on additional income of € 100, %



1. Including standard tax credit. Employee without sole earner or lone parent tax credit; employee and commuter tax credit are not taken into account.

Source: Ministry of Finance and WIFO.

... and in the corporate tax system

Austria's corporate tax reform was largely triggered by a perception of intensified tax competition within the European Union and specifically from the new EU member countries. Since the full implementation of the reform in 2005 the statutory corporate tax rate in Austria stands at 25%, the second lowest statutory corporate tax rate within the EU-15 and considerably below the EU-15 average of 30% (Table 2.3). The rate is higher than in the ten EU accession countries, whose average corporate tax moved down to 20.4% in 2005. Empirical evidence for Austria suggests that there is a significantly negative relation between capital utilisation costs and investment, although the sensitivity of the user cost of capital with respect to changes in statutory tax rates appears to be low.[23] Moreover, while effective taxation of the returns of an investment project can differ significantly from the statutory corporate rate – due to depreciation rules, interactions with other tax parameters, and government support policies – the latter can play an

Table 2.3. **Personal and corporate tax rates**

	Top statutory tax rate on:		
	Personal income	Corporate income	
	2004	2004	2005
Austria	**50**	**34**	**25**
Belgium	50	34	34
Cyprus	30	15	10
Czech Republic	32	28	26
Denmark	47.6	30	28
Estonia	26	26	24
Finland	53	29	26
France	49.6	35.4	35.4
Germany	45	38.3	38.3
Greece	40	35	32
Hungary	40	17.7	16
Ireland	42	12.5	12.5
Italy	45	37.3	37.3
Latvia	33	15	15
Lithuania	25	15	15
Luxembourg	38	30.4	30.4
Malta	35	35	35
Netherlands	52	34.5	31.5
Poland	40	19	19
Portugal	40	27.5	27.5
Slovak Republic	38	19	19
Slovenia	50	25	25
Spain	45	35	35
Sweden	56	28	28
United Kingdom	40	30	30
EU average[1]	**41.7**	**27.4**	**26.0**
Average of EU-15[1]	**46.2**	**31.4**	**29.8**
Average of 10 new EU member states[1]	**34.9**	**21.5**	**20.4**

1. Arithmetic average.

Source: European Commission structures of the taxation systems in the European Union, 2004 edition.

important role for international location decisions. Empirical work for Austria indicates that the size of the corporate tax rate is negatively related to the amount of FDI received.[24]

A more comprehensive judgement about the reform measures would have to consider their impact on effective taxation. Indeed, several studies indicate that the Austrian tax system is characterised by a variety of rules that drive a sizeable gap between statutory and effective tax rates. While assessments of effective taxation differ substantially between studies, depending on the concepts applied, their ranking of countries is in general quite robust and close to that of statutory tax rates. Before the tax reform Austria ranked in the lower or middle range of the EU-15 countries.[25] When compared with the group of new EU member countries Austrian effective average tax rates (EATR) exceeded those of all ten countries with the exception of Malta.[26]

Some studies already consider the impact of the most recent corporate tax reforms. In one study the pre-reform EATR for an investment project by a domestic investor was estimated to total some 30% in Austria, ranking as the third highest after Germany and Italy within a group of important trading partners (Germany, Italy, Poland, Slovak Republic, Slovenia, Czech Republic and Hungary).[27] After the reform the EATR fell to 22%, in the middle of the Central and Eastern European countries considered in the sample. The Austrian EATR is now about 40% lower than that of Germany. In another study the pre-reform EATR was estimated to be 35.3% for equity financing and 23.5% for debt financing.[28] The effect of the tax cut is much more pronounced for equity financing and by far exceeds the losses through the abolition of the interest deductibility of notional interest on increases of equity capital.[29] The EATR falls to 26.0% for equity financing and to 17.3% for debt financing, indicating an improved degree of neutrality between the two modes of financing. Austria's tax disadvantage as compared to the average of the ten new EU member states is reduced from 11.7 to 3.4 percentage points. Finally the attractiveness of FDI investment abroad declines relative to domestic investment, reducing incentives to shift production facilities abroad.[30]

... while some measures produce ambiguous effects

The preferential tax treatment of retained profits in partnerships contributes to reducing the user cost of capital, although the estimated effect is relatively modest.[31] While the measure is intended to promote the formation of equity capital in SMEs, which are typically undercapitalised, it suffers from the fact that it produces a lock-in effect for internal financing, hampering the re-allocation of capital on the capital market. Improving the functioning of the capital market would be a more fruitful policy line for helping small companies to build their equity capital base (see Chapter 4 below).

The introduction of enterprise group taxation is aimed at attracting or keeping headquarters of multinational corporations. In particular, the government hopes to attract the research and development centres of multinationals so as to maximise the effects on job creation and innovation. According to the new arrangement, losses of foreign subsidiaries of groups headquartered in Austria can be deducted from domestic profits while foreign profits are not taxable in Austria. This tax advantage is, however, limited by the requirement to repay earlier tax savings once the foreign losses can be carried forward abroad. The system replaces the previous tax entity regulation (*Organschaftsregelung*) in which a tax entity was restricted to domestic enterprises. Members of the entity had to be organisationally and economically integrated and this constellation had to be maintained for at least five years. The new group taxation arrangements relaxed most of these conditions substantially. The domestic or foreign group members do not need to be organisationally and economically integrated, an equity participation of at least 50% is sufficient and the group arrangement has to last for three years only for Austrian group members. The new approach also opens the possibility for more than one parent company, a potentially important element for joint ventures.

International experience with cross-border group taxation systems is sparse. Systems allowing for income statements of losses across borders under specific conditions exist only in few European countries (Denmark, Italy, France and the Netherlands) and the particular arrangements deviate substantially. However, given Austria's favourable geographic location with respect to Central and Eastern European countries, the system might provide some impetus to headquarters situated in Austria and organising the opening up of new markets in this region. Group taxation could be especially attractive for such risky expansions as it minimises the costs of initial loss periods. By the same token, however, group taxation removes disincentives for Austrian companies to outsource to foreign subsidiaries. Thus the net effect on activity and employment appears to be undetermined *a priori*.[32]

Some specific regulations with respect to cross-border loss deductions between group members might reduce the attractiveness of the instrument. In order to avoid double tax deduction, past tax savings through cross-border loss deductions fall due once the foreign group member makes profits and can use earlier losses for tax deduction in the foreign country. The repayment obligation also applies in case of liquidation or sale of a foreign group member. As there is no time restriction for this repayment liability for foreign group members (in contrast to the arrangement for Austrian group members where a three year limitation applies), headquarters may have to formally perpetuate obsolete foreign subsidiaries permanently in order to avoid losses through liquidation. If in contrast group members are situated in countries with no tax-loss carry-forward, or even no corporate tax at all, the repayment obligation cannot materialise so that foreign losses permanently reduce the tax liability in Austria. *Overall, the effects of the group taxation appear to be highly uncertain, both concerning the budgetary costs and economic benefits, and should be monitored.*[33]

Further tax reform should focus on reducing distortions

The tax reform 2004/05 implies significant reductions in statutory and effective tax rates, which – if combined with fiscal consolidation on the spending side of public budgets – will help improve Austria's international competitiveness and support economic activity more generally. Progress has also been made in simplifying the income tax schedule via transforming the standard tax credit into a basic tax allowance. However, tax codes are still subject to many special rules and exceptions that reduce the transparency of the tax system and distort economic activity. Examples of distortionary tax expenditures linked to personal income taxation are:

- Wage supplements for certain types of work are tax free. This is true for supplements for the first five hours overtime per month, for dirty, hard and dangerous work (*Schmutz-, Schwer- und Gefahrenzuschlag*), and for work at night, during the weekend and public holidays. These tax subsidies bias the labour-leisure choice of employees and subsidise certain sectors or enterprises, reducing their incentives to improve work conditions.
- The tax credit for employees, the traffic tax credit and preferential taxation of Christmas and leave bonuses discriminate between regular employees and the self-employed or workers with atypical work contracts; contributions to the FLAF are levied on wages only while benefits are now available also to families of non-dependent workers; the pension contributions for farmers and self-employed paid by the government provide support for self-employed and farmers.
- While the tax allowance for work-related expenses (*Werbungskosten*) is uniform across most professions, it is higher for selected occupational groups, notably several artistic and media-related professions, woodmen, hunters, salesmen, caretakers, and elected representatives at the local level. This biases occupational choice.
- The tax credit for sole earners (*Alleinverdienerabsetzbetrag*) discourages spouses from accepting employment paying more than the earning disregard (€ 2 200 per year for married couples without children, € 6 000 for couples with at least one child).
- The commuter tax allowance (*Pendlerpauschale*) – just recently increased by 15% as part of the tax reform – encourages settlement far from the workplace, with adverse consequences for infrastructure requirements, extensive use of land and air pollution

OECD ECONOMIC SURVEYS: AUSTRIA – ISBN 92-64-01104-8 – © OECD 2005

and is not integrated into the overall strategy to make economic activity more environmentally sustainable.[34]

- The tax allowance for certain expenses for the purchase or renovation of residential space effectively constitutes a subsidy for the construction sector, and lower taxation of diesel used for agricultural purposes is a subsidy for farmers.
- According to the new system of severance funds (*Mitarbeitervorsorge*) the employer pays 1.53% of gross incomes of each employee into a severance fund. The distribution of those funds is subject to a tax rate of 6% but funds remain tax exempt if they are invested into a precautionary savings fund. This arrangement is advantageous as compared to a direct investment of a part of the income into a private pension fund as the severance funds are not subject to income taxation. It thus has a distortionary effect on the private pension market.

Uneven taxation with potentially distortive consequences for economic activity is also present in the corporate tax system. While the general value added tax rate is 20%, reduced rates apply for several selected goods and services such as agricultural products, medical services, books, apartment rentals, certain foodstuffs and beverages or collectors coins. Such special provisions complicate the Austrian tax system and encourage rent seeking. Moreover, some taxes, while distorting economic activity, are associated with administrative costs that are disproportionately high in relation to the small revenues they generate. This is true, *inter alia*, for the entertainment tax (*Lustbarkeitsabgabe*) (see also Chapter 4 below).

Taxation remains uneven with respect to the type of taxed activity. After the corporate tax cut, the top tax rate on distributed profits (statutory corporate tax rate plus the dividend tax) now amounts to 43.8%[35] which is about the same as highest marginal all-in rate on wage income for employed people (43%, taking into account the tax exemption of the 13th and 14th salaries). The tax reform therefore reduces the gap between capital and labour income taxation. However, it falls considerably short of the marginal top tax rates of 50% for self-employed (for which the preferential tax treatment of Christmas and leave bonuses does not apply). This implies a more favourable tax treatment of corporations as compared to non-incorporated firms (sole proprietorships, landlords and partnerships) or self-employed following the reform. Small and medium sized enterprises either belong to this latter group or are in a tax-loss position so that they benefit from the measure only to a disproportionately small extent. The tax reform even increases incentives to change the legal form.

Hence, future tax reform should focus on simplifying the tax system and reducing economic distortions by slashing tax expenditures, including preferential treatment for selected occupational groups so as to create room for further cuts in statutory tax rates without jeopardising fiscal consolidation policies. In doing so, the government should also take the opportunity to offer more stable, less distortive revenue sources for lower levels of government in exchange for some currently used levies. A more level playing field associated with further cuts in statutory rates would also further improve the attractiveness of Austria for foreign investors. Indeed, the more difficult it is to gather information on the details of the tax system, the higher are the transaction costs associated with inward investment activities.

One additional option to go further would be introducing a dual income tax system with a uniform flat rate for all types of capital income and progressive taxation of earnings. This would terminate various distortions in the taxation of capital income and produce neutrality with respect to both the firms' legal status (corporation *versus* partnership) and their financing decisions (credit *versus* equity financing and internal *versus* external financing). The system would allow progressive taxation of earnings to be maintained while setting tax rates for capital income at internationally competitive levels that take into consideration the high mobility of capital. A number of OECD countries have adopted dual income tax systems of this type, notably the Netherlands, Denmark, Finland, Norway and Sweden. One of the trade-offs would be, however, that dual income taxation creates incentives to transform labour income into capital income (notably for self-employed and small partnerships), particularly when the gap between the rate of capital taxation and the top rate on earned income is large.

There is also scope to adjust taxation of energy such as to achieve reductions in greenhouse gas emissions in a less costly way, ensuring that the marginal cost of abating greenhouse gas are equal across producers of emissions. While energy taxes were raised in 2004, at the margin the taxes generate no incentives for energy-intensive industries to reduce greenhouse gas emissions, owing to caps on tax payments above 0.5 % of the net production value (see the 2003 *Economic Survey*). *Caps on energy tax payments should be phased out. The phasing-out could be stretched over a longer predictable time period*, allowing to curb adjustment costs in energy-intensive industries). In the same vein, industries participating in the emissions trading regime of the European Union currently face higher marginal abatement costs than other producers of emissions (such as transport), as they have to pay both energy taxes and face the costs imposed by the permits. *Energy tax rates should be adjusted such that sectors not participating in the emissions trading regime pay higher energy taxes than other greenhouse gas producers.* Adjusting petrol prices to the higher level charged in neighbouring countries would reduce "fuel-tourism", which artificially deteriorates Austria's emission performance.

Notes

1. In the definition of the Maastricht Treaty the general government deficit amounted to 1.2% of GDP.
2. See previous *Economic Surveys of Austria*.
3. Self-employed tax payers make advance payments according to recent incomes and tax schedules and report their income during the first quarter of the following year. Such taxpayers will therefore benefit from tax reductions with a delay of about a year. A similar rule applies to corporate income tax payers. Most of the additional revenue shortfall in 2006 comes from lower corporate taxes.
4. Estimates of the short-term impact of the tax reductions on GDP growth range between 0.2 and 0.4%. See *e.g.* Breuss *et al.* (2004). The long-term effect is likely to be smaller. Dirschmid and Glatzer (2004) estimate that the general government budget balance improvements in the 1990s contributed to a decline in the private household savings ratio.
5. Measures have been taken to raise additional revenues for hospital financing. Federal funding for hospitals will be increased by € 300 million annually (0.1% of GDP), financed by an increase in the tobacco tax rate and higher social charges. Patient co-payments for prescription medicines have also been raised. One-off effects related to increases in profits from outsourced government-owned enterprises, such as the sale of real estate, attenuate the impact of the tax reductions on the budget deficit in 2005 by about 0.2% of GDP.
6. This includes unification of cost accounting procedures within the federal administration and some widening of output-oriented budgeting (*Flexibilisierungsklausel*, see the 2003 *Economic Survey of Austria*).
7. Public sector reform measures include continuing the programme of merging district courts, the streamlining of the federal tax administration, and increasing the use of information technology, which are estimated to reduce staffing levels by several thousand. Reform of the federal tax administration is expected to yield permanent savings of about 0.1% of GDP per year. The

government introduced an e-government initiative in 2003 and launched up to now 38 online administrative procedures (covering a wide range of interactions with the government administration). *www.help.gv.at* received the best e-government in Europe award. The service is also available in the four languages of Austria's new EU-neighbours.

8. These "surpluses" are about equal to the amount of loans granted by states to the private sector.
9. Reform of the Federal Railways system, legislated in 2004, aims at achieving budgetary savings of about € 1 billion by 2010 (0.4% of GDP) through a reduction of subsidies. The savings largely aim at preventing an increase in subsidies that would arise in the absence of reform. Efficiency gains are expected to result from the introduction of long-term prospective budgeting of government subsidies to the railway system and through the creation of separate corporations for passenger transport, freight transport and track provision. 50% of the savings are expected to materialise from substantial reductions in employment. However, current employment protection provisions for railway workers make it difficult to achieve employment reductions without recourse to early retirement. The government has asked the railway holding company to negotiate a loosening of employment protection provisions of current employees with the trade unions in order to avoid early retirements. No attempt is made to involve labour market offices in outplacement of public sector employees in this or other cases.
10. Marin (2004).
11. See Prinz and Marin (1999).
12. See Marin and Fuchs (2003).
13. See OECD (2005b).
14. See Duval (2003). Effective taxation was assessed on the basis of the invalidity track into retirement.
15. Analysis by Guger *et al.* (2004) suggests that in the construction sector substitution between the incapacity and the disability schemes was roughly 50%.
16. See OECD (2004).
17. Revisions in national accounting standards (inclusion of financial intermediation services indirectly measured) shift GDP upwards inducing an automatic downward level shift of the tax ratio. Over the years 2002-04 this downward shift amounts to 0.4 percentage points on average.
18. Schratzenstaller (2004).
19. Schratzenstaller (2004).
20. See Box 1.2, Trends in working time, *Economic Survey of Belgium* (2005). A panel regression for a number of OECD countries with an error correction specification shows a significant negative relationship between the number of hours worked and average income tax rates (and real income, proxied by labour productivity).
21. In the federal government's evaluation the income tax reform will favour women more than men. Disposable incomes are projected to increase by about 2% on average for female tax payers but only by 1.5% for males, because of the lower median income of women. As most lone parents are women the increased sole earners and lone parents' surcharges will also mostly relieve women.
22. Tax exempt up to € 620 per year and taxed at 6% on top of that.
23. See Aiginger *et al.* (2002).
24. See Beer *et al.* (2004b).
25. Felderer *et al.* (2002); European Commission (2004); Spengel (2003); Schratzenstaller (2003).
26. Hirschler and Finkenzeller (2004).
27. Beer *et al.* (2004a).
28. Hirschler and Kinkenzeller (2004).
29. Notional interest of equity was only available for one year.
30. DeMooij and Ederveen (2003) found in a meta- analysis of 25 empirical studies that a 1 percentage point reduction in a country's corporate tax burden raises FDI inflows in that country by 3.3%. Taken even the most conservative estimate for the reduction of the effective corporate tax burden in Austria, FDI could increase by about 20%. This does, however, appear to be only an upper benchmark because of simultaneous tax cuts in other countries. The Austrian tax cut may attract

FDI inflows from other Western economies but in the case of the new EU member states it will rather have the effect of limiting the FDI shortfalls resulting from those tax reforms. Beer *et al.* (2004b) estimate the probability of new enterprise settlement within a set of countries (Austria, Germany, Italy, Poland, Slovak Republic, Slovenia, Czech Republic and Hungary), depending on location factors such as the unemployment rate, the costs of energy, the population density, the endowment with human capital and tax factors. For Austria the probability was 12.5% in 2003, indicating that Austria could attract more FDI inflows than could be expected based on its population share in the sample. If the countries in the sample realise their tax reforms as announced at the time of the conduct of the study but Austria had not reduced corporate taxes, the probability for new enterprise settlement in Austria would have decreased to 10.6%. The tax cut from 34% to 25% raises this measure back to 11.6% so that more than half of the pending losses can be avoided.

31. Beer *et al.* (2004) and Breuss *et al.* (2004).
32. The Austrian Business Agency (ABA) registered a substantial increase in inquiries for information on enterprise formation in Austria following the announcement of the tax reform, specifically from Germany.
33. Pummerer (2004) demonstrates furthermore in a theoretical paper that there are cases where the group taxation leads to higher tax payments for the enterprise through the "import" of profits that normally would not be taxable in Austria while leaving unchanged the tax claims of the source country. This results from the interaction between loss carry-forward restrictions with the repayment obligation of tax benefits in later years. Pummerer shows that the advantage of the group taxation arrangement is higher the lower the volatility of the Austrian tax base is, the more restrictive the loss carry over arrangement abroad is and the less restrictive the loss carry over arrangement in Austria is.
34. See The Austrian Strategy for Sustainable Development. An Initiative of the Federal Government, Federal Ministry of Agriculture, Forestry, Environment and Water Management (2002).
35. A profit of 100 is first taxed at 25% corporate tax rate, leaving 75. If distributed this is taxed at maximal 25% capital gains tax which leaves an after tax profit of 56.25. The cumulative tax rate is therefore 43.75%.

Bibliography

Aiginger, K. (2002), Der Einfluß von Steuern und Förderungen auf Wettbewerbsfähigkeit und Investitionsdynamik in Österreich, *Austrian Institute of Economic Research for the Austrian Federal Economic Chamber*, Vienna.

Beer, C., B. Felderer and L. Strohner (2004a), *Effektive Körperschaftsteuersätze in Mitteleuropa*, Institute for Advanced Studies, Vienna, *Research Report*, January.

Beer, C., B. Felderer, G. Grohall, C. Helmenstein, E. Krylova, A. Schnabl and L. Strohner (2004b), Ökonomische Wirkungen aktueller Steuerreformmaßnahmen, Institute for Advanced Studies, Vienna, *Research Report*, April.

Bellak, C., M. Leibrecht and R. Römisch (2004), "New Evidence on the Tax Burden of MNC Activities in Central- and East-European New Member States", *Vienna University of Economics and BusinessAdministration Discussion Paper*, No. 2.

Breuss, F., S. Kaniovski and M. Schratzenstaller (2004), "The Tax Reform 2004-05 – Measures and Macroeconomic Effects", *Austrian Economic Quarterly,* 3/2004, 127-142.

Bundesministerium für Finanzen (2004), Budgetbericht 2005.

DeMooij, R. and S. Ederveen (2003), "Taxation and Foreign Direct Investment: a Synthesis of Empirical Research", *International Tax and Public Finance*, Vol. 10, pp. 673-93.

Duval, R. (2003), "The Retirement Effects of Old-age Pension Systems and Other Social Transfer Programmes in OECD Countries", *OECD Economics Department Working Papers*, No. 370, OECD, Paris.

European Commission (2004), *Structures of the Taxation Systems in the European Union*.

Federal Government, Federal Ministry of Agriculture, Forestry, Environment and Water Management (2002), *The Austrian Strategy for Sustainable Development, Vienna*.

Felderer, B., B. Grossmann, D. Grozea-Helmenstein, C. Helmenstein, R. Koman, El. Krylova and E. Skriner (2002), Standortattraktivität Österreichs im europäischen Steuerwettbewerb, Institute for Advanced Studies, Vienna, *Research Report*.

Girkinger, H. (2004), Vergleichende Studie der effektiven Körperschaftsteuerbelastung in Österreich, Slowakei, Tschechien und Ungarn, KPMG, *www.kpmg.at/files/studie.pdf*.

Guger, A., U. Huemer and H. Maringer (2004), Schwerarbeit: Volkswirtschaftliche Kosten und Lebenserwartung – Pensionsübertritt und Arbeitsmarktsituation am Beispiel der Bauwirtschaft, *Austrian Institute of Economic Research for the Austrian Federal Economic Chamber*, Vienna.

Heady, C. and P. van den Noord (2001), "Tax and the Economy – a Comparative Assessment of OECD Countries", *OECD Tax Policy Studies*, No. 6, OECD, Paris.

Hirschler, K. and M. Finkenzeller (2005), Die Auswirkungen der Steuerreform 2005 auf den Unternehmensstandort Österreich – Ein quantitativer Belastungsvergleich mit den EU-Beitrittsstaaten, *Österreichische Steuerzeitung*, No. 12, Art. 576, June.

Loretz, S., M. Pfaffermayr and H. Winner (2004), Unternehmensbesteuerung, internationale Direktinvestitionen und die Steuerreform 2005 in Österreich, *Wirtschaftspolitische Blätter*, 4, pp. 495-505.

Marin, B. and M. Fuchs (2003), Pensionsharmonisierung in Kärnten – Expertise, Vienna.

Marin, B. (2004), NDC – A Magic All-European Pension Reform and Co-ordination Formula? – Some Comments on the Robert Holzmann Model Design, *mimeo*.

OECD (2003), *OECD Economic Surveys: Austria*, Vol. 2003/16, OECD, Paris.

OECD (2004) *Ageing and Employment Policies – Austria*, OECD, Paris.

OECD (2005a), *OECD Economic Surveys: Belgium*, Vol. 2005/5, OECD, Paris.

OECD (2005b), *Older Workers Report*, OECD, Paris (forthcoming).

Prinz, C. and B. Marin (1999), Pensionsreformen – Nachhaltiger Sozialumbau am Beispiel Österreichs, Campus, Frankfurt am Main.

Pummerer, E. (2004), Die österreichische Gruppenbesteuerung unter Unsicherheit, *mimeo*.

Schratzenstaller, M. (2003), Zur Steuerreform 2005, *WIFO Monatsberichte* 12/2003.

Schratzenstaller, M. (2004), Bundesvoranschlag 2005: Hohes Defizit durch Steuerreform und steigende Transferausgaben, *WIFO Monatsberichte* 11/2004.

Spengel, C. (2003), Unternehmensgewinne und Steuerbelastung im internationalen Vergleich – Indikator der Leistungsfähigkeit?, contribution to the 12th Wissenschaftliches Kolloquium Ökonomische Leistungsfähigkeit Deutschlands – Bestandsaufnahme und statistische Messung im internationalen Vergleich.

ISBN 92-64-01104-8
OECD Economic Surveys: Austria

Chapter 3

Reforming federal fiscal relations

Key areas of public sector activity are subject to complex fiscal relations across the layers of government. Revisiting the distribution of tasks and funding principles within the federation is likely to have a very significant potential to improve public sector efficiency. Fragmentation of decision-making in some spending programmes, such as hospital care and social assistance benefits, needs to be overcome, concentrating financing and spending responsibilities on one government level. Strengthening co-operation between municipalities as well as amalgamations of small municipalities would allow to take advantage of scale economies in the provision of local government services. Stronger tax-raising powers of the municipalities and the states, reform of tax sharing rules, as well as improved budgeting procedures would raise the ability of sub-national governments to match supply of services to local demand patters and improve accountability to voters. The Constitutional Convention (Österreich Konvent) has fostered debate on constitutional reform, providing inter alia an opportunity to improve fiscal federal relations along these lines.

Austria is a federal state with three layers of government, with elected government institutions, independent decision making powers and budgetary autonomy – the federation (*der Bund*), the states (*die Länder*) and the municipalities (*die Gemeinden*). The states have substantial legislative powers and the constitution guarantees the autonomy of the municipalities in all local matters. While decentralised decision powers can in principle allow policy makers to take local preferences better into account, federal fiscal relations in Austria generate inefficiencies in resource allocation in some important fields. Hence, reforming federal fiscal relations should have high priority on the policy agenda, linking public sector reform with fiscal consolidation. Indeed, a constitutional convention was installed in Austria in 2004, involving representatives of the various governments, the political parties and the social partners, whose task was to make proposals for constitutional reform that would simplify federal fiscal relations. While previous *Economic Surveys* already highlighted important elements in this context, this chapter aims at a more comprehensive account of a number of relevant policy issues.

The allocation of revenue-raising and spending competencies across government levels, channels of fiscal equalisation between sub-national governments, and modes of co-financing of spending projects across different layers of government all form part of a complex federal fiscal system, with many interactions between them. The first part of this chapter reviews basic characteristics of the Austrian federal fiscal system. The subsequent parts of this chapter highlight important aspects of Austrian federal fiscal relations where institutional reforms are likely to generate substantial gains in public sector efficiency. The second section considers policy issues in funding across layers of government. Section three examines issues in the allocation of spending responsibilities, including federal aspects of the provision of social assistance and health care financing. Finally, the last section makes proposals aimed at increasing the accountability of the budgeting process.

Main features of the Austrian federal fiscal system

The constitution lists areas in which only the federal parliament legislates. Areas not included in the list are considered to be the responsibility of the states' parliaments. Major examples of federal legislative responsibilities include higher education and vocational training, some areas of social policy, such as family support and private sector pensions, and labour legislation. State legislative responsibilities include social welfare, health care in the hospital sector, some areas of primary and secondary education (such as regulation of working conditions of teachers), nature conservation, building regulations, and regional infrastructure planning, including transport. Local authorities perform policing and inspection tasks, local planning, infrastructure provision – such as water services – as well as social services.

However, in many areas, decision making competences in closely related areas are assigned across different levels of government. For example, the constitution assigns legislative powers on the framework conditions (*Grundsatzgesetzgebungskompetenz*) of

Box 3.1. Policy assessment on federal fiscal relations

Tax sharing arrangements should be improved

- Distribution of tax revenue shares across sub-national governments should be more closely linked to indicators for demand of local services, taking into account the demographic composition of the population, as well as the provision of services by centres of agglomeration which are demanded by residents of neighbouring municipalities.
- Revenue allocations to the different levels of government should be fixed for a longer period than four years.
- Earmarking of specific tax revenues should be given up.

Tax-setting powers of sub national governments should be strengthened.

- Valuation of real estate for tax purposes should be updated more frequently and unified across sectors in line with market valuations.
- The states should be allowed to set a flat-rate surcharge on the personal income tax schedule subject to a corridor whose width is to be determined by the federal legislator.
- The states' levy on the municipalities should be abolished.

Transfer flows between government levels need to be targeted better and become more transparent

- The tax revenue redistribution mechanism among sub-national government levels should be simplified and made more transparent, reducing compensation effects on own tax revenues below 100%.
- Earmarked transfers to lower levels of government should be reduced. Earmarked federal government funding for residential construction subsidies and infrastructure spending of the states should be phased out.
- The consultation mechanism should apply to legislation causing both positive and negative cost spillovers to other levels of government. Compensating payments within the consultation mechanism should be made on an ex-ante basis, rather than on the basis of *ex post* cost.
- Co-financing should be strictly limited to cases where clear externalities are present and local provision is nonetheless preferable, and should be based on output rather than input indicators.

Returns to scale in services provided by municipalities need to be better exploited

- Consideration should be given to promote merging small municipalities where this can reduce administrative costs.
- Regulation on the creation of municipal associations, notably across borders of states, should be eased.
- Local authorities should be able to purchase services from each other.

Income replacement schemes run by sub-national governments need to be reformed

- Social assistance and unemployment assistance for recipients who are able to work should be combined into one means-tested income replacement scheme. Responsibility for the financing of social assistance payments should be moved to the federal government, with the Public Employment Service (*Arbeitsmarktservice*) in charge of disbursing the benefits. Recipients should cease to be obliged to repay social assistance benefits, while ensuring that needs testing and work availability testing are strict.

Box 3.1. **Policy assessment on federal fiscal relations** *(cont.)*

- The responsibility for the financing of combined means-tested income replacement benefits for individuals who are not disabled or unable to take up a job for other reasons should be assigned to one level of government, and care needs to be taken that the segregation of responsibilities for paying unemployment-related benefits and job placement is overcome.

Fragmentation in decision-making should be overcome

- Financing and spending responsibilities for hospitals and practicing physicians should be assigned to one government level.
- Sub-national levels of government should not be able to block hospital supply planning decisions unless they are fully in charge of paying for hospital-provided health care services.
- The annual sustainable development implementation reports should contain an explicit statement about the main indicator changes to be achieved by individual programmes. The terms of reference for the evaluation of the overall strategy should include an explicit request to assess the cost effectiveness of individual programmes. Future prioritisation of programmes should take cost effectiveness explicitly into account.
- The government should therefore make sure that the measures outlined in a big interdisciplinary flood study are also implemented by the responsible lower levels of government. Conditioning part of federally provided transfers on compliance with appropriate flood risk prevention measures could enhance efforts in the right direction.
- A mechanism should be put in place within the National Strategy for Sustainable Development which would allow the reconciliation of the different dimensions of sustainable development before the start of supra-regional projects. Indicator reports should include benchmarking information, which would allow a comparison of how Austria fares with respect to programme efforts and international best practice performance.

The budgeting framework at all levels of government should be revised

- Extra-budgetary funds should be fully integrated into the budgets of the respective governments.
- The accounting framework should be fully harmonised across government levels.
- A medium-term budgeting framework as well as long-term sustainability analyses should be introduced at all levels of government.
- Output-oriented budgeting should be introduced, with ministries held responsible for programme management, on the basis of an improved information base for cost and benefit analysis of spending and revenue programmes.

hospital care to the federal level, while it is the states' responsibility to legislate within this framework (*Ausführungsgesetzgebung*). While teachers' working conditions are legislated by the states, setting up curricula for schools as well as further education are responsibilities of the federal government. Responsibilities also overlap. For example, both state and local governments are responsible for the maintenance of schools. Also, most administrative tasks emanating from federal legislation are delegated to the states, and – to a lesser extent – to the municipalities. The latter also fulfil administrative functions delegated by the states.[1] Some administrative responsibilities, such as in taxation, security and military matters, remain with the federal government, however.[2]

The states employ the largest share of government employees of all three levels of government, about 43%, with the federal government and the municipalities employing 38% and 19% respectively.[3] About 30% of total government spending is spent by sub-national governments (Table 3.1). Austria occupies a middle position with respect to the decentralisation of government spending within the OECD, although the share of spending of the intermediate level of government is, on aggregate, somewhat lower than in other federally organised member countries. The states' share of general government spending (excluding intra-governmental transfers) increased between 1985 and 2002 while the municipalities' share declined. Rising outlays by the states for social assistance and hospitals – which were accompanied by higher transfers from the municipalities to the states – contributed to this development. Health and social security and welfare spending make up a larger proportion of sub-national government spending in Austria than in most other federal OECD countries (see Table 3.1). Close to one half of states' total spending and more than one third of municipalities' total spending is accounted for by health care and social spending. Spending and financing responsibilities in both policy areas are fragmented, involving all three levels of government, leaving room for substantial efficiency gains, as outlined further below in the chapter.

According to the federal constitution, governments of each level need to be given sufficient financial resources to fulfil the tasks assigned to them. Moreover, the constitution prescribes, in principle, that financing responsibilities of different layers of government should match spending powers (*Konnexität*). However, there is an elaborate system of tax sharing, transfers, and co-financing across the different layers of

Table 3.1. **Spending by sub-national governments by main categories**

In % of total sub-national governments' expenditure 2003 or latest year available

	Public order and safety		Education		Health		Social security and welfare	
	State, Region or Province	Local	State, Region or Province	Local	State, Region or Province	Local	State, Region or Province	Local
Federal countries								
Australia (2002)	9.2	2.0	25.7	0.3	22.9	1.5	6.0	5.3
Austria	**0.6**	**2.3**	**20.1**	**17.2**	**19.7**	**17.1**	**20.4**	**18.2**
Belgium	0.2	11.9	41.3	19.9	0.7	2.0	16.5	16.1
Canada (2002)	3.7	9.7	22.6	41.8	32.7	1.4	16.7	6.5
Germany	8.8	4.6	23.4	16.3	1.2	1.8	23.1	31.0
Switzerland (2001)	7.9	4.6	24.5	23.2	17.3	18.6	17.4	14.0
United States (2001)	4.4	10.4	30.9	44.8	22.0	8.4	17.9	7.3
Non-weighted average	5.0	6.5	26.9	23.3	16.6	7.3	16.9	14.1

	General public services		Housing and community amenities		Economic services		Other	
	State, Region or Province	Local	State, Region or Province	Local	State, Region or Province	Local	State, Region or Province	Local
Federal countries								
Australia (2002)	10.5	22.3	5.2	12.6	17.2	29.9	3.3	26.1
Austria	**11.0**	**17.2**	**4.1**	**3.4**	**20.9**	**14.6**	**3.1**	**10.1**
Belgium	17.0	23.5	1.7	1.8	15.8	11.2	6.8	13.6
Canada (2002)	12.4	9.6	1.3	5.9	9.6	18.5	0.9	6.7
Germany	25.8	14.7	3.7	6.8	11.6	11.9	2.5	13.1
Switzerland (2001)	11.6	15.9	2.1	8.0	16.8	9.8	2.4	5.9
United States (2001)	13.2	16.2	0.7	2.1	10.3	7.4	0.4	3.4
Non-weighted average	14.5	17.1	2.7	5.8	14.6	14.8	2.8	11.3

Source: OECD National Accounts for Austria, Belgium and Germany; IMF, *Government Finance Statistics Yearbook*, 2003, for the others.

government. To a large extent these arrangements reflect the objective to achieve roughly equal living conditions in all of Austria, as well as the high value given to co-operation and consensus-driven decision making across government levels.[4] The federal government and the states have struck agreements on many issues in which both layers of government have certain decision-making powers and coordination is considered beneficial. In some cases, these agreements also involve co-financing arrangements. For example, the rules governing financing of hospitals are set in temporary agreements between the federal government and the states, and both levels of government (as well as the municipalities) contribute to hospital funding. Further areas subject to co-financing and based on inter-governmental agreements include aspects of environmental regulation, hiring and financing of teachers, as well as rules concerning the use of subsidies for residential construction. A cornerstone regulating the assignment of revenue and spending powers is given by the Fiscal Equalisation Law (*Finanzausgleichsgesetz*), (see Box 3.2).

Extra-budgetary units have gained importance at all levels of government over the last ten years or so. This further increased the complexity of federal fiscal relations across entities of the public sector, boosting the entanglement of transfers between government and non-governmental public sector entities. Investment of extra-budgetary units – including public sector enterprises – as a percentage of investment by the federal government, the states, municipalities and the social security system increased from 1.7% in 1995 to 97.6% in 2003.[5]

Table 3.2. **Fiscal decentralisation**

	Share in general government spending[1]			
	Intermediate level		Local government	
	1985[2]	2003[3]	1985[3]	2003[3]
Austria	**13.7**	**16.4**	**17.2**	**13.7**
Belgium	20.2	22.4	12.3	13.0
Canada	47.8	52.3	10.2	10.5
Denmark			53.7	58.4
Finland			32.0	37.6
France			15.9	18.6
Germany	22.3	22.4	16.8	13.9
Greece			4.1	4.8
Ireland[4]			30.2	29.5
Italy			25.4	31.0
Japan			44.5	39.3
Netherlands			32.6	34.8
Norway[5]			34.6	30.6
Portugal			10.3	13.4
Spain	14.4	32.7	11.1	13.0
Sweden			37.1	43.6
United Kingdom			22.2	27.6
Average of OECD countries[6]			**23.7**	**26.1**

1. Excluding the transfers paid to other levels of government. National Accounts data.
2. Or earliest year available: 1986 for Ireland; 1987 for the Netherlands and the United Kingdom; 1989 for Canada, Japan, Luxembourg and Norway; 1991 for Germany; 1993 for Sweden; 1995 for Austria, Belgium, Denmark, Finland, Greece, Portugal and Spain.
3. Or latest year available: 1996 for Ireland, 2000 for Japan, 2002 for Denmark and the United States.
4. Data based on SNA68 methodology.
5. The share in general government revenues is expressed in % of mainland government revenues.
6. Simple average of federal and unitary countries. The average takes into account only countries for which data are available for both years.

Source: OECD National Accounts database; Statistics Norway; Statistics Canada; US Bureau of Economic Analysis.

Box 3.2. **The Fiscal Equalisation Law**

The Fiscal Equalisation Law (*Finanzausgleichsgesetz*, FAG) is pivotal in defining major inter-governmental fiscal relations. The provisions of the law are negotiated between the federal government, the states and the municipalities and have validity for a period of four years. The most recent update of the FAG came into force in January 2005. The FAG determines the types of taxes to be shared between the three levels of government (*gemeinschaftliche Bundesabgaben*) and the proportions according to which the revenues are allocated. It also specifies major transfer flows between the levels of government.

Most important types of taxes are shared taxes (*gemeinschaftliche Bundesabgaben*), such as personal income tax, corporate tax and value added tax, with the corresponding tax rates determined by federal legislation. The revenues of certain taxes are not shared but are kept by local and state governments according to how much revenue is generated within each state or municipality ("own taxes", *ausschließliche Landesabgaben, ausschließliche Kommunalabgaben*). These taxes however play a significant role only for the municipalities. The most important tax of this type is the communal tax (*Kommunalsteuer*), a tax on private enterprise payrolls, the rate of which is determined by the federal government. The FAG also determines which own taxes can be set autonomously by the states and municipalities, respectively. Real estate tax rates are the only significant tax parameter that can be set autonomously by sub-national governments. They are determined by the municipalities subject to a ceiling determined in the FAG.

Tax sharing is achieved in different stages. Distributable tax revenues are obtained after deducting some tax receipts from the total (*Vorwegabzüge*). These deducted tax revenue shares are earmarked to particular spending items. For example, a proportion of personal income tax revenue is earmarked for the financing of family benefits (*Familienlastenausgleich*) and is administered by an extra-budgetary fund, the *Familienlastenausgleichsfonds*. At the second stage the shares of tax revenues accruing to each level of government (federal government, states, municipalities) as a whole are fixed. About 73% of the revenues of shared taxes accrue to the federal government, the states receive 15% and the municipalities about 12%. Finally, the horizontal distribution of taxes across municipalities and states, respectively, is determined.

The allocation of revenues from shared taxes across municipalities is based on the weighed distribution of population, such that municipalities with relatively many inhabitants receive more revenues per capita, with the per-capita weights increasing up to a population of 100 000. The purpose of this rule is to compensate large municipalities for the supply of services that also benefit residents in smaller surrounding municipalities. However, the weight given to large municipalities gradually declined in successive FAG negotiations. In addition, a proportion of 13% of the municipalities' share in shared tax revenues is allocated via the states, which are required to distribute these funds back to the municipalities through discretionary grants.[1] These discretionary grants often co-finance investment projects of municipalities but can also be used to provide aid for municipalities in financial distress.

The weighted population key is also applied to the horizontal distribution of tax revenues across the states. Thus, states containing relatively large municipalities receive a larger tax revenue share than states containing small municipalities. In addition, if a state's per capita revenues from shared taxes fall short of the average per capita tax revenues by more than 11%, the difference is equalised by a federal transfer (*Landeskopfquotenausgleich*).

Box 3.2. **The Fiscal Equalisation Law** *(cont.)*

Up to the most recent revenue sharing arrangement the weighted population key was based on the results of the population census, conducted every ten years. The low frequency of population adjustments resulted in relatively large changes in revenues of sub-national governments. To solve this problem the new FAG, has determined a timetable for continuous updating of population data on the basis of residential registry.

In addition to determining the distribution of shared tax revenues, the FAG also contains rules to reduce inequalities in municipalities' own tax revenues, *i.e.* tax revenues generated within each municipality and which municipalities keep, notably real estate taxes and the communal tax. The equalisation mechanism is highly complex and has the following characteristics: Municipalities with below-average potential own tax revenues receive vertical equalising transfers from the federal government. Potential tax revenue is, essentially, defined as the sum of weighted per capita revenues from the communal tax as well as imputed real estate tax revenues on the basis of hypothetical (rather than actual) real estate tax rates (*Finanzkraft*).[2] Hypothetical real estate tax rates are used in order to prevent incentives for municipalities to set a low tax rate to qualify for more funds through the tax revenue equalisation mechanism. Part of the equalising transfers to the municipalities is provided directly by the federal government, while the other part is channelled through the states. Municipalities must meet eligibility criteria to qualify for the latter transfers. In particular, they have to set the maximum permissible real estate tax rate determined in the FAG. The states provide these funds to municipalities whose *Finanzkraft* is below the state average. In some states the funds received from the federal government exceed the amount required for this purpose. In this case, the states can distribute the funds according to criteria they determine themselves.[3] Equalising transfers provided directly by the federal government and transfers provided via the states are interdependent, as the latter are included in the *Finanzkraft* on the basis of which the direct transfers from the federal government are calculated.

The FAG also allows state governments to impose a levy on the municipalities (*Landesumlage*) and determines a ceiling for this levy. It is mostly set with respect to the municipalities' *Finanzkraft* (as defined above) and thus also has a redistributive impact. Most states make use of the opportunity to impose a levy on municipalities. The resulting funds are freely available for state governments.

In addition to the earmarked *Vorwegabzüge*, a substantial share of the tax revenue shares for sub-national governments as well as many transfers from the federal government to sub-national governments are earmarked to specific spending items. For example, a fraction of the total receipts in shared taxes is earmarked to subsidies for local public transport and to measures to save energy and protect the environment. Some earmarked funds require matched funding of the local government, for example, for states' and municipalities' spending on housing construction subsidies, waste treatment and hospital financing. The federal government reimburses sub-national governments for, notably teachers' pay.

1. The volume of discretionary grants however often deviates from the 13% proportion prescribed in the FAG.
2. The weights are those of the weighed population key noted above. Different real estate tax rates are used in the two different equalisation transfers, outlined below.
3. See Matzinger (2002).

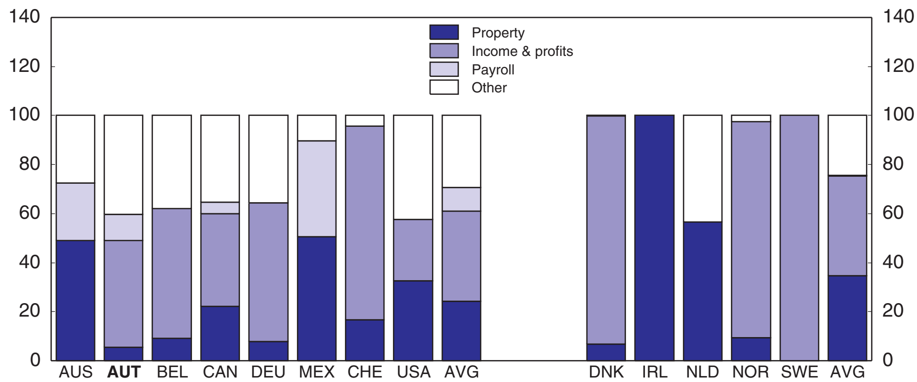
Issues in funding across layers of government

Devolved taxing powers are almost absent…

Sub-central levels of government rely largely on shared taxes, for which the federal government has full legislative responsibilities, and on federal government transfers. The states have few sources of own tax revenues. About 70% of the total revenues of the municipalities are made up of shared tax receipts and transfers from other levels of government. About 10% consist of user fees and 20% of tax revenues derived from tax bases that are attributed to the municipalities alone ("own taxes"). Since the beginning of the 1990s the share of own taxes in overall revenues declined (Figure 3.1). At present, somewhat more than half of the municipalities' own tax revenues consist of the communal tax (*Kommunalsteuer*).[6] The most important tax for which the municipalities have some discretion in setting taxation (the tax rate) is the real estate tax. Real estate tax revenues account for only 4.5% of the municipalities' total revenues,[7] their volume being much smaller than that of the communal tax. By international comparison, Austria also stands at the lower end with respect to utilisation of real estate taxes as a revenue source for sub-central government (Figure 3.2).

Figure 3.1. **Composition of tax revenues of sub-national governments, 2002**[1]

% of total revenue



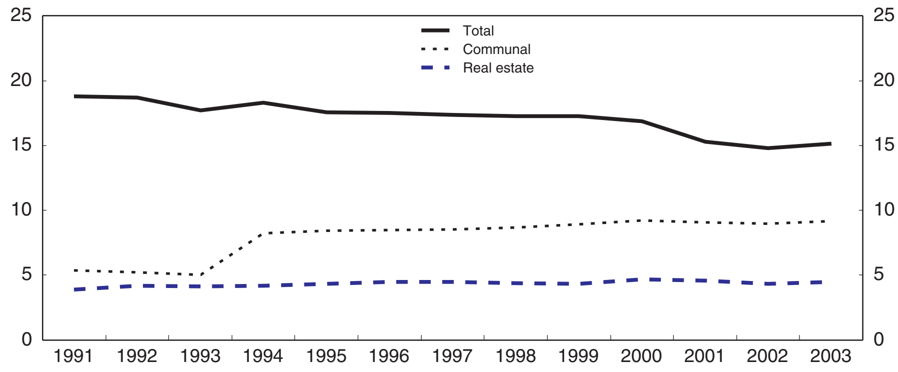
1. Federal countries to the left, unitary countries to the right. AVG is the average of the respective group of countries in the graph.

Source: OECD, *Revenue Statistics*.

In several respects there remains scope to improve the present rules of tax sharing. First, some regional centres with relatively high spending on services serving bordering municipalities are being funded less well than similarly sized municipalities which are not the centre of an agglomeration.[8] Second, sub-national governments differ in the demographic composition of population, while demand for social, education and health care services, which are financed by sub-national governments to a significant extent, is stronger for specific demographic groups, such as the elderly, young children, and immigrants. *The provision of services by centres of agglomeration demanded by residents of neighbouring municipalities should be taken into account in the distribution of tax revenues of local governments. The demographic composition of the population, such as the proportion of the elderly, young children and immigrants, should be used as additional criteria for the determination of tax revenue shares of sub-national levels of government.*

Figure 3.2. **Own tax revenues of municipalities**[1]

% of total revenue



1. Own tax revenues are tax revenues generated within each municipality which each municipality can keep. Vienna is excluded. Total revenues are administratively defined and include some financial transactions, such as the repayment of loans.

Source: Statistics Austria.

Moreover, the share of taxes which sub-national governments can set is very low in international comparison, given that the real estate tax of the municipalities is the only major item of this type. If sub-national governments had to rely more on tax revenues under their own control, the congruence between sub-central spending and taxation would be improved and become more transparent for the electorate, reinforcing social choice and fiscal discipline. In addition, a large proportion of municipalities' and states' tax and transfer revenues are earmarked to specific spending programmes according to uniform rules across all states or municipalities (see Box 3.2), which further limits the extent to which the regions can take differences in local preferences into account.

Thus, economic benefits of increasing the scope of state and local governments in levying own taxes at the expense of intra-governmental transfers and co-financing are likely to be significant. However, up to date valuation of real estate is a precondition for strengthening revenue-raising powers of municipalities on the basis of real estate taxes. The valuation of the tax base falls short of market values by large margins. Revaluation of real estate for tax purposes, which is the responsibility of the federal government, is conducted infrequently, the last one dating from 1973.[9] Low valuation of agricultural land is also maintained in order to provide support for agricultural activity.

The parameters of the communal tax are determined at the federal level. It appears appropriate that the tax rate is set centrally as business payroll tax rates set by local governments could induce some municipalities to raise tax revenue at the expense of residents of other municipalities and distort firms' location decisions. The tax gives the municipalities some incentives to develop their tax base as revenues generated from the tax accrue to the municipalities where employing firms are located. However, most core public services provided by sub-national governments serve resident individuals (in particular education, health care and social welfare, see also Table 3.1 above).[10] Hence, the communal tax might only weakly match spending needs on local government services, especially in view of the small size of most municipalities in Austria (see below). The new FAG enables municipalities to share communal tax revenues with each other, for example, if several municipalities contribute infrastructure investment for attracting enterprises. While the new rule is likely to improve incentives to attract business activity spanning across municipalities' borders, it does not address the geographic mismatch of spending needs and communal tax revenues. It is another draw-back associated with the communal tax that many municipalities appear to reimburse new firms for their communal tax liabilities, undermining the federally set uniform tax rate.[11] *De facto* tax competition through such reimbursements reduces transparency of the tax burden.

Relying more on revenues generated by the real estate tax is likely to be the most favourable option to develop the taxing power of the municipalities. The tax base is not mobile geographically and less cyclically volatile than other tax bases. The latter aspect is of particular importance with respect to Austria's domestic Stability and Growth Pact, which obliges the municipalities to prevent a deterioration of their fiscal balances below a certain threshold. Moreover, since the quality of local services is reflected in real estate values, real estate taxes raised by sub-national governments also strengthen incentives to improve service provision. The low share of real estate tax revenues by international comparison illustrates the scope to increase utilisation. Moreover, revaluation of real estate for taxation purposes in line with more up-to-date market prices would reduce the distortions inherent in the current valuations. The present unrealistic valuation of real estate distorts economic activity as real estate whose value has risen most strongly since the latest valuation is taxed more favourably than real estate which has risen slowly in value. Lower valuation of agricultural land should not be used as an instrument to subsidize agriculture. *Hence, valuation of real estate for tax purposes should thus be updated more frequently, taking into account the administrative cost of revaluations, and valuations should be unified across sectors in line with market valuations.*

On the level of the states, consideration should be given to introducing genuine taxing powers that replace the states' levy on the municipalities. Allowing the states to incorporate a surcharge into the – lowered – income tax schedule would be an option. Levying an income tax surcharge on residents would be broadly in line with taxing the beneficiaries of services provided by sub-national governments as the states serve their residents in a variety of areas (see above). Also, limiting states' discretion to the right to vary the rate of taxation, rather than the tax base, minimises compliance and administrative costs. However, strong income taxing powers of sub-central governments are associated with negative externalities on other constituencies. In particular, too high a taxation might cause the overall tax base to shrink and can weaken the redistributive role of federal income taxation. *Limiting such adverse effects suggests confining the right for sub-central income taxation to setting a flat tax rate subject to a corridor whose width is to be determined by the federal legislator.* While several OECD countries allow sub-national governments to set income tax rates, some countries, such as Norway and Iceland, introduced constraints of this type.[12]

... while earmarked revenue allocation and co-financing go too far

A substantial proportion of shared tax revenues and federal government transfers accruing to the states and local governments are earmarked to finance particular sub-national spending items. Many of these transfers are determined in the fiscal equalisation law (FAG) (see Box 3.2). Overall, earmarked revenues, net of additional cost sharing and transfer arrangements between state and local governments, account for about a third of the states' revenues and a half of the municipalities' total revenues.[13]

The large role of earmarked revenues for sub-national levels of government increases the complexity of federal fiscal relations substantially. Moreover, co-financing of spending items between the states and the municipalities occurs in both directions. For example, municipalities contribute to the financing of social spending of the states and the states co-finance expenditure of the municipalities on childcare facilities. The complexity of the tax sharing and transfer system overall renders the financing and delivery of services very non-transparent, reducing accountability to local voters. The lack of accountability, in turn, makes it difficult to assess the economic impact of resource allocation, impairing effective utilisation of resources.[14] At the same time, administrative costs associated with earmarked funding were found to be substantial, arising from application procedures involving potential beneficiaries, establishing evidence that funds were used as approved, and related activities. Costs relative to the size of the funds extended appear to be particularly high for small municipalities where they were estimated to reach between 10 and 20% of the transfer volume.[15] Moreover, federal government co-financing of sub-national spending items can generate inefficient resource allocation as it generates a wedge between the budgetary costs of the sub-national authority and the full costs of the spending project.

Earmarking tax revenues to spending is also likely to distort the tax and spending structure, as changes in the revenue from particular taxes may differ from appropriate changes in spending. The Family Burden Equalisation Fund (*Familienlastenausgleichsfonds*, FLAF) stands as a major example of revenue earmarking contributing to incentives to expand spending.

As was outlined in the 2003 *Economic Survey*, co-funding by the federal government and the states of investment for the purpose of waste water treatment has contributed to substantial inefficiencies in waste water networks, due to the development of settlements, mainly in the rural areas of Austria. Co-funding has also established a hurdle for abolishing subsidies for residential construction. Under the *Wohnbauförderung* (WF) scheme, the federal government provides earmarked funding to the states to subsidise residential construction. The states allocate the subsidies and provide matched funding. Most of the total funds are extended in terms of interest rate subsidies and annuity support for loans. Up to 1997 the volume of funds disbursed to states for this purpose was rising quickly, and cumulated claims out of granted credits amounted to € 20.5 billion, indicating the high volume of resources channelled into residential construction. More recently some states have capitalised their claims to contain their debt. To contain the rising fiscal burden on the federal budget, federal transfers to the states were capped from 2001 onwards, and earmarking was relaxed by allowing the states to use part of the overall funds for other uses, notably reduction of greenhouse gas emissions and improvements in infrastructure.[16] Up to now most of the subsidies for housing have been spent on new construction, and a smaller portion (some 11%) is used for renovations of the existing housing stock.

While the WF has been repeatedly under debate, it was placed outside the sphere of negotiable items in the recent re-negotiation of inter-governmental revenue sharing, indicating the difficulties associated with scaling down earmarked schemes of inter-governmental funding. Whether the scheme is effective with respect to social redistribution goals is questionable as low-income families who are not owners of residential property bear part of the tax burden to finance the WF. The WF constitutes a subsidy for the construction industry, effectively diverting resources away from more

 OECD ECONOMIC SURVEYS: AUSTRIA – ISBN 92-64-01104-8 – © OECD 2005

productive allocations. In the same vein, the subsidies have favoured substitution of newly constructed for already existing real estate. Moreover, while residential investment rates in Austria were large by international comparison, in recent years the residential construction sector has been subject to over-capacity and rapid population ageing in the years to come is likely to be associated with falling demand for residential units in the long term. This is aggravated further with respect to infrastructure requirements. *Earmarked federal government funding for residential construction subsidies disbursed by the states should be phased out.*

The WF funds can also be used by the states to subsidise expenditures which increase the energy efficiency of new or existing housing. However, these subsidies are unlikely to be the most efficient way to achieve reductions in greenhouse gas emissions. First, it is difficult for the federal government to ensure that the states and the ultimate recipients of the subsidies make use of the subsidies in the most effective way. Second, the emission-reducing impact of the subsidies is likely to be partly offset as a result of households choosing higher ambient temperatures, as the subsidies effectively reduce heating costs (see the 2003 *Economic Survey*). Third, there is a risk that the subsidies might reduce the private marginal cost of abating pollution in residential heating below the private marginal cost of abating pollution from other activities (*e.g.* transport), thus diverting abatement effort in other activities where such efforts would be less costly. As pointed out in the 2003 *Economic Survey*, a more efficient way to achieve greenhouse gas emission targets would be to rely on price mechanisms, such as higher taxes on heating fuel.

The federal government distributes earmarked grants to municipalities and state governments for public transport spending, amounting to about € 200 million in 2003. Part of the grants is allocated according to the length of the transport network relative to the number of passengers,[17] mitigating incentives to increase revenue through increasing passenger numbers. Until recently the volume of transfers was linked to some share of mineral oil tax revenues. Consequently, past increases in the mineral oil tax reinforced the adverse incentives.

Earmarking of tax revenues should be given up, and extra-budgetary funds should be fully integrated into the budget of the respective government. Co-financing should be strictly limited to cases where clear externalities are present and local provision is nonetheless preferable, and should be based on output rather than input indicators.

... with the overall redistribution system implying inefficiencies

Austria's system of revenue allocation yields a substantial redistribution of income across regions designed to reduce dispersion in living standards. As depicted in Table 3.3 transfers by the federal government – based on the provisions of the FAG (see Box 3.1) – to compensate municipalities with small own tax revenues imply a strong reduction in inequality as measured by the ratios of the highest to the lowest revenue quintile. Indeed, the large number of different transfers contributing to redistribution and their complexity make it very hard to assess the degree of the compensation effects faced by individual municipalities. On average, the municipalities are estimated to lose 55% of their own tax receipts due to inter-governmental revenue redistribution. Compensation effects are substantially higher among the poor municipalities, which are recipients of equalisation transfers, totalling more than 100% in some cases.[18]

Table 3.3. **Redistributive effect of the tax sharing and transfer arrangements**

Quintiles of municipalities, by own tax revenues per capita	Own tax revenues	Revenues from taxes[1] and transfers
1. quintile	87	695
2. quintile	140	686
3. quintile	199	683
4. quintile	286	790
5. quintile	525	1 096
Ratio 5th to 1st quintile	6.03	1.58

1. Including shared taxes and own tax revenues.

Source: Schönbäck *et al.* (2003).

The redistribution mechanism should be simplified and made more transparent, reducing compensation effects on own tax revenues below 100%. The present complex equalisation system could be replaced by a system of horizontal transfers among municipalities at the level of each Land, supplemented by grants of the federal government to relatively poor states, which the states distribute to municipalities.

Issues in the allocation of spending responsibilities

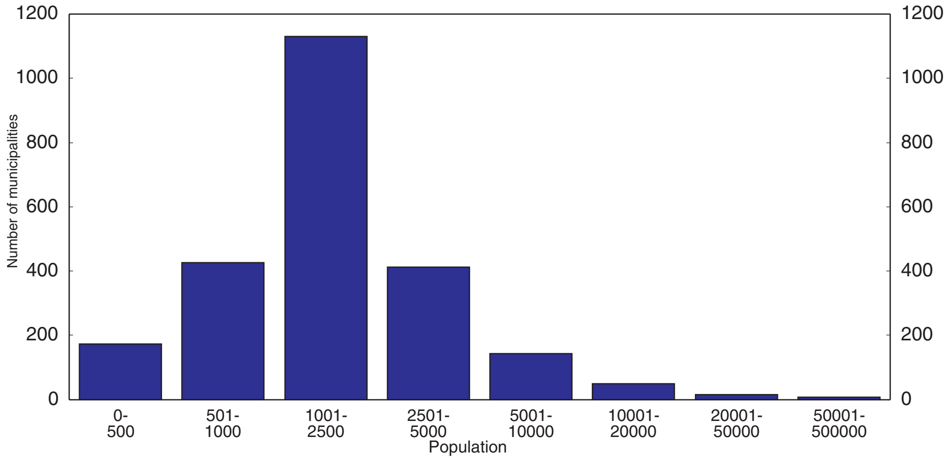
The assignment of regulatory powers by government level is an important determinant for the quality and efficient provision of public sector goods. Provision of services at sub-central levels of government can promote allocative efficiency and allows local preferences to be taken into account. However, in several respects the conditions for decentralised provision of services to be beneficial may not be met. Often spillovers across regional boundaries or the existence of scale effects suggest more centralised service provision. Moreover, without clear evidence in favour of decentralisation, regulations and income redistribution at the sub-national levels can lead to market segmentation that hampers the economy's potential to generate income and employment. For example, in Austria the states are responsible for the definition of skill profiles in certain occupations such as long-term care. This has led to a fragmentation of the labour market which reduces labour mobility and makes these occupations less attractive, ultimately restraining employment opportunities and pushing up the costs of service provision.[19] Fragmentation has thus contributed to a shortage for long-term care personnel.

On a related count, dispersed assignment of regulatory powers may increase the need for intergovernmental co-ordination. The need to reach consensus among all parties might prevent regulation from being modified quickly enough with changing circumstances. This section highlights areas where a re-assignment of spending and regulatory powers might yield substantial efficiency gains in the provision of public sector services.

Cost-sharing in service provision needs to be developed

Many municipalities in Austria are very small, with more than half of all municipalities counting less than 5 000 inhabitants (see Figure 3.3). The number of municipalities has even increased over the last 25 years. Municipal administrative costs per capita in Austria are highest in the smallest municipalities and decline as the population of municipalities increases, up to about 5 000 inhabitants[20] (see Figure 3.4). Outlays for primary schooling stand as an important example for high fixed costs, as municipalities cover the salaries of non-teaching staff as well as investment costs.[21] Administrative costs in municipalities with 5 000 inhabitants are about 40% lower than in

Figure 3.3. **Distribution of municipalities by resident population**

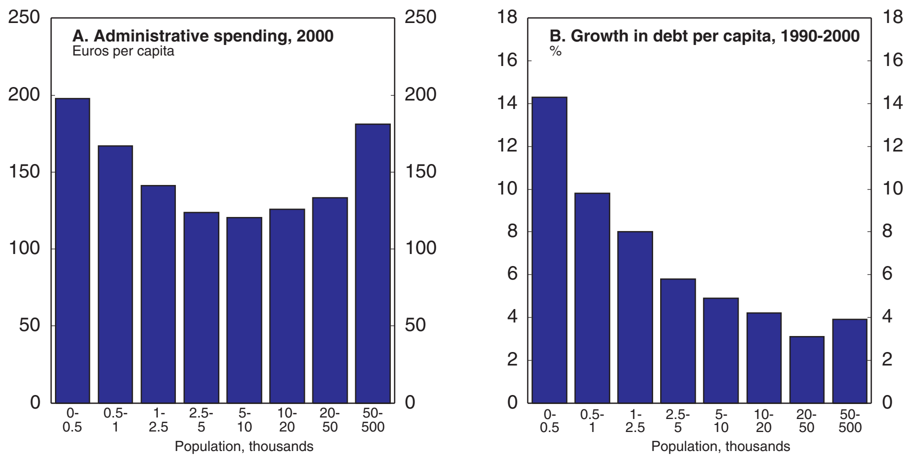


Source: Austrian Municipal Association.

the smallest municipalities. Administrative costs per capita rise again as the size of the municipality increases beyond a population of 10 000, but this reflects the tendency for larger municipalities to take on central administrative functions which also cover neighbouring municipalities. Digressiveness of costs per inhabitant over a wide range of population size originates from fixed costs and is in line with international evidence.[22] High fixed costs among small municipalities appear to have contributed to increasing indebtedness, as small municipalities have experienced a significantly bigger increase in indebtedness than larger municipalities.

The weight of fixed costs in administrative costs has further increased recently, as a result of increased use of information technology.[23] Hence, there is a need to exploit returns to scale of community size in the provision of government services to control costs

Figure 3.4. **Spending and debt by municipality size class**



Source: Statistics Austria and WIFO.

and debt accumulation and to deal with future fiscal demands originating from population ageing. From the economic perspective, merging municipalities would be a preferable option as mergers allow the benefits of increasing returns to scale to be reaped while preserving accountability to local voters. Some countries within the OECD merged local authorities to achieve cost savings. For example, Denmark is planning to reduce the number of municipalities from 271 to about 100, which will raise the general minimum size of a municipality to 20 000. Smaller municipalities which do not wish to amalgamate are obliged to enter co-operation agreements with other municipalities.[24] *Consideration should be given to merge small municipalities where this would result in cost savings.*

Widening co-operation between municipalities through the joint provision of services is a second option. Examples include the sharing of the capital stock used in the production of services, such as transport equipment, or the sharing of administrative services, such as the management of municipalities' property.[25] Joint provision among local authorities in Austria has spread in recent years, notably with respect to the provision of schooling, administration of social assistance and hospitals. There is evidence that municipalities were able to reduce the costs of schooling per inhabitant via joint provision of schooling facilities.[26] Nonetheless, legal hurdles still limit the extent to which municipalities can provide services jointly. In particular, municipalities have thus far not been able to create associations across state borders. Indeed, each state has so far determined its own rules on the organisation of associations. Agreement was reached in the constitutional convention (*Österreich Konvent*) to give more scope for the creation of associations of communities, allowing them to cover municipalities of various states. To this end, reform proposals of the constitutional convention foresee that legal rules regulating the institutional structure of associations can also be set in agreements between the federal government and the states. Such steps would mark progress towards reaping the benefits of increased co-operation. The consensual nature of agreements between the federal and state governments may however limit the extent to which any new institutional rules determined in such agreements may create room to foster such cooperation. *Legal hurdles for the creation of associations should be removed. It should be ensured that the creation of associations across the borders of states is not hampered by requirements to reach consensus between the federal government and the states.*

Experience from some OECD countries suggests, however, that the benefits of joint provision among municipalities need to be weighed against potential losses in accountability to local voters. *To increase transparency local authorities could purchase services from each other.* This requires transparent cost-accounting to be in place for prices to be determined. Such purchaser-provider relationships among municipalities are an option to the extent that it is feasible to exclude the non-providing municipality from the benefits of the service, as for example waste disposal. For all these options it is true that replacing discretionary grants from state governments by higher local autonomy to set tax rates and introduce user fees would strengthen cost-awareness among administrations.

Fragmented decision making needs to be reduced

Disaster prevention involves federal and local government

In August 2002 the most serious floods for more than 100 years touched large regions north of the Danube and caused damage of about 2% of GDP. Many areas were not prepared for a catastrophe of this kind and the magnitude of individual losses required large scale compensation efforts from public budgets. An analysis of hydrographical trends argued that the likelihood of floods increased. A thorough analysis of the 2002 flood[27] shows that scope for protection against natural disasters is limited. A number of conclusions have been drawn by the experts participating in this project, mainly emphasising passive flood prevention, measures in the catchment area, retention measures and nature-near structural protection measures. The government has also made clear that regional and local hazard zone plans have to be redesigned. This is a competence of the states, which have finished this task for about 65% of municipalities. The new plans identify not only areas at high risk, but also retention areas. Such areas are to be kept free of buildings and transport infrastructure. Past experience shows that natural disasters lead to significant budgetary costs. Measures which would contain the impact of future natural disasters would also curb such costs. *The government should therefore make sure that the measures outlined in a big interdisciplinary flood study are also implemented by the responsible lower levels of government.Conditioning part of federally provided transfers on compliance with appropriate flood risk prevention measures could enhance efforts in the right direction.*

Social assistance

Over the last decade or so labour market policies of the federal government have gradually given a larger role to measures designed to activate the unemployed. Developing this approach into a coherent strategy requires that disincentives for labour force participation and employment associated with the provision of social assistance benefits (SH) be addressed as well.

SH is subject to legislation by the states, and is financed by the states, with benefits generally administered by associations of municipalities, while unemployment insurance benefits are financed and administered by the federal labour office. SH for income support is means-tested and paid to all persons, working or not, whose income from other sources falls below a certain subsistence level. Those who are able to work are in principle obliged to accept employment to be eligible for SH benefits and have to be registered as unemployed. Recipients who refuse to co-operate might face sanctions. By the end of 2002 benefits were extended to some 91 000 persons living in households, including supported family members. The states' regulations differ with respect to eligibility conditions, the generosity of benefits and modes of organisation and financing. Local administrations have some discretion with respect to executing the law. At present the decentralisation of the social assistance system is associated with a number of shortcomings that warrant improvement.

First, statistical information on recipients of social assistance is deficient in several respects. Data delivered to the Statistics Office mainly contain information on the stocks of persons or number of episodes associated with aid within a given year, while information on the duration of support and on socio-economic characteristics of the recipients such as age, marital status and education is lacking. Hence, published information does not even allow judgment on basic characteristics such as to what extent support accrues to persons of working age or other age groups. More specifically, the lack of suitable statistical information is rendering analysis of the impact of income support and labour market policies on labour force participation and transitions into and out of employment almost impossible. In the same vein, statistics are not harmonised across states. Some states record only persons receiving permanent income support as opposed to one-off payments, and the definition of permanent support varies across states, ranging from a few months in some states to half a year or a year in others.[28] Data comparability is further reduced by the regions' discretion on whether or not social assistance is granted in terms of one-off or permanent transfers.

Second, dispersed responsibilities across sub-national governments go along with a lack of coherence between income replacement and activation policies that are likely to reduce incentives to accept employment. In principle, receipt of social assistance is conditional on the recipients' willingness to accept employment. However, eligibility standards appear to vary widely across both states and regions. Often, social assistance is granted on a one-off basis, associated with less stringent assessment of work availability, even if receipt of social assistance is not temporary. Efforts to monitor job search activities of social assistance recipients differ across jurisdictions, which may have contributed to variations in the number of SH recipients relative to the level of unemployment across sub-national jurisdictions.

Third, some share of SH recipients simultaneously receive unemployment assistance (*Notstandshilfe*, NH), which also provides means-tested income replacement for unemployed persons whose eligibility for receipt of unemployment insurance benefits is exhausted. While both types of benefits are of potentially indefinite duration, NH is extended at a fixed replacement ratio of previous earnings and is administered by the PES. The share of long-term unemployed who receive both types of benefits simultaneously still appears to be relatively small, but there is some evidence that simultaneous claims increased significantly in recent years. Since the share of part-time and a-typical employment contracts is increasing, social assistance benefits that top up income replacement provided by the PES are likely to gain further importance. Moreover, the increasing number of older workers, who are subject to a higher risk of long-term unemployment than other age groups, may raise simultaneous take-up of SH and NH in the future. The dichotomy of the two means-tested systems is likely to be associated with inefficiencies. The fact that means-tested benefits, based on different rules, are processed by two different layers of government increases administrative cost. It also raises the bureaucratic exposure of recipients of both types of benefits who need to deal with two separate administrations. Also, each layer of government only bears part of the budgetary costs of means-tested support for the unemployed, which could have a negative impact on placement efforts by both the labour office and the municipalities.

Moreover, the mode of financing SH poses disincentives for recipients to pick up employment, which appears to be inconsistent with activation policies followed by the PES. In general the states claim back SH benefits from former recipients after they have found employment and once their earnings exceed a certain threshold. This regime reflects the fact that social assistance is considered to be a source of income replacement of last resort and serves as a financing instrument at sub-national government levels. This practice leads to very high marginal effective taxation of earnings, on top of the one that is induced by the withdrawal of benefits when employment is accepted.[29]

Social assistance and unemployment assistance for recipients who are able to work should be combined into one means-tested income replacement scheme, removing the inefficiencies associated with the separate provision and financing of the two means-tested benefit systems. To overcome the lack of coherence between income replacement and activation measures, *responsibility for the financing of social assistance payments should be moved to the federal government, with the federal employment office in charge of disbursing the benefits*. This assignment of responsibilities would allow to more effectively combine benefit payment with the monitoring of job search by all unemployed. *Also, social assistance benefits should not be reclaimed by the states so as to lower the effective taxation of earnings. To reduce incentives to pick up social assistance payments in the first place means testing and work availability testing should be strict.*

Health care

While Austria enjoys the highest self-reported satisfactions levels with health care services among EU countries and nearly universal coverage of health care services, a number of fiscal federal issues arise. Responsibilities in funding and financing of health care are fragmented, particularly in the hospital sector, involving the federal government, the state governments, the municipalities and social health insurance. In addition, health care services provided by hospitals and outside the hospitals by practicing physicians have been managed separately.[30] At the same time, defined quality standards have been missing.

While the proportion of GDP devoted to health care spending in Austria – 7.7% of GDP in 2003 – appears moderate, health care costs may be underestimated by 1.8% of GDP.[31] Incomplete statistical coverage of the states' financing of hospital deficits contributes to the underestimation of healthcare spending.[32] Details of the states' financial contributions to hospitals are not made public in all states and some states have reclassified subsidies they provide to hospitals as loans, rather than transfers, in recent years.[33] Implementation of the OECD system of health accounts is expected to improve data transparency as well as the international comparability of Austrian health care spending data in the near future.

According to the social insurance association, the social health insurance finances 39% of total spending on hospital-provided services, with the states and municipalities contributing 35% and the federal government 9%.[34] Most contributions to finance services provided by the government-funded hospital sector are pooled in state-level off-budget health care agencies which manage hospital financing (*Landesgesundheitsfonds,* LGFs[35]). The funding contributions of the federal government, social health insurance and states to the LGFs are determined in an agreement between the federal government and the states. Some states, however, provide additional funds, in part outside the LGFs, mostly to cover deficits of hospitals within their territory, as the contributions to the LGFs agreed by the federal government, social health insurance and the states are subject to budget ceilings.[36] While the funds disbursed by the LGFs are distributed across hospitals according to a national system of diagnosis-related groups (DRGs), states are free to distribute their additional funds according to criteria they determine themselves. Investment spending is born separately by the hospital owners, mostly state and local governments.

While the states finance less than half of the government outlays for hospital services, the states play a dominant role in decision making for hospital services (see Box 3.3[37]), reflecting the assignment of health care policy responsibilities in the constitution. This is likely to weaken incentives to achieve cost reductions in hospital services, as state governments may have an interest in maintaining hospital capacity in their state, but only face part of the cost of doing so, which is likely to reduce incentives to cut excess capacity and take advantage of increasing returns to scale. Hospitals do not face a hard budget constraint, which dulls incentives for cost reduction stemming from the DRGs. In addition, to the extent that state-financing of deficits compensates cost differences across states, cost-saving incentives from the DRG system are weakened. Some states also split

Box 3.3. **Hospital financing: the new agencies for health**

A new system of health care agencies at the federal and state level, introduced in 2005, is in charge of implementing health care policy in both the hospital sector and the sector of practicing physicians as well as channelling financial flows to providers in both sectors for selected projects.

The new federal health care agency (*Bundesgesundheitsagentur, BGA*), is in charge of the planning of health care supply for all stationary and ambulatory services, setting up indicative budgets, setting quality and accounting standards, further development of remuneration systems and fostering health promotion. For example, the BGA is in charge of developing a proposal to reform the remuneration of services which have been generating incentives to shift patients to stationary treatments.

The new state health care agencies (*Landesgesundheitsfonds, LGFs*), implement guidelines of the *Bundesagentur* in these policy areas at the state level. The LGFs also take decisions which are binding for both the states and the social security association and take over the role of the former *Landesfonds,* pooling the financial resources from the social health insurance, the federal government and the states for hospital funding. Failure to implement guidelines of the BGA can lead to the withholding of funds to the LGF, up to 1.6% of total inpatient care spending.

The LGFs are also in charge of designing projects to improve the coordination of services between the ambulatory and the stationary sectors. 1% of the LGF's funds are earmarked to such projects ("reform pool") in 2005 and 2006, rising to 2% in 2007. The respective state and the social health insurance have to agree on these projects which are required to benefit both parties financially. Thus, the "reform pool" should, for example, compensate the social health insurance financially for the shifting of treatments from the hospital sector to practicing physicians. The social health insurance remains in charge of contracting and paying for services provided by practicing physicians, but has to follow guidelines set by the federal and state health agencies, for example, on the number of doctors who can contract services with the health funds.

The BGA and LGFs include representatives of the main players in health care service financing: health funds, the federal government and state governments, as well as representatives of the patients' and doctors' associations. While the federal government will have a majority of votes in the federal health agency, consensus is generally required. Moreover, all matters that affect hospitals require the approval of the states, while matters concerning the practicing physicians require approval of the social health insurance. In the LGFs, the respective states have a majority of votes on decisions on hospital-provided healthcare services, while the social security association has a majority concerning decisions on care outside the hospital sector.

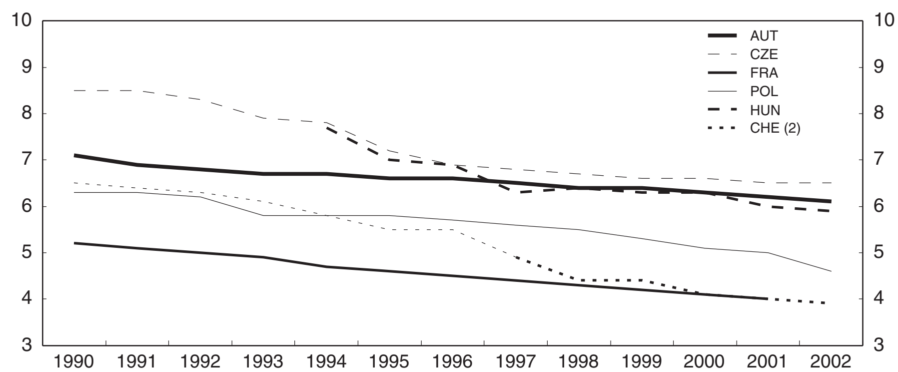
contributions needed to cover spending overruns with municipalities, reducing incentives for cost-effectiveness.[38]

While mixed responsibilities characterise financing of the hospital sector, the funding of service provision by practicing physicians is in the hands of the social security system, which sets up the contracts with doctors' associations. Remuneration systems in both sectors have thus evolved separately, generating incentives to shift services for patients treated by hospitals to practicing physicians, and *vice versa*, resulting, in some cases, in the duplication of medical interventions.[39]

While take-up of services of practicing physicians – as measured by the number of patient visits per population – is moderate in comparison to other OECD countries, the hospital caseload in Austria is the highest among all OECD countries and recorded substantial increases in the years following the introduction of DRGs in 1997.[40] The large hospital caseload is in part explained by the large acute-bed capacity interacting with the DRG system. While the introduction of DRGs in hospital financing helped to bring about a substantial fall in the duration of hospital stays, helping to slow the rapid rise in hospital care expenditure, high hospital capacity has exacerbated incentives for health care providers to maximise hospital admissions which typically result from DRG financing systems, thus undermining cost-reducing effects of DRGs.[41] Moreover, Austria has made less progress in reducing acute care beds than other countries with high hospital capacity (see Figure 3.5). Indeed the federal audit court, among others, has noted significant overcapacity, suggesting that hospital services to the tune of € 3.8 billion (about 1.7% of GDP) should be shifted from the hospital sector to practicing physicians. The social insurance association estimates that between 30 and 40 hospitals in Austria should be closed on both medical and economic grounds, as advantages from increased specialisation and increasing returns to scale of hospital size for both costs and quality of care may not be fully utilised in some cases. Moreover, hospital outputs, measured according to DRG points, could possibly be achieved at substantially less input costs, according to recent studies.[42] Fragmented decision making in health care financing and spending responsibilities has thus contributed to the fact that efficiency reserves in the hospital sector have not been fully exploited and that the allocation of service provision across the various health care providers leaves room for improvement.

Figure 3.5. **Hospital capacity**

Acute care beds per 1 000 population[1]



1. Refer to source for details of concept variations across countries.
2. Beak 1996/1997 due to implementation of a new system of hospital statistics.

Source: OECD Health Data 2004, 3rd edition.

To raise efficiency in health care provision, the government has launched an initiative to overcome fragmentation in health care financing and spending. In particular, the LGFs, created in 2005 on the basis of an agreement between the federal government and the states, bring together the government institutions involved in health care financing and have been given the task to co-ordinate health care service provision across hospitals and practicing physicians (see Box 3.3). The assignment of responsibilities to the different government institutions and the funding has largely remained unchanged, however.

The new LGFs can issue guidelines which are binding for both the social health insurance and the states, marking progress in bringing together disparate decision-making powers on hospital-provided health care services and services provided by practicing physicians. However, the approval of each state is still required for any decisions regarding the hospitals in its territory, while states continue to finance only part of the outlays for hospital-provided services. In addition, the states have been given some share of decision-making on the provision of services by practicing physicians, which they do not finance, which adds to split decision-making and financing responsibilities on health service provision. Consensual decision-making among the various institutions involved in the health care agency system may slow progress in health care reform. New earmarked funds for fostering coordination between the ambulatory sector and the stationary sector are unlikely to be a substitute for an efficient assignment of responsibilities.

Sub-national levels of government should not be able to block hospital supply planning decisions unless they are fully in charge of paying for hospital-provided health care services. Indeed, it should be possible to close hospitals which under-perform quality standards. More fundamental reform should aim at assigning financing and spending responsibilities for both the hospitals and practicing physicians to one government institution, giving it the role of purchaser of health services. To this end the health care agencies could be developed further to purchasers of all health care services, including services provided by practicing physicians. The health care agencies would have to be placed in the responsibility of only one level of government which should also be in charge of financing the agencies in full. Economies of scale in the hospital sector, in particular, suggest that the federal government level would be best suited for this task. Assignment to the states may be feasible if the agencies can purchase hospital services across the borders of the states, but would also require that the states raise substantial own tax revenues to ensure cost-effectiveness. An alternative option for reform would be to assign financing and spending responsibilities for both health care sectors to social health insurance.

Programme management in environmentally sensitive areas can be improved

Austria is continuing to provide considerable resources for improving sustainable development. With 2.4% of GDP pollution abatement and control costs are the highest among the OECD member countries providing such data.[43] Performance is in general good, however it is not always clear how this relates to spending, suggesting that there is scope to improve the efficiency of resource allocation for programmes aiming at supporting sustainable development.

In April 2002 the Austrian Federal Government adopted a National Strategy for Sustainable Development identifying 20 key objectives covering social, economic and environmental dimensions of sustainable development. Implementation is based on annual work programmes. Progress is monitored along 48 indicators and published in annual reports. An external evaluation is planned. This framework promises to deliver a high degree of policy integration on the level of individual programmes, although coverage is not yet complete (Box 3.4) and prioritisation and cost efficiency is not guaranteed. While the wealth of information provided in the progress and indicator reports is commendable it is not possible to link progress to individual programmes or the interaction of programmes. While the data underlying the indicators have in general been compiled only since 2003, the indicators are already used for international comparisons to some extent.

Box 3.4. **The Semmering Tunnel: An example for missing policy integration across different levels of government**

A headline example of missing policy integration of different sustainable development goals is the decade-long conflict over a tunnel, which would shorten rail-travel time between Vienna and the southern states of Carinthia and Styria by about half an hour. The project volume is about € 1 billion, of which about € 100 million have been spent already. The government of Lower Austria opposes the project because of local nature protection concerns while the governments of Styria and Carinthia together with the federal government support the project for economic and transport policy reasons including enhanced opportunities to shift transport volume towards the less environmentally damaging rail transport. The current railtrack over the Semmering is not fit for big containers and rapid trains. Hence transporting goods and persons between Vienna and the southern states of Carinthia and Styria mainly runs on roads. The basic issue is that a supra-regional project can be blocked on the grounds of local concerns, which obviously are not consolidated on a higher level.

The project made multiple preparations necessary, was started, but is now on hold because of a natural protection decree of the state government of Lower Austria, rejecting the project:

First the rail track between Vienna and the Italian border was declared a high performance track by a decree of the federal government.

Second a law concerning the financing of the tunnel project passed the federal parliament.

Third a decree of the minister of transport charged the high performance rail track company (*HL-AG*) with the realisation of the project.

1989 Start of planning phase.

1990 Positive assessment of the environmental impact of the project.

1991 Choice of the track by decree (out of 19 alternatives).

1993 Economic analysis of the project by an external consultant (*Prognos AG*) demonstrates the project to be preferable relative to alternatives (renovation of the 150 year old track, construction of a new track without a tunnel).

1994 Final permission by the highest rail track authority after hearing all concerned federal and local government authorities and after consideration of all public (including environmental) interests.

1994 Start of construction works.

1994 Start of the natural protection proceedings under the jurisdiction of the state of Lower Austria.

1999 The Austrian Constitutional Court (*Verfassungsgerichtshof*) confirms that the competence in issues of natural protection is with the states – even concerning rail track construction, which is a federal competence – but that the states have to consider supra-regional matters when issuing a decree in this area.

2000 Stop of construction works after a negative natural protection decree from the government of Lower Austria.

2001 Second negative nature protection decree concerning the project.

2003 The federal parliament passes a motion to encourage the federal government to implement its decisions concerning the construction of the Semmering Tunnel.

2004 The high administration court (*Verwaltungsgerichtshof*) rejects the negative natural protection decree because of an excessive interpretation of competences. The state of Lower Austria is asked to repeat the natural protection examination.

2004 The government of Lower Austria solicits new expertise, which argues that 12 out of 14 swamps would be endangered if the construction of the tunnel were continued.

No attempt is made yet to benchmark best practice or programme targets. No mechanism is available to deal with conflict cases, which could help prevent lengthy court proceedings. *The annual implementation reports should contain an explicit statement about the main indicator changes to be achieved by individual programmes. The terms of reference for the evaluation of the overall strategy should include an explicit request to assess the cost effectiveness of individual programmes. Future prioritisation of programmes should take cost effectiveness explicitly into account. A mechanism should be put in place within the National Strategy for Sustainable Development which would allow the reconciliation of the different dimensions of sustainable development before the start of supra-regional projects. Indicator reports should include benchmarking information, which would allow a comparison of how Austria fares with respect to programme efforts and international best practice performance.*

Decisions about the right policy mix in many environmentally sensitive areas involve complex cost considerations and multiple objectives. Fragmentation in this respect may occur because decision makers are only aware of parts of this complex set of constraints, costs and objectives. Developing appropriate support tools may involve considerable fixed costs and might not be worthwhile from the point of view of single actors. For example, regarding waste management, this might be true for a single household management waste unit on the municipal or regional level. In an effort to narrow this gap the Federal Ministry of Agriculture Forestry, Environment and Water Management has developed a management tool (see Box 3.5), which is offered free of charge to municipalities and public waste management units. This instrument is already applied in one state (Styria). It is important to quantify the impact of this tool on environmental efficiency in order to increase compliance with this and other measures, which rely on voluntary co-operation.

Box 3.5. **An example for improving cost awareness:** ***The Austrian Waste Management Tool***

The development of this instrument has been commissioned by the Federal Ministry of Agriculture, Forestry, Environment and Water Management and was elaborated from 1996 to 2004 as a decision support tool for the judgment of different measures in the field of management of municipal waste in Austria. Based on various processes and mass fluxes, the computer model describes environmental effects as well as business costs of specific waste collection and treatment options. Using the scenario method, different measures can be compared concerning their current and future economic and ecologic effects.

Application of the tool can be expected to increase cost consciousness and to provide a basis for decision-making taking into account a more complete information set. In particular, the tool allows to calculate:

- costs of legal measures;
- costs *versus* ecologic effects of different measures;
- the cost-minimising policy mix to reach ecologic goals;
- the most cost effective implementation of legal measures.

The waste management tool was developed and designed to be used on the basis of standard software. With the input of expert knowledge, the computer model can be adapted for other regions.

This computer model will also be used for the assessment of policy measures.

Source: The Federal Ministry of Agriculture, Forestry, Environment and Water Management (III/6).

Towards higher accountability of the budgeting process

Linking fiscal consolidation to public sector reform requires a rigorous approach to evaluating and prioritising public sector spending projects. Both budgetary autonomy of the different layers of government in the federation and the existence of an elaborate system of fiscal linkages between them require efficient budgetary processes and inter-governmental co-ordination. This necessity is reinforced by the provisions of the Maastricht treaty, relating to the general government, to meet the 3% deficit limit and balance the budget in the medium term. In 2001 the federal government, the states and the municipalities agreed on the first Domestic Stability Pact designed to support implementation of Austria's fiscal consolidation targets (Box 3.6). While this marked progress in institutional reform, recent experience indicates that meeting the targets of the Domestic Stability Pact have contributed to budgeting practices which blur spending commitments falling due in the future, highlighting the need for reforms of the budgeting framework.

Improving the budgeting framework at all levels of government

On several counts there is significant scope to improve the budgeting framework at the different levels of government as a fundamental tool for fiscal decision making.

First, since 1996 the federal government has presented "double budgets" to Parliament, each covering two years. Parliament decides over appropriations for the first of the two consecutive years, while the second year is added so as to improve the continuity of the budgetary process. While this marks progress over single-year budgeting there is no medium-term budget framework available that accounts for envisaged future developments of spending and revenue items. Within the present setting, a number of future spending commitments remain unrecorded such as the states' future pension obligations for public sector employees that can be expected to weigh heavily in the states' future spending. This substantially complicates policy planning and evaluation. Moreover, future inter-governmental negotiations on revenue sharing and deficit targets may be confronted with demands by the states to fund obligations for which insufficient provisions were made in the past. This risks putting fiscal sustainability under stress and could lead to agreements between the parties involved that jeopardise the quality of general government spending.

Second, the budgeting process would need to be better geared toward programme orientation. As has been highlighted in previous *EconomicSurveys,* progress has been made in introducing instruments that enhance performance orientation of the federal administration. In particular, for some federal administrative units the fungibility of funds was raised, creating incentives to attain budgetary outcomes that are better than targeted.[44] However, the budgeting system is still lacking focus on policy outcomes. The federal budget provides a very detailed description of appropriations that are input based, and this is true as well for the budgets of the states. Correspondingly, legislation focuses on parliamentary control of inputs as opposed to budgetary appropriations on a programme or activity basis. In contrast, since the 1980s, many OECD countries, such as the United Kingdom, northern European countries, New Zealand and the United States, have relaxed input controls and reoriented budget systems to focus on results. In exchange for more flexibility in budget management, in this approach decentralised managers now have greater responsibility for achieving results from a relatively small number of government

Box 3.6. **Domestic Stability Pact**

In the Domestic Stability Pact the federal government, the states and the municipalities agree on balance targets for the three levels of government as well as on sanctions in case of a party's non-compliance with the target. A new agreement was negotiated for the period 2005-08. The federal government is subject to a deficit ceiling of 2.4% in 2005, declining to 1.2% in 2008. The states have to reach a surplus of 0.6% of GDP in 2005 and 2006, rising to 0.7% of GDP in 2007 and 2008. Specific surplus targets are attributed to each of the 9 states, largely according to population, with less affluent states facing a somewhat smaller surplus requirement. Municipalities have to keep a balanced budget throughout the 4-year period. The balanced budget requirement does not however apply to each individual municipality. Instead, the target is applied to the municipalities within each state on aggregate. Any sanctions for exceeding deficit requirements would also be born by all municipalities in the state.*

The budget balance requirements are determined with respect to the actual balance, rather than with respect to a measure of structural balance, although the stability pact provides some flexibility, as the federal government, state governments and municipalities are allowed temporary underruns of 0.25%, 0.15% and 0.1% of GDP, respectively, on aggregate. Such underruns have to be made up in other years such that the target is reached on average. However, such underruns are only permitted in 2007 and 2008, not in 2005 and 2006. The sanction mechanism also provides an escape clause for cyclical deficits. Except to compensate temporary balance underruns, surpluses are not transferable to future years, but can be transferred to other jurisdictions through written declaration, in which case they do not count towards the average deficit requirement of the transferring jurisdiction.

Classification criteria to calculate budget balances for the purposes of the Domestic Stability Pact are different from those which apply to the national accounts in 2005 and 2006. In particular, some sales of government real estate, which since 2001 have not counted towards deficit reduction in the national accounts, will continue to improve budget balances for the purposes of the Austrian Domestic Stability Pact in these two years.

Governments that fail to reach the target on average over the period of the stability pact would have to pay a fixed and variable fine totalling 8% of the absolute amount of the targeted balance and 15% of the shortfall, respectively, up to a ceiling (thus, the municipalities are not liable to a fixed fine, as they are required to generate neither a surplus nor a deficit). Sanctions arising from non-compliance with the 3% deficit ceiling of the Maastricht treaty are also distributed across domestic governments. In each case, however, application of sanctions depends on the unanimous decision of a commission involving the federal government on the one hand, and the states or the municipalities on the other hand. Also, the agreement specifies circumstances under which targeted government balances need to be renegotiated – such as a significant economic slow-down – and no sanctions apply. There is no obligation to publish budget balances according to the Domestic Stability Pact. Similarly, transfers of surpluses between governments are not published.

In order to adhere to the rules of the Domestic Stability Pact, the states, in particular, took measures which reduced their measured deficits which do not improve the level of future spending obligations of the states. Net lending of states to government-funded hospitals amounts to about 0.3% of GDP per year. In particular, transfers of state governments to public-sector financed hospitals were replaced by loans to hospitals. Moreover, the obligations of the stability pact induced the states to provide housing subsidies as loans at interest rates below market values, rather than direct grants.

* For more details on the Austrian Domestic Stability Pact, see Diabalek *et al.* (2005).

OECD ECONOMIC SURVEYS: AUSTRIA – ISBN 92-64-01104-8 – © OECD 2005

programmes. Accordingly, budget laws have been changed to simplify the structures of budget appropriations approved by parliament. For example, in France full introduction of a programme-oriented budget is scheduled for 2006, with only about 150 programmes ("budget lines") to be approved by Parliament.

Third, Austrian legislation requires that budgeting is based on cash rather than accruals. By contrast, accrual accounting is supplementary to an outcome-based budgeting approach in that it makes the full cost of government activities more transparent, thereby improving decision making by using this enhanced information.

Fourth, while major accounting principles are valid for all layers of government, some accounting rules are not completely harmonised between the different governments. In particular, transactions between the states and the municipalities are often opaque. Transactions may be recorded inconsistently by paying and receiving jurisdictions. Similarly, identification of inter-governmental transfers between the states and the municipalities is often not possible.[45]

Fifth, basing spending and revenue decisions on *ex ante* and *ex post* evaluations of benefits and costs requires that the policy relevant information is available at all levels of government.[46] An important benefit of decentralised provision of government services is that it creates the potential to benchmark performance of states and municipalities with the performance of their peers, introducing a degree of competition among states and municipalities that encourages innovative policies and the adoption of best practice. Indeed, transparency and benchmarking has helped increase efficiency gains from devolved provision of government services, for example, in Denmark and Norway. In Austria, transparency of the federal administration has increased in recent years as ministries present themselves with their core and non-core services in annual performance reports, which also contain summary indicators on service provisions. However, systematic evaluation of the costs and benefits of policy programmes is widely lacking and important information is often not available at the different levels of government. In particular, resources utilised for the production of municipal services, notably employment, appears to be insufficiently accounted for. On the level of the general government, data on employment are often not consistent with corresponding data on personnel expenditure. Transparency is also lacking in several other areas, such as the administration of social assistance, state hospitals and the civil service pension liabilities of the states.[47] In some cases, inadequate information on key features of budgetary spin-offs have also prevented appropriate evaluations of their economic performance. Indeed, as considered in the 2001 *Economic Survey on Austria*, there is evidence that spin-offs of entities from government budgets did not always yield the desired results.

Sixth, extra-budgetary funds segregate the information base for policy makers, widening the gap between a comprehensive budgeting approach for the general government as it underlies the Maastricht treaty and administrative accounting practices. For example, a surplus is created within the fund if the fund's earmarked revenues exceed the fund's spending, whereas the "regular" administrative budget of the government remains unaffected. Similarly, an increase in earmarked spending financed out of the fund's revenues would not be reflected in increases in the government deficit in administrative terms. This might add to the bias in favour of higher spending (see above).

Hence, facilitating the setting of spending priorities by policy makers suggests fundamental revisions to the budgeting framework at all levels of government. A medium-term budget framework *should be introduced at all levels of government in the same systematic way as in the annual budgets and allowing accounting of envisaged budgetary appropriations to be detailed enough to make the causes for spending and revenue pressures transparent. Long-term fiscal pressures should also be made transparent. Moreover, the input-oriented budget items at the levels of the federal government and the states and municipalities should be adapted so as to introduce output-oriented budgeting. This would entail basing budgetary appropriations around programmes, within a simplified budgetary framework, associated with the requirement to supply an analysis of the costs and the benefits of such programmes to parliaments. Within this setting, ministries would be held responsible for the programme management. Moreover, the information base for cost and benefit analysis of spending and revenue programmes needs to be improved, and the accounting framework should be fully harmonised across government levels.*

Re-enforcing inter-governmental co-operation

The Domestic Stability Pact would be re-enforced by adoption of a medium-term consolidation rule at each level of government. Experience within the OECD indicates that in cyclical downswings a rule requiring budgets to be balanced might not be obeyed, which in turn can impair the credibility of the consolidation strategy. More appropriate would be a rule – as adopted in Switzerland by some Cantons and legislated for the federation – requiring the budgets to be balanced over the cycle.

The more often revenue allocations are negotiated between the different administrations the higher the risks are that agreed-upon deficit caps are not considered effectively binding. Hence, relatively frequent re-negotiation of the Fiscal Equalisation Law, which is currently renewed every 4 years (see Box 3.2 above), is likely to weaken inter-temporal budget constraints to sub-national governments' spending decisions, easing incentives for budgetary consolidation. Transaction costs also rise with the frequency of negotiations. *Hence, revenue allocations to the different levels of government should be fixed for a longer period than four years.* This would not need to imply a lower degree of flexibility in financial endowments if the revenue raising power of the sub-central governments were increased.

In the discussions on constitutional reform in Austria, proposals have emerged to give the states powers to block federal fiscal legislation in the Bundesrat, the second chamber of parliament, on matters that affect them financially. Such powers for the states may however make it difficult to find the necessary political consensus for reforms, as state governments might condition their approval to federal fiscal legislation on concessions in federal legislation that does not require the approval of the Bundesrat. Instead, constitutional reform should disentangle decision-making powers of the different layers of government. In Germany, whose federal structure resembles the Austrian one in several respects, attempts are being made to scale down the blocking power of the states in the second chamber of parliament. Indeed, these blocking powers have considerably slowed the reform process and reduced its transparency.[48]

Instead, there is scope to improve the system of inter-governmental co-ordination in another important respect. A consultation mechanism was already introduced in 1998 in order to deal with cost spillovers of legislation originating from the federal or the state level on other levels of government, compelling the legislating level of government to reimburse other levels of governments for such cost spillovers. Any local, state or the federal government can invoke the mechanism if costs it has to bear rise as a result of legislative action by another level of government. The consultation mechanism has improved incentives to take administrative costs into account more fully when introducing new legislation, and has already been used. However, the mechanism is asymmetric in that it does not generally allow spillovers of cost saving legislation to be internalised. In particular, if a government introduces legislation that reduces administrative costs to other levels of government it cannot, in general, demand reimbursement from the levels of governments which benefit from the cost reduction.[49] Thus, while the consultation mechanism creates incentives to avoid cost-generating legislation, it does not fully exploit incentives for cost-saving legislation. In addition, while the governments involved in negotiations on cost reimbursement can agree on lump-sum payments to offset cost spillovers, court settlements, which comes about if parties fail to agree, result in reimbursements of *ex post* costs. However, cost reimbursements based on historic costs may reduce incentives to minimise costs in the government receiving the compensation. *The consultation mechanism should therefore be amended in a way that takes into consideration both positive and negative cost externalities, allowing governments to invoke the mechanism when they pass legislation generating cost savings for other governments. Compensating payments should be made on an ex-ante basis, rather than on the basis of ex post cost.*

Notes

1. Thöni (2002).
2. OECD (1997).
3. Figures as of end-2002 from Staatsschuldenausschuss (2004).
4. Convergence of GDP per capita among districts and states was found to be on average 2% per year by Hofer-Wörgötter (1997), but seems to have accelerated more recently.
5. See Schratzenstaller (2004).
6. Lehner (2003), data from 2000. The share is likely to have diminished further after 2000.
7. Excluding Vienna, which is both a municipality and a state.
8. Bröthaler *et al.* (2002).
9. Real estate values for tax purposes have been uniformly increased by 35% following the last valuation exercise in 1973.
10. Joumard and Kongsrud (2003).
11. Schneider (2002).
12. See Joumard and Kongsrud (2004). Limits on sub-national income tax-setting powers are also imposed in Spain and Mexico, while Denmark and Sweden experienced upward drifting personal income tax rates set by sub-national governments.
13. For the municipalities this has been estimated by Bröthaler *et al.* (2002).
14. Matzinger (2002).
15. Schönbäck *et al.* (2004).
16. Beginning in 2001 states were also allowed to make free use of repayments received from subsidised loans granted under the scheme.
17. Matzinger (2002).
18. See Schneider (2002).
19. WKÖ (2004).
20. Lehner (2003).
21. Lehner (2003).
22. Joumard and Kongsrud (2003).

23. Lehner (2003).
24. OECD (2005).
25. Lehner (2003).
26. Lehner (2003).
27. Analysis of flood events 2002 – FloodRisk, interdisciplinary project carried out at the Ministry of Agriculture, Forestry, Environment and Water Management with more than 150 participating experts. The project also benefited from co-operation with Swiss government institutions.
28. See Bock-Schappelwein (2004).
29. Statistical information on the extent to which the states re-claims benefits is incomplete. However, the ratio between SH spending and revenues on account of the SH system varies substantially between states –ranging from 110% to 3% in 2001 – which might reflect to some extent differences in regress policies. For example, the state of Vienna does not reclaim SH benefits. However, the variation in the revenues ratio might be overstated as reporting across states is uneven. Some states do not report full revenues to Statistics Austria, and in some cases revenue items are included which are not strictly associated with SH granted to households. See Bock-Schappelwein (2004).
30. Streissler (2004).
31. See *e.g.* Hofmarcher *et al.* (2004).
32. Rechnungshof (2002). In particular, state and municipality funding to cover deficits of hospitals are not recorded as health spending. In addition long-term care for the elderly which is recorded as health spending in other OECD countries is not recorded as health spending in Austria.
33. Streissler (2004). OeNB (2004). Reclassification of subsidies as loans has resulted in a reduction of general government spending and the general government's deficit, as measured in the national accounts, by about 0.3 % of GDP.
34. Including funding provided by hospital owners, which in most cases are the *States* and the municipalities. Patients out-of-pocket spending and private health insurance contribute 5%, social assistance 1% of revenues.
35. The *Landesgesundheitsfonds* replaced the *Landesfonds* in 2004. See Box 3.3 for details.
36. The funds of the federal government and social security are distributed across hospitals according to a DRG system.
37. The states also played a predominant role in the *Landesfonds* which were in charge of hospital funding before introduction of the LGFs.
38. Hofmarcher and Riedel (2001).
39. See *e.g.* Streissler (2004).
40. . Austrian hospital discharge statistics include same-day discharges since 1996, which is not the case in most OECD countries, making Austrian hospital discharges appear larger relative to other countries. However, those OECD countries which also include same-day separations in discharage statistics – Hungary, Luxembourg, New Zealand and the Unites States – have substantially lower discharges than Austria. See OECD (2003b).
41. Docteur and Oxley (2003).
42. Hofmarcher *et al.* (2005), Hofmarcher *et al.* (2002).
43. See the 2003 *OECD Environmental Performance Review for Austria*.
44. See OECD (2003).
45. Österreich-Konvent (2004).
46. See OECD (2001).
47. . Staatsschuldenausschuss (2003).
48. OECD (2004b).
49. Measures that reduce administrative costs at other levels of government are only taken into account if reimbursement of a cost-increasing measure is being negotiated, in which case the former are deducted from the latter. See Matzinger (2002).

Bibliography

Arbeiterkammer (2004), Gesundheitsagenturen – Verbessserung des Schnittstellenmanagements im Gesundheitswesen? *Gesundheit and Soziales info*, No. 3, April.

Aufgabenkommission (2001), Bericht der Aufgabenkommission, *mimeo.*

Bock-Schappelwein, J. (2004), *Arbeitslosigkeit und offene Sozialhilfe in Österreich – Eine quantitative Analyse*, Österreichisches Institut für Wirtschaftsforschung, Vienna.

Bröthaler, J., L. Sieber, W. Schönbäck, A. Maimer and H. Bauer (2002), *Aufgabneorientierte Gemeindefinanzierung in Österreich*. Vienna, New York: Springer.

Diebalek, L., W. Koehler-Toeglhofer, D. Prammer (2005), "The Austrian Stability Pact 2001-2004 – Design, Objectives and Effectiveness", forthcoming in: *Wirtschaftspolitische Blätter 2/2005*.

Docteur, E. and H. Oxley (2003), "Health-care Systems: Lessons from the Reform Experience", *OECD Economics Department Working Papers*, No. 374, OECD, Paris.

Grossmann, B. and E. Hauth (2004), Entwicklung der öffentlichen Beschäftigung in Österreich. Projektstudie im Auftrag des Staatsschuldenausschusses, Vienna, *mimeo www.staatsschuldenausschuss.at/html/download/Studie_Beschaeftigung.pdf.*

Hofmarcher, M. M., I. Paterson and M. Riedel (2002), "Measuring Hospital Efficiency in Austria – A DEA Approach", *Health Care Management Science*, No. 5, pp. 7-14.

Hofmarcher, M. M., C. Lietz and A. Schnabl (2005), "Inefficiency in Austrian Inpatient Care: An Attempt to Identify Ailing Providers", Department of Economics and Finance, HIS Institute of Advances Studies, Vienna.

Hofmarcher, M. M. and M. Riedel (2001), Gesundheitsausgaben in der EU: Ohne Privat kein Staat. Schwerpunktthema: Das Österreichische Krankenanstaltenwesen-eines oder neun Systeme? *Health System Watch*, Spring.

Hofmarcher, M. M., M. Riedel and G. Röhrling (2004), "Health Expenditure in the EU: Convergence by Enlargement? Focus: Health Remains Precious to Us – So What?"*Health System Watch,* I/Spring, *www.ihs.ac.at/departments/fin/HealthEcon/watch/hsw04_le.pdf(20/11/04).*

Hofmarcher, M. M. and G. Röhrling (2003), Gesundheitsausgaben in der EU: DieVergleichbarkeit kränkelt. Vorausschätzung der Gesundheitsausgaben in Österreich, *Health System Watch,* Vol. I, Spring.

Joumard, I. and P. Kongsrud (2003), "Fiscal Relations Across Government Levels", *OECD Economics Department Working Papers*, No. 375, OECD, Paris.

Lehner, G. (2003), *Aufgabenorienterter Finanzausgleich,* Österreichisches Institut für Wirtschaftsforschung, Vienna.

Matzinger, A. (2002), Finanzausgleich, in: G. Steger (ed.), *Öffentliche Haushalte in Österreich*, Verlag Österreich, Vienna, pp. 51-95.

McLure, C. E. (2000), Tax Assignment and Sub-national Fiscal Autonomy, *International Bureau of Fiscal Documentation Bulletin*, December.

Oates, W. E. (1999), "An Essay on Fiscal Federalism", *Journal of Economic Literature*, Vol. 37.

OECD (1997), Managing Across Levels of Government, Directorate: GOV, OECD, Paris.

OECD (2001), *OECD Economic Surveys: Austria*, Vol. 2001/3, OECD, Paris.

OECD (2003a), *OECDEconomic Surveys: Austria*, Vol. 2003/16, OECD, Paris.

OECD (2003b), *Health at a Glance,* OECD, Paris.

OECD (2004a), *OECD Economic Surveys: Euro Area*, Vol. 2004/5, OECD, Paris.

OECD (2004b), *OECD Economic Surveys: Germany*, Vol. 2004/12, OECD, Paris.

OECD (2005), *OECD Economic Surveys: Spain*, Vol. 2005/6, OECD, Paris.

Österreich-Konvent (2004), Anlage 10 – Die Gemeinden im Netz der intergovernmentalen Transferbeziehungen.

Rechnungshof (2002), *Tätigkeitsbericht des Rechnungshofes, Vorarlberg, Verwaltungsjahr 2002*

Schneider, M. (2002), "Local Fiscal Equalisation Based on Fiscal Capacity: The Case of Austria", *Fiscal Studies*, Vol. 23, No. 1.

Schönbäck, W., J. Bauer and J. Bröthaler (2004), *Die Gemeinden im Netz der intragovernmentalen Transferbeziehungen*, *Endbericht*.

Schratzenstaller, M. (2004), *Bundesvoranschlag 2005: Hohes Defizit durch Steuerreform und steigende Transferausgaben*, Wifo Monatsberichte 11/2004.

Schratzenstaller, M. (2005), Neuer Finanzausgleich und Stabilitätspakt – keine grundlegenden Änderungen. *WifoMonatsberichte* 1/2005.

Staatsschuldenausschuss (2004) *Bericht über die öffentlichen Finanzen* 2003, Vienna.

Streissler, A. (2004), Das österreichische Gesundheitswesen. Eine ökonomische Analyse aus interessenpolitscher Sicht. *Materialien zu Wirtschaft und Gesellschaft,* No. 89, August.

Thöni, E. (2002), Der Stellenwert des Finanzausgleichs: Reformdruck, Problemdarstellung und internationale Perspektiven, in: B. Rossman (ed.) *Finanzausgleich- Herausforderungen und Reformperspektiven,* pp. 9-21. *Wirtschaftswissenschaftliche Tagungen der AK Wien*. Vienna.

WKÖ (2004), Gründungsoffensive "Gesundheitsberufe", mimeo.

ISBN 92-64-01104-8
OECD Economic Surveys: Austria

Chapter 4

Fostering productivity growth and innovation

This chapter proposes reforms to raise productivity growth in Austria. The contribution of business start-ups to productivity growth could be raised, through reducing administrative burdens and improving the framework conditions for the provision of risk capital, notably venture capital. Steps should also be taken to raise competition in product markets, improving competition law enforcement, liberalising regulation of the services of the liberal professions and exposing incumbents in the electricity and telecoms industries to more competition. Obstacles to structural change originating in labour market regulation should be removed. Reforms in secondary and tertiary education can improve the skills base of the economy, strengthening its capacity to reap the productivity potential of new technologies, such as ICT. While R&D spending has increased in recent years, government support for R&D can become more effective.

Like many other countries Austria will have to rely more on productivity growth as a source of economic growth. Furthermore, changes in the global environment and Austria's relatively advanced income position increase the need for finding new ways to foster the development of high value added activities. While Austria is one of the countries with the highest per capita GDP in the OECD, innovation activity is only about average, despite recent improvement, and the supply of highly skilled workers educated at the tertiary level is low. Moreover, further regulatory reform could improve productivity growth, notably in the services. This chapter deals with innovation policy regulatory framework conditions in the labour, product and capital markets, as well as with secondary and tertiary education, laying out how reforms in these policy areas can contribute to foster productivity growth.

Innovation activity is catching up

Key performance indicators show that innovation performance in Austria has improved over the last 15 years. Overall R&D spending and patenting rose more strongly than the OECD average. While a decade ago Austrian R&D spending in terms of GDP fell significantly short of the levels in most other OECD countries it is now around the OECD average (Figure 4.1). R&D spending in foreign owned firms accounts for most of the catch up, especially since the mid-1990s, which is largely related to take-overs of Austrian firms by foreign enterprises.[1] The widening of Austria's export markets, in the wake of both the county's integration into the European Union and the opening of Eastern Europe, played an important role in this process. Indeed, there is evidence from firm-level data that Austrian enterprises operating in external markets are far more likely to engage in R&D activities than others.[2] Available evidence suggests that total factor productivity in Austria has not accelerated since the early 1990s, which may, however, reflect time lags associated with the impact of innovation activity on total factor productivity.[3]

Evidence from the European Innovation Survey places Austria above average of the EU-15 countries with respect to the proportion of innovating firms. However, sales of new or improved products and the level of innovation spending is below average if related to the firms' total turnover.[4] Relative to other countries, both innovation spending and the share of new and improved products in total turnover have been stronger in the manufacturing industries than in the service industries.[5]

Patenting is relatively strong in sectors which traditionally have a high share in exports and domestic value added, such as construction goods or machinery. Activity is largely characterised by cumulative improvement of existing products in established firms, with a relatively large proportion of small and medium-sized firms participating in the innovation process. By contrast, a comparatively small proportion of innovation activity is dedicated to R&D-intensive new technologies, with Austria being a net importer of R&D-intensive goods. The proportion of patents in information and communication technology (ICT, see Box 4.2) as well as in biotechnology is below the OECD average. This is reflected in a relatively small contribution of R&D-intensive industries to manufacturing value-added.

 OECD ECONOMIC SURVEYS: AUSTRIA – ISBN 92-64-01104-8 – © OECD 2005

Box 4.1. **Policy assessment on productivity and innovation**

Framework conditions for start-ups should be improved further

- Administrative costs of setting up enterprises should be further reduced. Some taxes raising insignificant revenues should be simplified or abolished so as to reduce the fixed costs of newly founded enterprises.
- The range of trades requiring certificates of qualification to set up a business should be further narrowed. Certification of qualification should be associated with employees rather than owners. For services in the liberal professions compulsory chamber membership should be dropped.

Competition in product markets should be further encouraged

- The institutional set-up of general competition law and enforcement should be simplified, giving more decision powers to the Federal Competition Authority (FCA). Investigative powers of the FCA should be strengthened. Consideration should be given to introduction of criminal charges for hard-core cartels. Consideration should be given to removing the role of the social partners in appointments to the Competition Court and the Competition Commission. The activities of the FCA should become more proactive, notably via more frequent investigations of product market segments. Application of the law to protect fair competition among retailers and their suppliers (*Nahversorgungsgesetz*) should be limited to cases of suspected abuse of market power.
- In professional services, some existing provisions should be discontinued or reformed so as to minimise their distorting effect on competition. Recommended fee schedules, issued by the relevant associations should be prohibited and compulsory chamber membership in the liberal professions should be dropped. Exclusive rights granted to liberal professions should be narrowed. Regulation on shopping hours should be eased.
- Telekom Austria should be fully privatised and the regulator should have effective means to impose a decision with immediate effect if this is necessary to ensure the effectiveness of a decision.
- In the electricity sector, network access prices should be reduced and price transparency in retailing ensured. The constitutional requirement of majority government shareholdings should be abolished.
- The states are encouraged to use the opportunities of the federal framework legislation to liberalise shop opening hours more fully.

The flexibility of the labour market should be raised

- Consideration should be given to linking employers' unemployment insurance contributions to their dismissal record such that firms with lower dismissal rates contribute less (experience rating). There is a need for better activation – also by encouraging the use of flexible working time models – and measures to combat abuse of unemployment benefits by firms laying off workers temporarily.
- Part of childcare benefits should be provided as childcare vouchers, partly replacing current cash benefits. Reductions in childcare benefits depending on the income of the beneficiary should be phased. The tax credit for single-earner households should be abolished.
- Easing immigration rules for highly qualified personnel should be considered.

Hurdles for the supply of risk capital should be removed

- Pension fund regulation should focus on the overall risk diversification of the portfolio (the "prudent person" principle).

Box 4.1. **Policy assessment on productivity and innovation** *(cont.)*

- Restrictive investment rules with respect to venture capital should be relaxed. Also, rather than giving tax preferences to a particular legal form of investment funds, equity and venture capital participations should be made subject to roughly the same tax regime with low taxation of the returns across all types of investors, including business angels and partnerships.
- Preferential tax treatment of retained profits should be abolished.
- Minimum taxation of corporate profits should be lowered significantly or dropped. Widening the scope for carrying forward losses should be considered. The capital duty on share issue (*Gesellschaftssteuer*) should be abolished.

Government support for innovation should be streamlined

- The tax support system for R&D should be simplified. All R&D subsidy spending programmes should be subjected to evaluations by independent institutions. Evaluation should be extended to tax expenditures and the relative benefits of direct subsidies and tax concessions. Innovation policies should be co-ordinated across levels of government.

Secondary education should be reformed

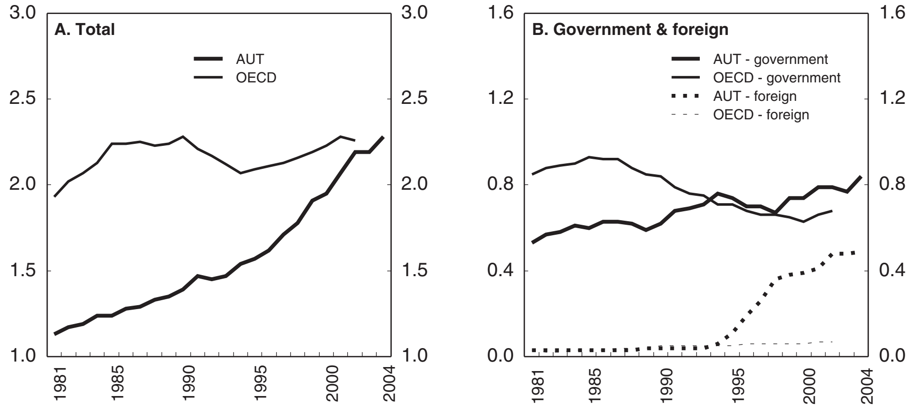
- Country-wide educational targets should be established against which the performance of schools can be assessed. Funding of schools should be linked to their relative performance. The schools' autonomy with respect to organising the learning environment and in personnel matters should be increased.
- Full-day schooling should be extended.
- Integration of children with immigration background into the school system should be fostered through more intensive language training and better access to cost-free programmes that lead to a general secondary school degree (*Hauptschulabschluss*).
- Financing and spending responsibilities for schools should be placed at one level of government. Reimbursement of teacher salaries to state governments by the federal government should be replaced by block grants depending on the number of pupils.
- The qualified-majority requirement for legislation on educational matters should be given up.

University reform should proceed further

- In linking university funding to performance, preference should be given to output-related indicators over input-related ones. One strategy would be to start with a small set of quantifiable performance indicators, to be broadened gradually.
- The government should ensure that the universities develop management capacity in the transition to increased autonomy.
- Admissible commercial activities for universities should be narrowly defined. Universities which are in financial difficulties should not be bailed out.
- The government should monitor whether the universities develop appropriate management capacity.
- The impact of tuition fees should be further monitored and evaluated, also in comparison with international experience. Consideration should be given to allowing universities to increase the share of fee financing, complemented by an income-contingent loan scheme for students, by giving universities the right to set the level of tuition fees.
- Further measures to improve access to higher education should be considered.
- It needs to be ensured that the new IPR system does not generate incentives for the universities to shift resources from their budget to research areas in which patenting revenues are likely to be largest at the detriment of fields in which research output is valuable but less likely to yield profits from patents.

Figure 4.1. **Gross domestic expenditure on R&D**[1]

% of GDP



1. OECD series are estimated by the OECD; see source for details. OECD – foreign is obtained by subtracting business and government from total expenditure.

Source: OECD, Main Science and Technology Indicators Database, December 2004.

Countries devoting a relatively large proportion of their R&D spending to R&D-intensive industries, such as Finland, Ireland, Canada and the US, have tended to experience the largest increases in overall R&D spending as a proportion of GDP.

Regulatory reform can strengthen productivity growth and innovation

Regulatory features of product, labour and capital markets impact on an economy's productivity performance and capacity to innovate via various channels. For example, administrative regulation can have significant adverse effects on the creation of new enterprises, stemming not only from specific barriers to entry but also from administrative opacity more generally. The efficiency of equity markets affects both the foundation and growth of enterprises and the capability to engage in risky investment projects. A regulatory stance conducive to product market competition induces firms to adopt new production technology more rapidly in order to increase productivity. It also increases investment, as producers in competitive markets have stronger incentives to expand production capacity when demand increases.[6] Labour market regulation – such as rules determining unemployment benefit eligibility – can influence the degree to which workers move to those industries where they are the most productive. This section highlights key areas where regulatory reform would be likely to generate significant benefits.

Fostering formation and growth of enterprises...

New firms make an important contribution to innovation because they can enter a market with the most productive combinations of inputs and, unlike established firms, do not incur adjustment costs when adopting new technologies and work practices. They also generate competitive pressures on existing firms, inducing them to innovate and improve performance. Moreover, regulatory reform fostering entry might be particularly effective in high-tech sectors, where new firms have contributed particularly strongly to productivity growth, notably in ICT-related industries.[7]

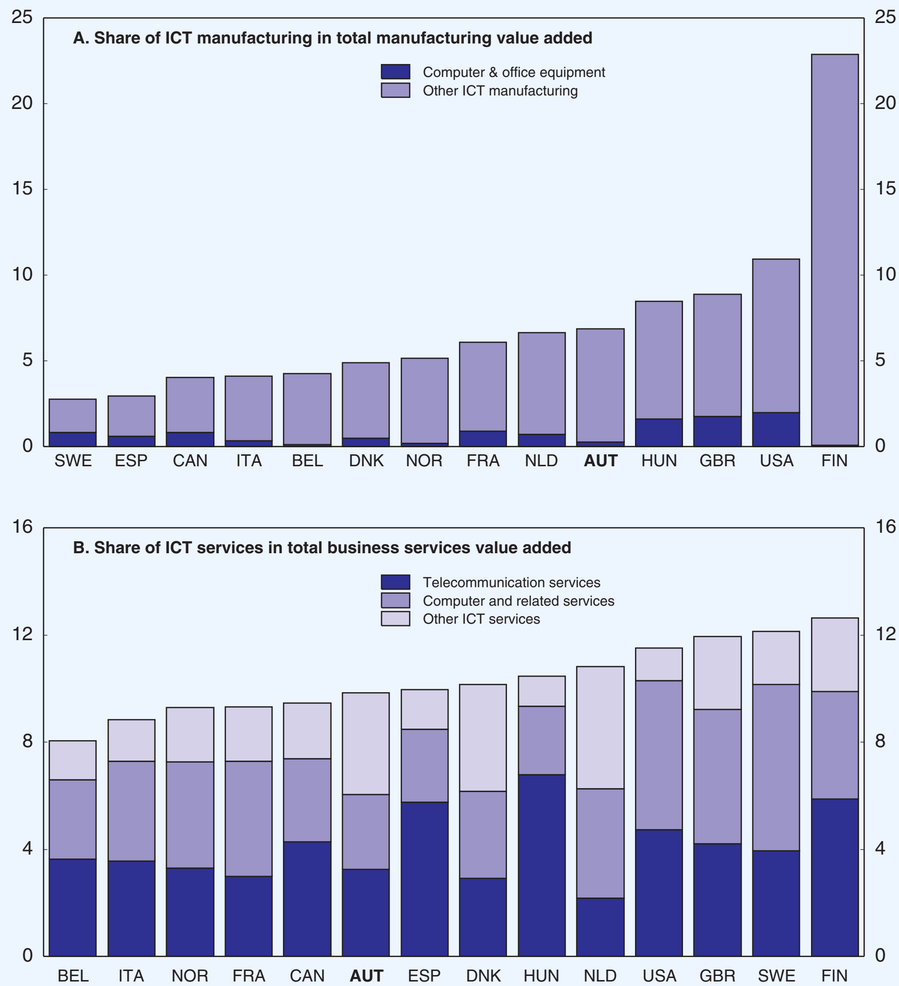
Box 4.2. **The ICT sector in Austria**

Rapid innovation has turned ICT into an important source of productivity improvements, through both the production and the use of ICT goods. Specifically, ICT spurs economy-wide productivity growth via three channels:

- Acceleration of productivity in the ICT producing sectors themselves and a growing size of the ICT producing sector.
- Increased use of ICT equipment in the production of other goods.
- Spillover effects from the use of ICT, arising as a result of complementary innovations, *e.g.* in work practices or organisation, as ICT equipment is introduced, resulting in higher total factor productivity growth.

Figure 4.2. **ICT in value added, 2001**[1]

%



1. Other ICT manufacturing includes communication equipment, insulated wire and cable and precision instruments. Other ICT services include wholesale and rental of ICT goods.

Source: OECD, *Information Technology Outlook* (2004).

Box 4.2. **The ICT sector in Austria** *(cont.)*

The share of ICT services production in services sector value added in Austria has expanded little in recent years and is modest relative to other high-income countries (see Figure 4.2).[1] Austria's position is more favourable with respect to the share of ICT manufacturing in total manufacturing value-added, where it occupies a middle position. Patenting in ICT is weak by international comparison. Cross-country evidence suggests that firm entry makes a particularly important contribution to productivity growth in those industries in which technological change is particularly rapid, including, notably, ICT.[2] Indeed, the ICT sector has particularly high firm entry rates across OECD countries.[3] Firm entry rates in the ICT sector in Austria grew only modestly over the 1990s, and even less dynamically than in Germany, where the contribution of firm entry to productivity growth has also been relatively weak.[4] Easing firm entry regulation could increase the contribution of ICT production to overall productivity growth.

Benefits from productivity improvements associated with ICT can be reaped by application of ICT without producing ICT goods and services. Intensive users of ICT are largely found in the services sector, notably in retail trade, finance, insurance and business services.[5] Indeed, ICT use has been found to be particularly beneficial for service sector firm performance.[6] The contribution of ICT-use-intensive sectors in Austria to productivity growth did not increase between 1996 and 2001 relative to the preceding five-year-period, suggesting that these sectors' productivity performance did not benefit as much from the surge in ICT over the 1990s as in other countries. The proportion of GDP spent on the acquisition of ICT equipment (hardware and software) in Austria falls short of the levels attained in other high-income countries, and, while spending has been growing vigorously, there is little evidence of catch-up.[7] Internet access by enterprises, broadband penetration and electronic commerce in the business sector – as measured by the share of turnover resulting from transactions over the internet – appears to be relatively well developed, following fast growth since the mid-1990s. While a competitive environment in the broadband market has contributed to relatively high broadband use, product market regulation, notably in services, still generates obstacles to further productivity gains through ICT use and production.

Another factor contributing to modest diffusion of ICT is the relatively small supply of highly skilled workers, with respect to both specific ICT skills and general skills. Human capital plays an important role in realising productivity gains from ICT use, for example in order to foster organisational change to bring about productivity improvements.[8] Indeed, empirical evidence at the firm-level confirms that declining costs of computing increased the demand for skilled workers while reducing the demand for unskilled workers. Firms with a high investment in ICT employ a larger fraction of workers with a university degree as well as ICT specialists. In addition, life-long learning helps match the skills of workers to new technologies such as ICT. The proportion of highly skilled ICT workers in the workforce in Austria is below most high-income countries, and growth in recent years suggests only little convergence to countries with higher shares of ICT workers.[9] More generally, the proportion of workers with tertiary education is also low. Participation in life-long learning in Austria is also low in international comparison.[10]

1. ICT services include telecommunication services, computer and related services, wholesale and rental of ICT goods. See OECD (2004b).
2. OECD (2003b).
3. Brandt (2004).
4. Bundesministerien (2004); OECD (2004).
5. OECD (2003d).
6. Hempbell (2002).
7. Rat für Forschung und Technologieentwicklung (2004).
8. OECD (2003b).
9. OECD (2003c).
10. OECD (2003d).

Despite substantial progress in reducing administrative overheads, there remains scope for lowering barriers to the creation and growth of enterprises in Austria. In recent years a waiver of fees for compulsory chamber membership for new firms was introduced and qualification-related entry barriers in trades were lowered. However, in many trades, notably in the crafts sector, the eligibility to set up a firm remains dependent on the owner having obtained a certificate of qualification reducing the potential for firm creation and hampering the emergence of multi-disciplinary enterprises (see the 2003 *Economic Survey*). As mentioned in Chapter 3 above, state-specific qualification requirements for health care-related services hamper labour mobility. Services of the liberal professions are also often tightly regulated. In several OECD countries services which are used as intermediate products by enterprises – notably accounting and legal advice, engineering services and services provided by architects – have experienced fast growth and play an important role in reshaping the organisation of business and helping to generate productivity gains. A recent study suggests that entry regulations in Austria for accountants, architects and engineers are the most restrictive among the EU-15 countries.[8] Compulsory professional training and required periods of practice are generally long. Exclusive rights granted to liberal professions are much wider in Austria than in most other countries. For example, exclusive rights for accountants do not only encompass statutory audits but also non-statutory audits, book-keeping, tax advice (together with lawyers), tax representation and legal advice and representation (together with lawyers). The previous *Economic Survey* also pointed to retail services being hampered by restrictions on shop opening hours and zoning limitations for the establishment of large stores. Some states have liberalised shop opening hours to some extent since the introduction of federal legislation in 2003 allowing them to extend opening hours. However no state has fully exhausted the available scope for liberalisation. *The states are encouraged to use the opportunities of the federal framework legislation more fully*.

While the foundation of sole-proprietor business or partnerships is generally easy in non-regulated trades or professions, the costs of creating a limited liability firm are higher in Austria than in other high income countries. The minimum equity requirement also appears to be high by international comparison.[9] Empirical evidence indicates that owner-managed firms appear to have a lower propensity to innovate than firms with appointed managers, arguably because more widespread ownership spreads the risks stemming from innovative business strategies.[10] The number of start-ups has risen in Austria since the mid 1990s, with the increase accounted for by sole proprietors.[11] Internationally comparable figures for firm creation are difficult to obtain, but available evidence suggests that firm creation rates are relatively low in Austria.[12]

Complex tax legislation is likely to deter entry as the costs of coping with complex tax rules are more difficult to shoulder for small firms. There are specific regulatory arrangements that prove especially costly for young or small enterprises, particularly if income is volatile as is often the case for innovative firms. For example, the local annual Air Tax (*Luftsteuer*), levied in a few big Austrian cities on equipment such as advertisement signs, shop portals, shop windows, porches or sun-blinds, is related to the volume of air displaced. The pertinent ordinance is voluminous, and the requirement to measure anew the size of these installations once business ownership changes increases the fixed costs of business take-over. This is also true for the tax on credit contracts (*Kreditgebühr*), which can fall due a second time if a new owner takes over an enterprise that already has credit contracts.

Thus, further efforts need to be made to reduce administrative costs of setting up enterprises. This should include revisiting some tax items, whose revenues are often relatively small. The range of trades requiring certificates of qualification should be further narrowed. To the extent that certification is wanted in order to safeguard certain levels of quality, it should pertain to employees rather than owners. In professional services, there is considerable leeway for discontinuing some existing provisions or reforming them so as to minimise their distorting effect on competition. *For example, recommended fee schedules, issued by the relevant associations, should be prohibited, compulsory chamber membership for the liberal professions should be dropped, exclusive rights granted to professions should be narrowed, and shop opening hours should be further liberalised.*

... strengthening the general competition framework...

The 2003 *Economic Survey of Austria* found that substantial progress had been made in aligning the Austrian competition framework with the mainstream and noted that much scope for improvements remained as the institutional set-up was complex, notably in merger control, and rules on vertical agreements lead to excessive administrative costs, in part as a result of the compulsory notification system of cartels. The *Economic Survey* also concluded that the sanctions regime needed to be made more effective and the influence of the social partners on the appointment of judges should be removed. The government is planning to modify the competition law in order to bring it further into line with EU legislation. Plans include abolishing the national system of compulsory cartel notifications and new powers for the Federal Competition Authority (FCA) to obtain documents from enterprises. A leniency programme is scheduled to be introduced, which would strengthen competition law enforcement, and the scope for private litigation is to be increased, harmonising differences in the enforcement of national and European competition law. Moreover, to improve transparency, the government is also planning to oblige the FCA to publish its decisions whether or not it presents a case to the Cartel Court, as well as the decisions of the cartel court. The FCA has also published guidelines about competition policies it pursues on its internet site, providing guidance to private parties.

These moves are welcome, although scope for further improvement remains. *The institutional setup should be simplified, giving more decision powers to the FCA. In particular, investigative powers should be transferred from the Cartel Court, which does not itself have the resources to conduct in-depth investigations, to the Federal Competition Authority.The activities of the FCA should become more proactive.*[13] More frequent investigations of product market segments, such as the ongoing investigations of the electricity market, the gas market, and the food retailing market would allow the FCA to obtain more insights on anti-competitive practices. *The effectiveness of the sanctions regime could be raised further through the introduction of criminal charges for hard-core cartels.The credibility of competition law enforcement would also benefit from fully removing the statutory role of the social partners in appointments to the competition court as well as to the Competition Commission.* Also, the Competition Commission, which plays an advisory role in competition policy, has noted that the FCA's resources need to be increased further. The Federal Competition Authority considers its staffing level to be far below those of other countries of comparable size.[14]

The government also plans to amend a law which aims at ensuring fair competition among retailers and suppliers (*Nahversorgungsgesetz*). According to the law, price discrimination in contracts between upstream suppliers and retailers, such as discounts for large quantities purchased, can be prohibited if they are deemed to lead to unfair competition. The planned amendment would give powers to the FCA to investigate infringements against the law even in cases in which it does not suspect abuse of market power. While the FCA is not obliged to bring infringements of the *Nahversorgungsgesetz* to the cartel court, enforcement of the law by the FCA when no abuse of market power is suspected would bind the FCA's resources in competition law enforcement but is unlikely to result in stronger competition. *Application of the law to protect fair competition among retailers and their suppliers should be limited to cases of suspected abuse of market power.*

... and reaping the benefits from competition in network industries

Competition in the market for telecommunication services is of high importance to support productivity growth. ICT use contributes to capital deepening and can spur complementary innovation. Telecommunication markets have become more competitive in recent years. The incumbent market share for the number of all fixed line calls has dropped to 54%, smaller than in most other European countries. Viable technological alternatives to DSL (notably cable modem technology) have increased competition in the broadband market. This has increased broadband penetration rates, boosting internet use and e-commerce, which are widely utilised in comparison to most European countries, although Scandinavian countries and some non-European OECD countries continue to perform better with regard to internet use. However, in some market segments the incumbent has retained a dominant position. In particular the incumbent retains a near-monopoly in the provision of local loops, and has bundled local loops with the provision of other connection services, reducing competition. Following an investigation of the FCA, the Cartel Court decided that the incumbent was abusing its market power and demanded remedies.[15]

Fixed-line telephone charges influence the degree of internet-use and e-commerce. Austrian prices for fixed-line telephone services for business customers are high in comparison to other high-income countries in Europe and almost twice as high as in countries with the lowest prices.[16] Scope for improvement in the regulatory framework remains. For example, portability of fixed-line telephone numbers across providers is relatively costly, reducing competition.[17] While the telecoms regulator is independent from instructions, its director is appointed by the government, which, at the same time, owns about 30% of the telecoms incumbent. *Telekom Austria should be fully privatised, which would help ensure that no perceptions of a conflict of interest on the part of the government arise.* Appeals against decisions of the telecoms regulator suspend the validity of the decisions, pending a court ruling, which tends to encourage appeals against the regulator's decisions, even if the appeal is unlikely to succeed. *Hence, the regulator should have effective means to impose a decision with immediate effect if this is necessary to ensure the effectiveness of a decision.*

In the electricity sector, implementation of a European Union directive in 2004 would strengthen unbundling of network access provision from other services. However, application of the directive still depends on the states, which also own substantial stakes in electricity suppliers, and which have yet to issue legislation implementing federal framework legislation on the directive. The directive requires unbundling both legally and managerially, while previously it was required only in accounting terms for distribution and legally for transmission.

Retail prices have risen in the last two years, but this is to some extent due to increasing wholesale prices, reflecting increasing demand and higher oil prices. The level of retail prices in Austria remains lower than in neighbouring countries, although this may reflect lower production costs.[18] Nonetheless, there are signs that competition in the electricity sector can be improved. Switching of customers is relatively low in comparison to other European countries.[19] Market entry of new firms has hardly occurred since the onset of market liberalisation in 2001. As highlighted in a recent market analysis by the FCA, regional market concentration is high and few electricity suppliers make offers outside their regions in which they dominate the market. Advertising activity has also diminished. The electricity regulator continued to lower *ex ante* regulated network access prices in 2004, but, for high-voltage electricity, access prices remain the highest within the European Union.[20] Indeed, there is some evidence that the current level of access prices leads to cross-subsidisation of retail electricity prices by vertically integrated suppliers, deterring entry of competitors into the market, as retail electricity prices net of access charges are among the lowest among European Union countries.[21] Moreover, retail pricing is not fully transparent, as incumbents often provide information on prices without separating network charges from the price of the electricity, hindering price comparisons. As noted in the 2003 *Economic Survey,* constitutional ownership and voting rules, requiring majority government ownership, lead to substantial entry barriers. *Network access prices should be reduced and transparent retail electricity prices should be required. Rules requiring public ownership should be abolished.*

Labour market institutions and work practices could be adapted to encourage innovation and structural change

Some features of the Austrian labour market promote the attachment of workers to firms and hence the accumulation of firm-specific human capital. This is true for the dual apprenticeship system, which is sustained by the absence of poaching of workers by other firms. Accumulation of firm-specific human capital has also been supported by the prevalence of collective bargaining and a significant degree of employment protection.[22] By promoting stable employment relations these institutional features of the Austrian labour market may have supported cumulative innovation patterns, whereby established firms improve existing products and production processes gradually.[23] However, there is also a trade-off in that factors diminishing the reallocation of labour between different firms and activities might have adverse implications for innovation in areas that rely more on recruitment from external labour markets, thus contributing to a lower degree of innovation in new technologies. At least in three respects relaxing institutional features tending to reduce labour mobility appear persuasive in fostering the reallocation of qualified labour.

First, there are a number of specific barriers that distort labour supply in favour of the relatively big public sector and hamper labour mobility between the public and the private sectors. As outlined in Chapter 2 above, pension accrual rules differ markedly between the public and the private sector schemes, implying more generous retirement incomes for civil servants. In addition, seniority wages are particularly pronounced in the government sector. Both of these features combined produce life time incomes of civil servants that were estimated to exceed that of private sector employees within the same educational bracket by up to 44%.[24] Also, tenured civil servants in the general government sector as well as non-tenured civil servants in the federal administration are covered by a special health insurance scheme. These regulations are also likely to have contributed to the fact that more than 50% of university graduates seek employment as civil servants (see below).

Second, activities relying on seasonal employment, notably tourism and construction, are effectively cross-subsidised by other industries through the unemployment benefit system, as seasonal workers can claim unemployment benefits while being out of work. *Consideration should be given to linking employers' unemployment insurance contributions to their dismissal record such that firms with lower dismissal rates contribute less (experience rating). At the same time, there is a need for better activation – also by encouraging the use of flexible working time models – and measures to combat abuse.*

The share of women taking up R&D-related employment is one of the lowest among high-income European countries, particularly in the private sector.[25] Disincentives for labour force participation for women raising children may weigh particularly strongly for those qualified for research activities, as their human capital depreciates more rapidly with prolonged non-participation. Disincentives for female labour supply in Austria result *inter alia* from the withdrawal of child care cash benefits as women take up work. The benefits are provided to mothers of newly born children for a duration of up to three years, irrespective of whether the parent was in paid employment prior to the birth of the child. Benefits are withdrawn completely as the earnings rise above a threshold equivalent to 69% of an average production worker. *Instead, reductions in support should be phased*. The tax credit for single earner households – including the recently introduced supplement for children – also discourages labour supply (see Chapter 2). *To make the generous childcare support system in Austria more compatible with incentives to work, part of the childcare benefits could be provided as childcare vouchers, partly replacing current cash benefits (see the 2003 Economic Survey). The tax credit for single earner households should be abolished.*

Policies that reduce the labour tax wedge for highly qualified workers (see Chapter 2) and make immigration of highly qualified personnel more attractive would help ensuring that recent increases in government funding and tax incentives in favour of R&D translate into increased innovation output rather than being absorbed by rising wage costs with only modest improvements in output. Rules preventing the portability of pension entitlements of immigrant researchers once they return to their home country hamper the inflow of foreign workers. Also, the Council for Research and Technology Development, which advises the government on R&D-related policies, has recommended easing of immigration rules to facilitate the inflow of skilled foreign workers.[26] *Policies favouring the immigration of highly skilled foreigners should be considered and pension portability should be gradually extended.*

Framework conditions for risk capital markets need improvement

Profits generated by innovation in the business sector typically arise with a time lag. Therefore, as is the case with investment decisions, the availability of financing is crucial for innovation decisions. Moreover, innovation decisions are, by their nature, particularly risky and the expenses are often not associated with the purchase of capital goods that can be collateralised. Also, the distribution of information is often highly asymmetric – more so than is the case with investment – as an innovating firm will be better able to assess the potential profitability of an innovative project than a provider of external finance. In particular, much innovation in research-intensive sectors, such as biotechnology, relies on entry of new firms.[27] The large proportion of intangible assets (such as human capital or a new product idea) involved in innovation in these industries aggravates the asymmetry of information between the firm and a potential provider of finance so that credit and conventional equity financing are often not provided to these start-ups. Venture capitalists fill the void, typically providing management services as well for these companies to

 OECD ECONOMIC SURVEYS: AUSTRIA – ISBN 92-64-01104-8 – © OECD 2005

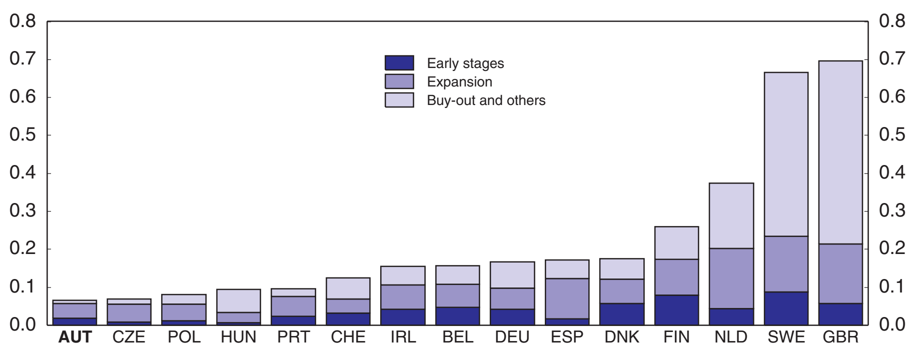
overcome the informational problems. The scope for cross-country venture capital (VC) flows is limited since management services are not easily exported because they require local knowledge and presence.[28]

Hence, well functioning markets for equity and venture capital are indispensable for financing innovation projects. In the same vein, the taxation of enterprises affects innovation not only via the overall tax burden it places on enterprises but also via its effects on the structure of financing and on risk-taking. To the extent that both a developed VC market and the removal of disincentive effects for equity financing through the tax system increase the equity capital endowment of enterprises, this will reduce the risk of bankruptcy during cyclical downswings and therefore increase the willingness of entrepreneurs to accept risks. This can have positive effects on the innovative potential in the Austrian economy through higher incentives to invest in research or the development of new markets.

The Austrian VC market is relatively young and despite a remarkable upturn since the mid 1990s still small in size. Austria appears at the lower end within the OECD with respect to VC investment in terms of GDP (Figure 4.3). The VC financing share amounts to only about one tenth of the level in the United Kingdom and less than half that in Germany on average between 2000 and 2003. The major part of private equity in 2003 came from the banking sector (42%), but the share of other institutional investors is increasing, with pension funds and insurance companies accounting for 14% and 20%, respectively. The contribution of private individuals is also increasing while the share of government agencies in the supply of equity capital has fallen. The fraction of realised capital gains, dividends and interest as percentage of total new capital has only caught up recently with European levels. VC in Austria is primarily invested in the early phases of development. Start-up and expansion investment is about twice as important in Austria as in the European average, with expansion funding accounting for two thirds of all invested funds in 2003. Buyouts, attracting more than half of the investment volume in the European average, play a subordinate role in Austria.

Figure 4.3. **Managed venture capital investment, 2000-03**[1]

% of GDP



1. Total investment flow over period. Venture capital investment in country i is investment managed by venture capital funds located in country i, it is not the amount invested in country i. Strictly speaking venture capital is a subset of private equity and refers to equity investments made for the launch, early development or expansion of a business.

Source: OECD, based on data from the European Private Equity and Venture Capital Association.

Regulation needs to become friendlier for investment in equity and venture capital…

Both supply and demand factors are likely to contribute to the small size of the Austrian VC market. The preponderance of cumulative innovation in established firms is likely to reduce the demand for VC. However, Austria is a net importer of venture capital, *i.e.* more Austrian firms receive VC provided from foreign VC funds than Austrian VC funds provide capital to foreign firms.[29] These inflows are unlikely to match domestic demand, given the limed scope for cross-country VC capital flows. Hence, the relatively low supply of VC in Austria is likely to restrain the volume of VC available to Austrian enterprises. Indeed, in the *European Innovation Survey* more small Austrian enterprises report a lack of financing opportunities as a factor inhibiting innovation than is the case for the average of EU-15 countries.[30]

A further supply side constraint is that traditionally banks have been supplying credit for relatively risky investment projects, notwithstanding the low equity capital ratio of Austrian companies,[31] as house bank relations have served to reduce information asymmetries.[32] In addition, government interest subsidies make loans often cheaper than equity finance. The preponderance of universal banks has contributed to the small number of firms listed at the stock market. However, credit financing cannot substitute equity financing. Indeed, empirical evidence suggests that innovation activities are stronger in countries with a relatively large share of equity relative to credit financing. A liquid stock market is, however, crucial for the supply of venture capital as it provides an efficient exit channel for providers of venture capital having financed start-ups.[33] The Vienna stock market has small trade volumes, a low rating and a very small market capitalisation, equivalent to less than 30% of GDP as compared with more than 50% of GDP in Germany or Italy or more than 150% in Finland, the Netherlands or the UK. Hence, measures that would lead to a broadening of the stock market would simultaneously support the emergence of a more active VC market.

Another reason behind the low supply of equity capital is the subdued role of funded pension insurance, given Austria's predominant pay-as-you-go pension system. Increasing importance of private and occupational pension schemes and especially the establishment of the new severance pay system by employers (*Mitarbeitervorsorge*) are likely to substantially augment available funds in the future (see the 2003 *Economic Survey*). However the scope is limited by the quantitative restrictions for pension funds and insurance companies concerning investments in this asset class. Currently pension funds can invest 5% of their assets in VC, for insurance companies the legal limit is 10%, a setting that is restrictive by international comparison. *Alternatively the regulation could focus on the overall risk diversification of the portfolio (the "prudent person" principle), as already implemented in the US or the UK.* This might significantly increase the volume available for VC investment. In line with initiatives of the European Union, these investment rules are currently under consideration.

A special type of VC fund (*Mittelstandsfinanzierungsgesellschaft*, MFG), which is subject to preferential tax treatment (Box 4.3), is the core instrument for channelling private equity investment.

While the MFG framework might have been initially effective in creating a basic VC market, it appears deficient for the market's further development. In a benchmarking exercise involving 15 countries, carried out by the European Private Equity and Venture Capital Association (EVCA), Austria ranked as the country providing the least favourable

Box 4.3. **The regulatory framework for Mittelstand-Finance Corporations (MFG)**

A tax-favoured regime for Investment Fund companies providing financing for Small and Medium-Sized Enterprises (*Mittelstandsfinanzierungsgesellschaft*, MFG) was introduced in 1994. During the first five years after its foundation an MFG is completely freed from corporate taxes (and therefore also from taxation of capital gains). Thereafter profits from equity investment remain tax exempt but yields from other assets (such as bank deposits) are subject to corporate tax. MFGs are incorporated companies. The management holds shares of the MFG and receives annual dividend distributions that are income tax exempt up to € 14 600. In addition, the government offers supplementary guarantee schemes that protect a certain share of the initial venture capital investment against capital losses.[1] However, MFGs cannot carry forward losses from its equity investments.

Furthermore, MFGs are subject to the following regulations:

- 75% of the founding members of an MFG need to be either banks or other investment funds.[2]
- At least 75% of the capital needs to be invested in Austria.
- The size of an individual participation must not exceed 20% of the fund's capital, and the MFG has to hold at least 8 participations. Not more than 49% of a company can be bought by a single MFG.
- 70% of the funds need to be invested in business enterprises with a focus on SMEs; 30% can be held as bank deposits or security papers. Other forms of investments such as investment funds and speculative trade are not allowed.
- Investments in financial services or power generation are not permitted.

1. The state owned development agency *Austria Wirtschaftsservice* (AWS) was founded in October 2002 to merge several Austrian institutions (the *BÜRGES Förderungsbank*, the *Finanzierungsgarantie GmbH* and the *Innovationsagentur*) within a one-stop-shop. The AWS guarantee scheme provides security for equity capital with guarantees up to 50% of the initial venture capital investment. In addition it provides a credit guarantee for the enterprise in which the VC fund invests.
2. However at foundation they only have to provide a small fraction of the required minimum capital for MFGs and can take on board other investors to reach the required € 7.3 million. The final share of banks and investment funds on the overall capital can therefore be far below 75%.

legal and tax environment for private equity and venture capital.[34] Indeed, the narrow definition of admissible founding members of MFGs shelter incumbents against a potentially higher degree of competition on the VC market, and the regulations for admissible investments restrain the supply of VC in several respects:

- Given the small size of the Austrian market the requirement to invest 75% of the funds within Austria constrains risk diversification within a specific branch, technology sector or stage of development of the enterprises within the portfolio of the MFG. This prevents the Funds from fully exploiting the advantages of specialisation. Admissible investment projects are further constrained by exclusion of participations in certain fields such as, for example, wind power plants or the services of online brokers.
- Confinement of investment to minority participations hampers the restructuring of enterprises via management buyouts. To overcome this burden MFGs need to co-operate with other investors, which only pays off for sufficiently large transactions. Also, at the margin the provision restrains further the scope for risk diversification.

Moreover, focussing tax preferences on MFGs disadvantages other types of investors such as business angels.[35] This disadvantages start-ups as business angels typically concentrate on developing companies after the seed stage. In addition, taxation of capital gains at the level of the corporations (unless they hold the MFG status) leads to multiple taxation of profits if one corporation holds shares in another corporation. *Hence, to foster the supply of VC, restrictive investment rules should be relaxed. Moreover, rather than giving tax preferences to a particular legal form of investment funds,*[36] *equity and venture capital participations should be made subject to roughly the same tax regime with low taxation of the returns of capital across all types of investors, including business angels and partnerships.*[37] This reinforces the need to broaden the tax base in personal and corporate income taxation and indirect taxation, so as to generate scope for lower taxation of the returns from equity participation (see Chapter 2 above). *Consideration should be given to abolishing taxation of capital gains at the level of the corporation.*

… while taxation rules discouraging efficient allocation of capital need to be dropped

As outlined in Chapter 2 above, retained profits of sole proprietorships and partnerships, kept within the company for at least seven years, are subject to lower taxation than distributed profits. The tax preference was introduced as part of the recent tax reform with the aim of promoting the formation of equity capital in small and medium-sized enterprises, which are typically undercapitalised. While studies expect the measure to be effective in supporting equity capital holdings via internal financing[38] the measure hampers the reallocation of capital on the capital market. This is to the disadvantage, in particular, of new and innovative firms, whose investment projects do not yet yield the returns that allow internal financing. Moreover, as funds are subject to *ex post* taxation if withdrawn too early, the retained capital is likely to be considered more risky than retained profits without tax preference. Similarly, to benefit from the preferential treatment the equity capital in a given year has to exceed the highest equity capital stock of the last seven years. This provision produces incentives to shift profits at the expense of efficient allocation of capital. *Hence, preferential tax treatment of retained profits should be abolished.*

For corporations the recent tax reform increases the relative tax advantage of retained profits slightly. As the tax rate for retained profits was reduced from 34% to 25% and the cumulative tax on dividends (corporate plus tax on dividends) decreased from 50.5% to 43.75% the tax wedge between both types of profit utilisation widened by some 2 percentage points in favour of retention.

Moreover, corporations are subject to minimum taxes to be paid. Loss carry forward is limited to 75% of annual profits made in later years.[39] While these provisions smooth corporate tax revenues of the government they produce high start-up costs for enterprises and reduce incentives for risk taking. Both of these features have adverse effects for new and innovative firms whose returns may be subject to increased volatility.[40] The capital duty on share issue (*Gesellschaftssteuer*) taxes the equity capital input in domestic incorporated enterprises at a tax rate of 1%. The tax applies for first-time purchase of equity, for enterprise foundation or a capital increase, but also if the headquarters or the statutory location of a foreign (non-EU) corporation moves to Austria. *Minimum taxation should be lowered significantly or dropped entirely, while widening the scope for carrying forward losses should be considered. The Gesellschaftssteuer (capital duty on share issue) should be abolished.*

Allocation of public sector support for innovation can be improved

The contribution of the public sector to total R&D spending is substantially larger in Austria than in most other high-income countries of the OECD and, contrary to the overall trend in the OECD, has risen over the last 15 years. The increase in public spending has been particularly marked since the late 1990s, reflecting the high priority attached to innovation by the government. A large proportion of government-funded R&D is conducted by the universities.[41] In a number of respects the present system of public sector engagement in the innovation process can be improved.

... different channels of support need to be better scrutinised

Government support for innovation is extended via tax instruments and direct subsidies. Regarding the former, there are two schemes of tax concessions, linked to different but overlapping definitions of R&D spending, and a supplementary scheme of cash grants targeted at enterprises without taxable profits (Box 4.4). Tax concessions were

Box 4.4. **Government support schemes for innovation**

Firms conducting R&D benefit from a basic tax allowance, which reduces taxable profits by 25% of the amount of R&D spending conducted in the relevant year, where eligible R&D spending is defined according to the OECD *Frascati* manual.[1] A higher tax allowance of 35% applies to all R&D spending which exceeds average spending in the previous 3 years. However, this instrument is only relevant for a different, narrower, definition of R&D spending than the general tax allowance of 25%. In particular, it only includes economically valuable inventions as defined in the tax code. Eligibility requires that a certificate be obtained from the Federal Minister of Economic Affairs and Labour or that a patent has been obtained or been applied for.[2] To obtain a certificate, the firm has to provide evidence on the technical novelty and the economic benefits of the invention.[3] This regime disadvantages innovation that is not patentable, such as software development.[4] As an alternative to the tax allowance option, enterprises can obtain a 8% R&D expenditure subsidy, which applies to the OECD definition of R&D spending, intended for firms which are not yet profitable, notably start-ups.

In addition, various programmes – notably preferential credit, guarantees acting as surrogates for equity capital, and grants – are available by both the federal government and the states, designed to support start ups and R&D. Such programmes can be cumulated with preferential taxation.

1. This definition covers activities leading to the acquisition of new knowledge through basic and applied research as well as the development of new or substantially improved production processes or products. See OECD (2002).
2. Some other forms of intellectual property protection are also admissible.
3. Bundesministerium für Wirtschaft und Arbeit (2004a).
4. Bundesministerium für Wirtschaft und Arbeit (2004b).

widened in 2000 and 2003. The need for firms to choose their optimal tax or transfer regime among three options increases tax compliance costs. These are likely to weigh particularly heavily on small firms. Indeed, although Austria's tax subsidy is more generous than in most other OECD countries, survey evidence suggests that enterprises operating in Austria have assessed the Austrian regime unfavourably.[42] Moreover, as a result of the application of various tax allowance rates, the cost of investing in R&D varies across enterprises, which results in scarce resources, such as R&D personnel, not being allocated to their most productive use across the economy, diminishing efficiency.

Evaluations of Austrian grant programmes suggest that government support significantly increased recipient firms' R&D spending beyond the received amount, raising productivity performance. This alone does not indicate, however, that funds are spent in an efficient way. Indeed, productivity gains from extra spending on R&D turned out to be lower with than without grants,[43] which might indicate that government support – across all schemes – is not being allocated in the most productive way. Evaluation of subsidies has gained importance, with most programmes being evaluated. However some evaluations are carried out by the administering agency which may reduce the credibility of evaluations.[44]

Evaluation of government funding institutions found that the prevailing fragmentation of funding into several institutions was inefficient and required simplification.[45] In response, the federal government merged several government agencies involved with start-up financing into one agency (*Austria Wirtschaftsservice*). Similarly, several agencies involved in managing R&D support programmes were merged into the *Forschungsförderungsgesellchaft*. However, the states run their own programmes to support the development of industrial clusters which are not co-ordinated with the federal government's programmes. The states' programmes are based on analysis of existing industrial strengths within the state rather than the development of new technologies through the co-operation of science and business, as in recent federal programmes.[46] In some cases, the programmes of the states support activities which are not related to innovation.[47]

Hence, the tax support system for R&D should be simplified, so as to reduce compliance costs for enterprises and distortions. All R&D subsidy spending programmes should be subjected to evaluations by independent institutions. Moreover, evaluation should be extended to all instruments, including tax expenditures, which have not been covered in the past.[48] This would allow an assessment of the relative benefits of tax concessions relative to direct subsidies. *Innovation policies need to be co-ordinated across levels of government.*[49]

Co-operation between business and science has been improving

Austrian patents appear to draw less on scientific publications than is the case in other high-income countries, which may be an indication of low co-operation between public sector-conducted research and business. To improve the transfer of knowledge from science to business, the government has made the co-operation between public science institutions and enterprises a policy priority. For example, the government provides subsidies for "competence centres" in which private enterprises and researchers from public research institutions work on joint R&D projects. Science-industry links appear to have improved, as the number of enterprises co-operating with universities has increased, and science-based R&D activity in firms has risen. However, different programmes to support science-business relationships appear to overlap, making the system overly complex.[50]

In addition, the government has reformed rules concerning patenting rights on inventions within universities. Indeed, patent applications in the sciences by higher education institutions have been relatively low in international comparison.[51] In

OECD ECONOMIC SURVEYS: AUSTRIA – ISBN 92-64-01104-8 – © OECD 2005

particular, universities can now, if they wish, claim the intellectual property right on all inventions generated by their research staff. Under the previous regime, the individual researcher retained the intellectual property, if the government abstained from requesting it, a process which in some cases took a long time. Universities may be in a better position to ensure the economic exploitation of patents than single researchers, as they are, for example, better placed to deal with patenting costs and associated risks, such as litigation. However, no evidence is as yet available whether assignment of intellectual property rights to universities strengthens innovation performance. Publicly funded research is most necessary in those areas of research, in which private property rights cannot be established.[52] *Hence, it needs to be ensured that the new IPR system does not generate incentives for the universities to shift resources from their budget to research areas in which patenting revenues are likely to be largest at the detriment of fields in which research output is valuable but less likely to yield profits from patents.*

In this context it is worth noting that innovative capacity in Austria is likely to be particularly adversely affected by the costs of patenting, given the predominance of small firms and the fact that administrative costs are more difficult to shoulder for small enterprises. Filing a patent at the European Patent Office is about five times more costly than at the US Patent Office of the US, which is likely to be of special importance for a small open economy like Austria. The EU plans to introduce a "European Community Patent", linked to a European Community Patent Court.[53] According to the European Commission, the European Community patent would be likely to reduce patenting costs substantially. However, agreement on the new patent has not yet been reached. Agreement on a substantially less costly European patenting scheme would improve the availability of IPR to Austrian firms, strengthening incentives to innovate.

The education system needs institutional reform

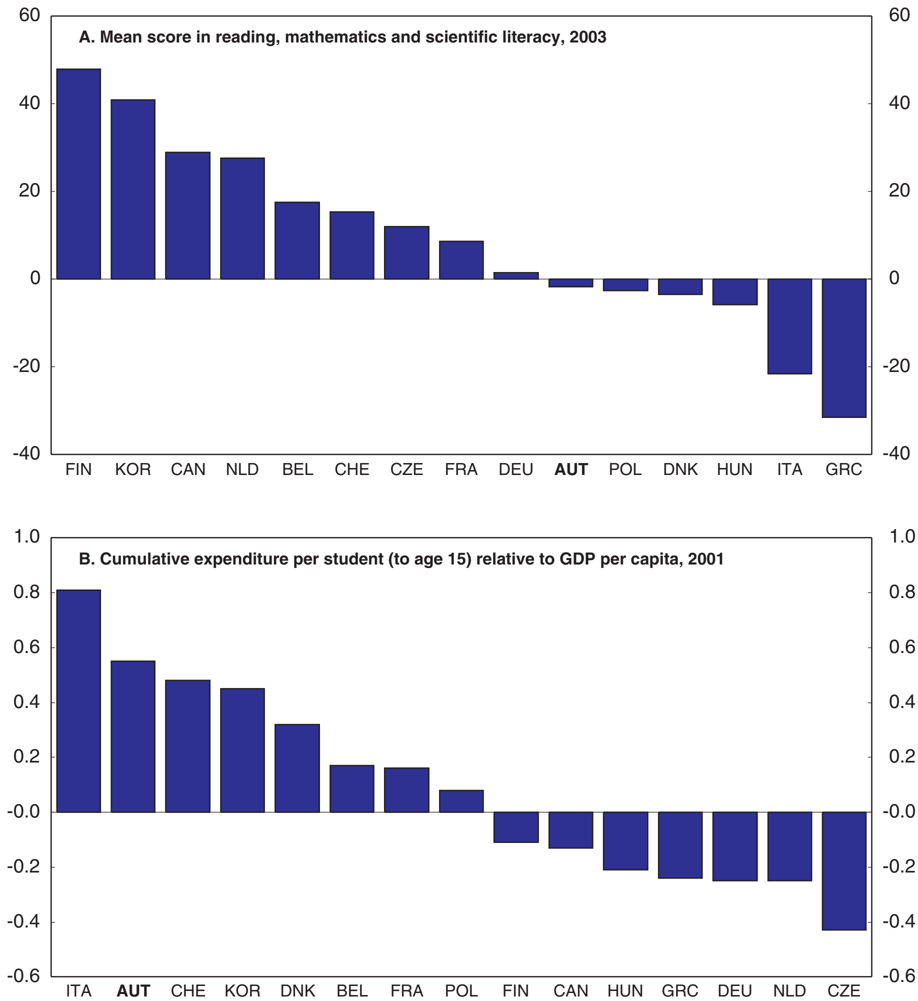
Securing the supply of highly skilled workers is crucial for the generation and absorption of new knowledge and technologies, such as ICT. Empirical evidence for Austrian firms shows that, controlling for firm characteristics, enterprises employing a relatively large proportion of workers with tertiary education are more likely to engage in innovative activities and R&D.[54] A survey of Austrian enterprises, conducted at the end of 2003, shows that enterprises in Austria plan to increase their demand for research and development personnel in the next few years, and that availability of academically-trained research personnel is one of the most important location criteria for R&D location decisions.[55] In the same vein, the Austrian government – actively promoting Lisbon targets – envisages a substantial increase in R&D outlays in terms of GDP over the next years and has set incentives to boost R&D spending of the private sector. All of this reinforces the need to adopt policies that are conducive to labour force participation of well-trained personnel, as discussed above. Equally important, framework conditions need to be set so as to secure a high performance of all segments of the education system. The final part of this chapter highlights important issues in educational reform.

Broad reforms to raise the performance of the secondary education system are necessary…

Within the OECD Austria is among the top countries with respect to annual expenditures per pupil in primary and secondary schooling. The teacher-to-student ratio is also above average. Despite these high input levels the pupils' performance in the OECD

PISA exercise for 15-year-old students was only close to the OECD average for most indicators (Figure 4.4).[56] In mathematics and reading about 20% of the students belong to the "risk group".

Figure 4.4. **Educational performance of 15 year olds and spending on education**
Deviation from the average[1]



1. A positive figure indicates above average.
Source: OECD, *Learning for Tomorrow's World, First Results from Pisa 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 measured against countrywide standards. Experience in best-performing countries also suggests that giving a large degree of autonomy to individual schools for organising their own programmes while setting national performance standards improves performance. Also, in several well performing countries the extent of educational differentiation between schools is limited and the selection process starts late. There is considerable scope to improve the efficiency and performance of the Austrian school system on all of these scores.

The education system is characterised by a high degree of inter-generational persistence with respect to educational paths attended. The qualification of the parents plays an important role for the decision as to whether a child after primary schooling enrols in a general secondary school (*Hauptschule,* HS) or an academic secondary school (*Allgemeinbildende Höhere Schule*, AHS) that directly leads to a university qualification exam. Around 80% of children with at least one parent with university degree attend the first four years of an AHS while the share is only 10% if both parents only attended compulsory education.[57] The regional location also plays an important role: in rural areas most pupils between 10 and 15 years are enrolled in general secondary schools while in urban areas, the AHS is the dominant school type. The educational background of the parents again plays an important role for the decision as to whether a pupil continues education at the tertiary level. For pupils in urban areas with high-school certificate the probability of achieving a university degree is about 60% if at least one parent has a university education background, but it is only 20% if both parents just attended compulsory education. The dependency on the parents' educational background is particularly pronounced for females. This evidence suggests that accessibility of higher stages of education, independent of the socio-economic background, is of crucial importance to develop educational standards in the society as a whole and raise individual socio-economic mobility.

Similarly, children with immigrant background showed a much weaker performance in the PISA survey than native students. This result is not specific to Austria and has also been found for other European countries, with the differences being even more pronounced in some countries. However, the difference in performance between the scoring of first-generation students (born in Austria with foreign-born parents) and non-native students (born outside Austria) is much smaller in Austria than for example in Sweden, France or Norway. This suggests that the integrative performance of the Austria school system is quite weak. Improving language proficiency is a special challenge as children from immigrants often follow their parents with a considerable time delay due to the pertinent rules for immigration of family members. *Language training for children entering the Austrian school system at advanced age without or with little knowledge in German needs to be intensified.Also, formal requirements for access to cost-free programmes that lead to a general secondary school (Hauptschule) degree independent of age should be revisited in order to support integration into the education system and the labour market.*

Differentiation of students by school types based on specific levels of performance takes place at a younger age and is more pronounced in Austria than in some well performing countries. Also, Austria shows one of the highest variations in school performance across schools within the OECD, with academic secondary schools scoring significantly above intermediate vocational schools and general secondary schools. Indeed the low scoring in the PISA exercise can in part be related to the high weight of vocational education in Austria. While the specific occupational orientation of the vocational education system fosters a smooth transition of the graduates into working life – as indicated by the low unemployment rate of young people by international comparison – it comes at the cost of a lack of general knowledge formation. Insufficient general knowledge in combination with weak participation in life-long learning[58] limits the mobility and flexibility of workers to adjust to new work practices, organisational structures and skill demands, with potentially adverse effects on both employability and the economy's capacity to innovate.

While some progress has been made to develop quality standards for educational attainment in certain areas, there are no mandatory country-wide educational targets that are regularly evaluated and against which the performance of schools could be assessed, allowing for schools to be held accountable for their performance record. 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.

Discretion of schools with respect to appointing or dismissing teachers is very limited.[59] The selection of teachers is done by the school supervisors and schools have almost no decision making powers in dismissing teachers. Similarly, schools cannot determine teachers' salaries and have little discretion in budgeting matters more generally. A government-appointed commission, whose task is to make proposals for the development of the education system (*Zukunftskomission),* has recommended developing a system of output indicators for education in order to compare educational outcomes of individual schools to benchmarks. It also recommended giving schools global budgets with far-reaching spending autonomy. *Country-wide standards for schooling attainment that are regularly evaluated should be introduced, while leaving schools more freedom in determining suitable ways to reach their targets.Proposals to develop a system of output indicators and to extend benchmarking should be adopted, and funding of schools should be linked to their relative performance as will be the case with the universities. Increasing the schools' autonomy should include widening their scope in personnel matters.*

At present, half-day schooling is the rule in Austria, with the supply of full-day schools being very limited. *Full-day schooling should be extended.* This would reduce the supply constraints of care for children at school age. It would also be an important step towards reducing the fixed costs of work, thereby lowering an impediment to female labour force participation.

Reform in the secondary education system is subject to complex inter-governmental relations (see the Chapter 3 for a more general treatment of this matter). The municipalities are in charge of installation and maintenance of primary and general secondary schools as well as for the salaries for non-teaching staff (administration, guardian). The states co-finance part of these expenses and pay the cost of the installation and maintenance of secondary vocational schools for which municipalities in turn participate in financing. The investment for academic secondary schools is borne by the federal government. While state governments are in charge of hiring teachers, the ratio of teachers-to-students is set in agreement between the federal government and states. The federal government fully pays the salaries and pensions of teachers in primary and general secondary schools and half of the remuneration in vocational schools with the rest being borne by the states. The federal government sets curricula, and the states are in charge of administrative matters. Supervision of schools is a task of both the federal government and the states.

The high degree of dispersion of competencies across layers of government hampers reform of the education system. For example, the federal government can implement performance standards only for academic secondary schools, but not for vocational state schools. The complex financing system also contributes to an inefficient distribution of capacities, which tend to be too small in areas with immigration and a large number of children facing learning obstacles while becoming increasingly excessive in areas with shrinking population due to internal migration.[60] *To avoid such inefficiencies, financing and spending responsibilities for schools should be aligned at one level of government. In particular, reimbursement of teacher salaries to state governments by the federal government should be abolished and substituted by block grants depending on the number of pupils.*

Moreover, most of education-related legislation is subject to qualified parliamentary (two thirds) majority (constitutional laws). This setting has led to a stagnation of legislation concerning schools over the last years, with even minor changes being blocked through the requirement for qualified majority. *The qualified-majority requirement for legislation on educational matters should be given up.*

… the apprenticeship system needs to be adapted further…

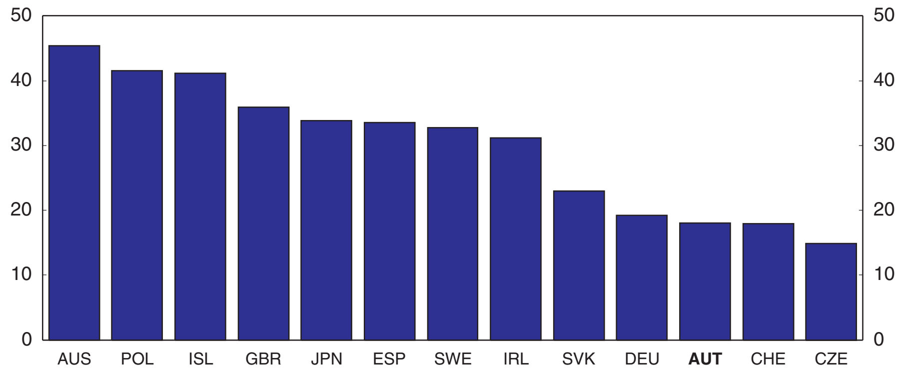
Austria's dual apprenticeship system – which at present absorbs about 40% of an age cohort after completion of compulsory schooling – has been successful in providing high-quality applied skills, as indicated for example by the low youth unemployment rate that is only half that of the European average (Table 1.2 in Chapter 1). Efforts have been made over the past decade to adapt apprenticeship curricula to new demands. Since 1997 130 apprenticeship curricula have been introduced or reshaped, mainly in the service sector and in information technology. However, efforts to broaden curricula in order to ensure the mobility and flexibility of the workforce led to a shrinking willingness of enterprises to engage in the apprenticeship training (Table 1.2 in Chapter 1). One policy option could be setting incentives for co-operation between enterprises and training institutions with a modular approach to education so that specialisation and generalisation can be better combined. In one Austrian state, reform along this line is under investigation.

… and substantive progress in university reform needs to be firmly anchored

Tertiary graduation rates in Austria are among the lowest within the OECD (Figure 4.5).[61] While rates have doubled since 1991, compared with an average increase by one third in the OECD, no further improvement is visible since 2000. Moreover, with 6.3 years the average duration of university education in Austria in 2002 was one of the longest within the OECD (OECD average: 4.7 years).[62] While annual expenditures per student stand at the OECD average, long study durations make the Austrian tertiary education system one of the most expensive worldwide (Figure 4.6).[63] At 41%, drop-out rates are also high by international comparison.[64]

Figure 4.5. **Graduation rates for tertiary programmes, 2002**

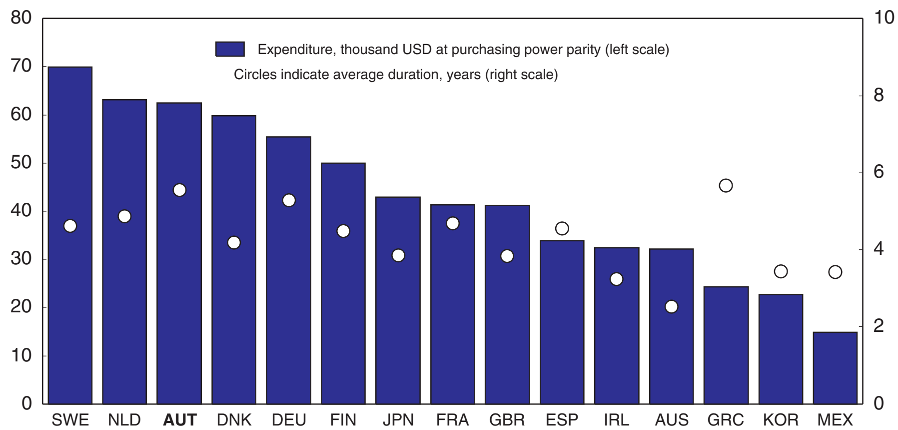
%



1. Rates are estimated as [number of graduates]/[population of typical graduation age]. Tertiary programmes (tertiary-type A) provide qualifications for advanced research or higher skill professions.

Source: OECD, *Education at a Glance* (2004).

Figure 4.6. **Cumulative expenditure per student over the average duration of tertiary studies, 2001**



Source: OECD, *Education at a Glance* (2004).

Long study periods tend to discourage investment in education if they are not matched by proportionate gains in productive capacity or if the latter are not reflected sufficiently in subsequent earnings. In a study assessing returns to education between medium and high education levels covering eleven European countries, Austria shows the third lowest returns when evaluated on the basis of the income profile alone, notwithstanding a relatively low supply of graduates with tertiary education degree. The country ranks last when unemployment probability and unemployment benefits are taken into account as well. By contrast, returns to education between low and medium skill levels rank second.[65] Apart from long study durations, early retirement also reduces returns to education, and high tax rates on top incomes diminish incentives for further education. At 50% the top statutory marginal tax rate in Austria exceeds by far the EU average of 42%, although effective taxation is lower due to the notional 13th and 14th month salaries (Table 2.3 in Chapter 2). Another study indicates that the returns to education decreased in Austria over the 1980s and 1990s, this trend having been most pronounced at university level.[66] Decreasing labour demand by the public sector may partly account for this outcome, as about half of all university graduates in Austria seek employment as civil servants.[67]

Over the last years the importance of securing high standards of university education has increasingly been recognised in the policy debate. The University Act (*Universitätsgesetz*) of 2002,[68] which became fully effective on 1 January 2004, completed a gradual process towards more university autonomy that had taken place over the past decades (Box 4.5). In major respects the law is designed to raise the efficiency of the university system.

- Both performance-related elements of funding and the allocation of students' tuition fees to their university introduce an element of competition between universities and set incentives for the universities to improve their services. Agreements, spanning three years, between individual universities and the federal government that link government funding to the services offered by the universities, support forward-looking planning.
- The three-tier degree structure – Bachelor, Master and Doctor degree – promoted by the Bologna Process, is now compulsory for all newly introduced degree courses. This will shorten study durations and provide incentives for higher mobility of students. Currently, the degrees in about 30% of degree courses are included in the new three-tier structure, as established degree courses are also increasingly converted to the new structure.
- Freedom to contract with enterprises could help reducing the heavy dependence of the Austrian tertiary education system on government funding and promote a more efficient exploitation of research outcomes.
- New university employees have no longer the status of tenured civil servants but are salaried employees of the respective university. This gives universities the freedom to choose their personnel and widens the scope for performance-related elements of pay as well as for pay differentiation so as to attract highly qualified staff.[69] Tenure within universities is set to diminish quite rapidly as a quarter of professors are going to retire within the next ten years. This implies a substantial opportunity for fundamental adaptations in the remuneration system.

These reform measures mark substantial progress in making the tertiary education system more efficient. Yet, there remains scope for further improvement. Since universities have been given greater responsibility for managing their own affairs, universities will require more skilled personnel for managing resource use effectively. *The government should monitor whether the universities develop management capacity in the transition to increased autonomy*. The set of performance indicators relevant for the allocation of government funds across universities is scheduled to be determined at the end of 2005. Output-related indicators, such as the average study duration or the number or quality of research publications, provide incentives to raise performance and are therefore preferable over input-based indicators such as the number of students per teacher or the number of research positions. *Hence, in linking university funding to indicators, preference should be given to output-related indicators over input-related ones.* International experience shows, however, that it is often difficult to choose appropriate indicators and a weighting scheme that accounts for heterogeneity between universities. In particular, it may not always be

Box 4.5. **Towards more autonomous Austrian universities**

The first step towards more autonomy for universities occurred in 1987 when institutes were allowed to contract with business, an important factor to promote research projects and to foster the link between the private economy and the universities. The University Organisation Act (*Universitäts-Organisationsgesetz*) of 1993 gave universities increasingly more scope for decisions and configurations through the introduction of the university specific instrument of the "partial legal capacity" (*Teilrechtsfähigkeit*). This opened the way for commercial activities of university institutes. But it also led to an obscure and complex net of activities where the available budget funds, the cost distribution, the overall number of university employees and the structure and number of research projects were unobservable to the management and left the liability question completely open. University autonomy was still limited by restrictions for appointing and dismissing teaching staff and the absence of the right to create subsidiaries. The University Study Act (*Universitätsstudiengesetz*) of 1997 gave universities sovereignty in implementing curricula.

Under the Universities Act 2002 universities became legal entities under public law, having full legal capacity. The universities are the legal successor of the commercial activities of the institutes under the former partial legal capacity system. This allowed a consolidation and registration of all resources and costs. Universities are autonomous in implementing curricula and fields of study and in using the funds provided by the state. They can create subsidiaries with full legal capacity, invest in and form companies or take loans, using their entire assets as security.

The University Act introduces a new system of funding that fully enters into force with the budget for the year 2007. Under the new system universities get funds from three types of sources: About 80% of the total funds available to universities are provided by the federal government in the form of three-year global budgets (*Globalbudget*) that are at their free disposal. A second source of funding is the proceeds of the tuition fees. Tuition fees were introduced in 2001, but until 2004 the proceeds accrued to the federal government budget. According to the 2002 University Act, fees are retained by the universities in which students enrol. They account for about 10% of total university funds and student bodies have a voice in the decision about the use of the funds. The final source of funds is the receipts from commercial activity of universities. Since universities have full legal capacity they may acquire property, invest their assets, create subsidiaries with full legal capacity and conduct research on a commission basis. Furthermore universities have full rights on research output and can keep the rights for patent protection and utilisation. At present funds from these sources accounts for about 10% of total university budgets.

The government's global university budget is broken down into two parts. 20% of the government's total allocation to universities will be distributed in line with a formula, based on a small number of qualitative and quantitative indicators related to teaching, research and development and objectives of society. This formula is still supposed to capture the past performance of the individual university relative to average performance. The remaining 80% are distributed on the basis of negotiations of agreements between the government and the individual universities (*Leistungsvereinbarung*), pinning down the planned measures and service provisions of universities as well as the funding obligations of the government over the next three years. This so-called basic budget (*Grundbudget*) provides the funds for strategic reforms within a university. If universities and the government disagree about the basic budget, there will be a mediation procedure. Universities are required to establish quality management systems, to commission research and teaching evaluations and to give evidence of the use of the global budgets and the retained proceeds of the tuition fees.

possible to establish a monotonic and stable relationship with performance. For example, a reduction in the number of students per teacher could be advisable for a particular course or university while an increase – for example by pooling of courses – may be recommended in other cases. Box 4.6 provides an overview over indicators utilised in countries with performance-based funding systems. *One strategy would be to start with a small set of quantifiable performance indicators, to be broadened gradually.*

Care needs to be taken to secure the sustainability of the three-year budget system. The universities' full legal capacity under the new legislation implies that they can borrow funds from the credit market if they overdraw their budget. Moreover, universities are allowed to engage in equity participations in enterprises or found their own business. *Against the background that government funds and student fees account for the bulk of universities' finances, admissible commercial activities should be narrowly defined. Also, in order to exclude moral hazard on the side of the universities and ensure competitive neutrality the government should firmly exclude bailing out universities in financial difficulties.*[70]

At present, government funding accounts for some 80% of total finance for universities. This is high even by European standards, while in non-European member countries of the OECD funding from non-governmental sources covers between more than 40% (Canada) and more than 80% (Korea) of total outlays. Within the OECD the level of funds spent on tertiary education tends to be higher the more countries rely on other sources of finance apart from government spending, notably student fees and grants. Moreover, tuition fees provide incentives to improve services if universities are allowed to retain the fees of their own students, as stipulated in the new university legislation. Fees also prevent students from considering education as a costless good, contributing to shorter and more efficient studies from the demand side as well. Indeed, in Austria, the introduction of modest student fees in 2001 is estimated to have reduced the share of inactive students from some 25% to around 5%,[71] but it induced no permanent decrease in new inscriptions. The share of students passing no exam per academic year dropped from 39% to 23%.[72] The social composition of students remained unchanged after the introduction of the fees, which is likely to relate to the fact that 40% of all first-time students receive study grants, effectively reimbursing the fees.[73] *The impact of tuition fees should be further monitored and evaluated, also in comparison with international experience. Consideration should be given to allowing universities to increase the share of fee financing, complemented by an income-contingent loan scheme for students, by giving universities the right to set the level of tuition fees.*

It is also important to note that the performance of the tertiary education system is to a certain degree conditional on the performance of the pre-tertiary education system, reinforcing the need to reform the latter. Moreover, the organisation of students' access to universities is an important determinant of the degree to which students' educational potential can be developed. As a rule, eligibility to university access in Austria is confined to students with high school degrees (*Matura*). Given the high share of persons who completed an apprenticeship or underwent intermediate technical or vocational training it is of particular importance that the system of university access does not prevent the potential among young people for tertiary education from being fully exhausted. Progress has been made over the last decade or so in reducing barriers to university access for vocational tracks of secondary education. An important step in this respect was the establishment of the Study-Entry-Qualification Exam (*Berufsreifeprüfung*) in 1997 for employees who had acquired knowledge through practical work. It complements the

Box 4.6. **Overview of indicators used in performance-based university funding systems**

Performance-based funding systems for universities are in place in a number of OECD countries, notably in Australia, the Netherlands, Sweden, Switzerland, UK, and the US. Below is a tentative list of (quantitative and qualitative) performance indicators used in the international context within performance-based funding systems, covering the areas of research and teaching as well as social goals. Indicators can be expressed as absolute numbers or trends. To make them scale independent they can be expressed in relation to reference figures (per student, research position, teaching staff, etc.).

Output-oriented indicators

- Reputation of university: number of (new) students, number of doctoral graduations.
- Quality of teaching: student satisfaction, number of graduations within 100 (150)% of minimal study duration, average study duration, drop-out ratio, ratio of graduates to beginners, number of students changing subject, number of double degrees.
- Quality of research: number of publications (weighted by impact factor), citation index, number of grants and awards, revenues from research licenses and patents, number of invitations for presentations.
- (International) recognition of research: number of appointments at other universities, number of staff members receiving a professorship appointment at another university, number of referee and consultant positions, attractiveness for visiting professors, development of new research generations, third-party funds for projects, sponsor funds.
- International orientation: exchange with foreign universities, number of research co-operations with other universities, organisation of conferences, workshops, number of courses held in foreign languages.
- Market orientation of study programmes: employment rate of graduates in jobs which match their qualifications after two (five) years, starting salary of graduates, employer perceptions, graduate satisfaction, public satisfaction, degrees in shortage areas, pass rates for licensing exams of lawyers.
- Result of measures targeted at social goals: quota of women in university/teaching staff/ professorships, number of foreign students, attractiveness for employed people, number of students making use of facilities for students with special needs.
- Management quality: cost effectiveness in resource allocation.

Input-oriented indicators

- Resources for teaching: ratio of students per teaching staff, number of study fields, costs per student, administration expenditures, time devoted to continued training for teaching staff.
- Resources for research: number of scientific research positions, number of research projects.
- Measure targeted at social goals: measures in support of the participation of women or students with special needs, programmes targeted at knowledge spillovers to disadvantaged regions or economic fields, opening hours of university library and offices, library and computer equipment, services for students, child care facilities at universities.
- Quality assurance: internal evaluations, management standard, accounting system.

Study-Eligibility Exam (*Studienberechtigungsprüfung*) that restricts study permission to a specific study field. The introduction of the Universities of Applied Sciences (*Fachhochschulen*, FH) in 1993 further facilitated mobility between pre-tertiary and tertiary education as they are open for students who do not have the *Matura* but have qualifications related to the desired field of study, after passing an entrance exam (currently 10% of the FH students). The FH sector also contributed to reducing disparities in tertiary education access. FHs mainly focus on business administration and engineering and are less research-oriented than universities. Their introduction was a major factor behind the doubling of tertiary graduation rates during the 1990s and past reductions in average study periods (minimum duration: six semesters). In 2003 around 20% of all-first time students enrolled at a FHS.[74] *Notwithstanding this progress, the high degree of inter-generational persistence with respect to educational paths suggests that there is considerable scope for further measures to facilitate access to higher education.*

Notes

1. In the assessment of the federal government spending of the new foreign owners appears to have contributed to improving production processes and products, contributing to productivity growth. Bundesministerium für Bildung, Wissenschaft und Kultur *et al.* (2004).
2. Falk and Leo (2004).
3. For example, Guellec and van Pottelsberghe (2001) estimated that on average across OECD countries of a one per cent increase in a country's business R&D spending (at constant prices) generates an increase in total factor productivity (TFP) of 0.13% in the long run. However, the full impact of an increase in R&D on TFP growth is estimated to take considerable time to materialize. For example, the estimates suggest that no increase of TFP might occur in the first three years following an increase in R&D spending. A considerable lag between an increase in R&D spending and its full impact on productivity growth has also been estimated in OECD (2003a).
4. The fact that the relatively large share of innovating firms is not reflected in innovation spending and turnover performance is likely to be related to the fact that Austria has relatively few large firms, since large firms are more likely to be involved in innovation activities.
5. The percentage of turnover devoted to new products as well as the percentage of turnover devoted to innovation spending were higher in manufacturing than in the services relative to the EU-15. In terms of the proportion of firms involved in innovation activity, Austria occupied the 5th rank in industry and the 6th in services within the EU-15. However, the proportion of all firms innovating in-house was slightly higher than the EU-15 average in services while it was slightly below average in manufacturing. European Commission (2003).
6. Alesina *et al.* (2003).
7. Scarpetta *et al.* (2002). In addition, firm entry rates are above-average in ICT-related industries and services as well as pharmaceuticals OECD (2003a), Chapter 4, and Brandt (2004).
8. Paterson *et al.* (2003).
9. According to European Commission (2002) mandatory set-up costs for a private limited company in Austria are the highest among the EU-15 countries. Equity requirements are also among the highest. The World Bank (2005) also concludes that the cost of creating a limited liability company, the number of procedures, the time required as well as the minimum capital requirement exceeds considerably those in high-income countries with the lowest costs.
10. Czarnitzki and Kraft (2003).
11. Janger and Wagner (2004), who argue that this increase is related to the fact that becoming self-employed has become easier.
12. OECD (2003d).
13. See the 2003 *Economic Survey of Austria*.
14. Bundeswettbewerbsbehörde (2004).

15. Bundeswettbewerbsbehörde (2004a). The Cartel Court's decision was upheld by the Court of Appeal.
16. OECD Communications Database.
17. European Commission (2004b).
18. Bundeswettbewerbsbehörde (2004a).
19. European Commission (2005).
20. European Commission (2005).
21. Bundeswettbewerbsbehörde (2004b).
22. Bassanini and Ernst (2003). OECD (2004) places the strictness of Austrian employment protection legislation in a middle rank among OECD countries.
23. Bassanini and Ernst (2003). See also Gnan *et al.* (2004).
24. Marin (2004).
25. Bundesministerien (2004).
26. Bundesministerien (2003).
27. See *e.g.* ZEW (2003).
28. This refers to the flows of capital from venture capital firms to start-ups. Venture capital firms themselves may still raise funds from foreign investors. Venture capital supplied by domestic venture capital firms largely determines how much venture capital is available to domestic firms, as reflected in the close correlation between the amount of VC raised and the amount of VC invested across countries. See also OECD (2003c).
29. This is true for venture capital flows between 1999 and 2002.
30. European Commission (2004c).
31. The equity capital ratio of Austrian business is only 28% as compared to 40% in the EU-15. Furthermore 44% of all Austrian businesses had a negative equity capital ratio (equity capital as per cent of total capital) in 2001/02. For small enterprises the share exceeds even 50% (see Gittenberger and Voithofer, 2004). 68% of Austrian firms have bank loans, in the euro area the share is only 50%.
32. The Basel II agreement might limit previously common financing of risky projects by bank loans. As a result, small firms with low equity ratios may have less access to loans for a risky project, or will have to pay higher interest rates for such loans. This might increase the demand of firms for equity capital. On the other hand, SMEs will benefit from lower risk weights under Basel II. Similarly, projects supported by state guarantees will also benefit from a more favourable risk assessment under Basel II.
33. In 2003 one quarter of divestment in Austria took place by public offering. 33% of total divestments were written-off, a markedly smaller fraction than in earlier years.
34. EVCA (2004a).
35. For individual investors equity sale profits are only tax exempt if they own less than 1% of the corporation's capital at any time within five years preceding the sale; else they are subject to income tax at reduced rates. Short-term capital gains (less than one year) are taxable at normal income tax rates. Foreign investors from countries without double taxation agreements are subject to the restricted corporate tax liability.
36. The MFG setting is also under review by the European Commission for its compatibility with European government aid law.
37. In other countries equity investment companies often take the form of limited liability partnerships. In Austria, limited partnerships (*Kommanditgesellschaft*, KG) are corporate tax exempt, as are incorporated MFGs. However, limited partnerships are unattractive relative to MFGs for VC investment. Profits from equity sales accruing to natural persons are fully taxed if their participation exceeds 1% of the capital of the receiving corporation. Consequently, only few Austrian VC funds adopt the legal form of a limited partnership.
38. Beer *et al.* (2004b), Breuss *et al.* (2004).
39. The minimum corporate tax payment is € 1 092 in the first year after business foundation, € 1 750 thereafter for limited liability companies, € 3 500 for public limited companies and

€ 5 452 for banks and insurance companies. The minimum tax payment is treated as advance payment for later tax liabilities.

40. Also, the right to carry forward losses ad infinitum is restricted to enterprises with adequate and orderly accounting. For all other companies this only applies for the first three years after enterprise formation.
41. OECD (2003c).
42. The survey was conducted at the end of 2003, *i.e.* after the widening of the tax allowances contained in the current tax reform package. Firms were asked to assess the relative strength of various institutional characteristics as well as their importance for locating R&D. See Bundesministerien (2004).
43. Zinöcker (2004).
44. European Commission (2004a).
45. Arnold (2004).
46. European Commission (2004a).
47. Hutschenreiter (2005).
48. Hutschenreiter (2005).
49. Jörg (2004).
50. See OECD (2004f) which also includes a description of the programmes.
51. OECD (2004f).
52. OECD (2003f).
53. Guellec and Martinez (2004).
54. See Falk and Leo (2004).
55. Knoll (2004). The survey is a non-representative sample of mostly foreign-owned enterprises, mostly in manufacturing.
56. A comparison with the 2000 PISA study is misleading for Austria because of differences in the sample selection. In 2000 pupils in vocational schools as well as schools for pupils with special needs were significantly underrepresented in the sample which posed an upward bias to the performance indicators and limits the comparability with other countries. This in part explains the strong deterioration in absolute scores and relative rank throughout the various indicators in Austria between 2000 and 2003. See OECD (2001) and OECD (2004c).
57. See Spielauer (2003).
58. See European Commission (2004d) and OECD (2003d).
59. According to the 2003 PISA survey only 22% (8%) of the students are enrolled in schools that have some responsibilities in appointing (dismissing) teachers. The respective figures for the OECD average are around 60% in both cases (OECD, 2004c).
60. See Schönbeck *et al.* (2004).
61. The graduation rate in doctoral studies is, however, with 1.7% within each age cohort above OECD average (1.2%).
62. Due to differences in the estimation method of the average study duration the international comparability is limited. Countries using the approximation formula (such as Austria) tend to overestimate the duration while countries using the chain method tend to underestimate it. For Germany the comparison of the figures based on both methods showed a gap of about 10% (Lassnigg and Steiner, 2003).
63. Lassnigg and Steiner (2003) argue that fees per student fall short of the level reported in *Educationat a Glance* by some 10%, due to measurement error. At the same time expenditures for secondary education would be higher by the same amount. But even taking this adjustment into account Austria still ranks above OECD average in terms of tertiary education expenditures per student over average study duration.
64. Source: OECD (2004d).
65. Barceinas-Paredes *et al.* (1999).

66. Fersterer and Winter-Ebmer (2003).
67. Schneeberger (2004) finds that 52% of all tertiary education graduates find employment in the public sector and the publicly regulated or financed sectors (including medical professions). The figure varies from about 20% in technical, agricultural or economic fields to 95% for medical studies. Guggenberger *et al.* (2001) use a narrower definition of public sector and come to a lower estimate of 33% of university graduates. The unemployment rate of university graduates increased steadily since 2000.
68. The Universities Act 2002 was shadowed by the FHS Studies Act 2002 and the Danube University Krems Act 2004.
69. Labour unions and the National University Federation (*Dachverband der Universitäten*) are in the course of negotiations about a collective agreement.
70. Since the introduction of the full legal capacity of universities all research projects at the level of institutes are in principle subject to approval by the university management. The budget for those projects is part of the overall university budget. As this was considered as too restrictive for research co-operations, especially with the Austrian Science Fund (*Fonds zur Förderung der wissenschaftlichen Forschung*, FWF) an exception was established that allows under special conditions to have project-specific budgets. Those are used by the researchers but administered by the university. The consequences of this exception should be carefully monitored as it may re-introduce problems known from the previous system such as moral hazard behaviour or a missing link between project responsibility and liability.
71. See Pechar and Wroblewski (2002).
72. For beginners this figure dropped from 53% to 24%. See Wroblewski and Unger (2003).
73. See Wroblewski and Unger (2003).
74. See Bundesministerium für Bildung, Wissenschaft und Kultur (2004b).

Bibliography

Alesina, A., S. Ardagna, G. Nicoletti and F. Schiantarelli (2003), "Regulation and Investment", *OECD Economics Department Working Papers*, No. 352, OECD, Paris.

Arbeitskreis Kapital und Wirtschaft (2004), Neue Wege zur Hochschulfinanzierung, Chapter 4: Vielfältige Finanzierungsformen im Hochschulbereich: Mehr Leistungsorientierte Finanzierung, pp. 47-54.

Arnold, E., ed. (2004), *Evaluation of the Austrian Industrial Research Promotion Fund (FFF) and the Austrian Science Fund (FWF). Synthesis Report*, Joanneum Research, KOF, Technopolis, Universiteit Twente, WIFO, Vienna.

AVCO (2002), White Paper – Bessere Rahmenbedingungen für Beteiligungskapital in Österreich.

AVCO (2003), Bessere Rahmenbedingungen für PE/VC in Österreich.

Barceinas-Paredes, F. *et al.* (1999), "Unemployment and Returns to Education in Europe", in: R. Asplund and P. Telhado Pereira (eds.), *Returns to Human Capital in Europe, A Literature Review*, ETLA, The Research Institute of the Finnish Economy, Taloustieto Oy, Helsinki, pp. 56-63.

Beer, C., B. Felderer, G. Grohall, C. Helmenstein, E. Krylova, A. Schnabl and L. Strohner (2004b), Ökonomische Wirkungen aktueller Steuerreformmaßnahmen, Institute for Advanced Studies, Vienna, *Research Report*, April.

BIS (2003), *Quantitative Impact Study* 3.

Breuss, F., S. Kaniovski and M. Schratzenstaller, 2004, "The Tax Reform 2004-05 – Measures and Macroeconomic Effects", *Austrian Economic Quarterly*, 3/2004, pp. 127-142.

Bundesministerium (2001), Bundesministerium für Bildung, Wissenschaft und Kultur, Volle Rechtsfähigkeit der Universitäten – Politische Eckpunkte für ein Gesetz zur Universitätsautonomie, report, *www.bmbwk.gv.at*.

Bundesministerien (2003), Österreichischer Forschungs – und Technologiebericht 2003.

Bundesministerien (2004a), Bundesministerium für Bildung, Wissenschaft und Kultur, Bundesministerium für Verkehr Innovation und Technologie, Bundesministerium für Wirtschaft und Arbeit, *Österreichischer Forschungs – und Technologiebericht 2004*.

Bundesministerium, (2004b), Bundesministerium für Bildung, Wissenschaft und Kultur, *Statistisches Taschenbuch 2004*.

Bundesministerium für Wirtschaft und Arbeit (2004), Forschung, Technologie und Innovation, *Tätigkeitsbericht 2003*.

Bundeswettbewerbsbehörde (2004a), Allgemeine Untersuchung der österreichischen Elektrizitätswirtschaft, 1. Zwischenbericht.

Bundeswettbewerbsbehörde (2004b), Allgemeine Untersuchung der österreichischen Elektrizitätswirtschaft, 2. Zwischenbericht.

European Commission (2002), *Benchmarking the Administration of Startups*.

European Commission (2003), "2003 European Innovation Scoreboard", *Technical Paper,* No. 2.

European Commission (2004a), *2004 European Trend Chart on Innovation: Annual Policy Trends and Appraisal Report for Austria*, covering period: September 2003-August 2004.

European Commission (2004b), "European Electronic Communications Regulation and Markets 2004" (10th Report) *Commission Staff Working Paper*.

European Commission (2004c), "Innovation in Europe, Results for the EU, Iceland and Norway, Data 1998-2001", Theme 9, Science and Technology, Eurostat.

European Commission (2004d), "European Innovation Scoreboard 2004 – Comparative Analysis of Innovation Performance", *Commission Staff Working Paper*, SEC(2004) 1475.

European Commission (2005), *Annual Report on the Implementation of the Gas and Electricity Internal Market*.

EVCA (2004a), *Benchmarking European Tax and Legal Environments*.

EVCA (2004b), *2004 Yearbook*.

Falk, M. (2004), Diffusion von Informations- und Kommunikationstechnolgien und Einsatz von qualifizierten Arbeitskräften, *WIFO Monatsberichte,* No. 3, pp. 213-222.

Falk, M. and H. Leo (2004), *Die Innovationsaktivitäten der österreichischen Unternehmen*, Vienna, WIFO.

Fersterer, J. and R. Winter-Ebmer (2003), "Are Austrian Returns to Education Falling Over Time?", *Labour Economics* 10 (2003), pp. 73-89.

Gittenberger, E. and P. Voithofer (2004), Betriebswirtschaftliche Situation der österreichischen Unternehmen, *Research report*, Austrian Institute for SME Research.

Gnan, E., J. Janger and J. Scharler (2004), Determinants of Long-Term Growth in Austria – A Call for a National Growth Strategy, *Monetary Policy and The Economy* Q1/04, Oesterreichische Nationalbank.

Guggenberger, H., P. Kellermann and G. Sagmeister (2001), "Higher Education and Graduate Employment in Europe", *Austrian Country Report*.

Hutschenreiter, G. (2005), "Innovation Policy and Performance in Austria", Chapter 2 in *Assessing Innovation Policy and Performance – A Cross-country Comparison*, OECD, Paris (forthcoming).

Janger, J. and K. Wagner, "Sector Specialization in Austria and in the EU-15", Austria National Bank, *Monetary Policy and the Economy*, Q2/04.

Jörg, L. (2004), *Policy Profile Austria*, Technology Information Policy Consulting (TIP).

Kirschke, D. *et al.* (2003), "Nutzung von Leistungsindikatoren in der Hochschulfinanzierung", *Das Hochschulwesen* 6/2003, pp. 252-257.

Lassnigg, L. and P. M. Steiner (2003), Die tertiären Bildungsausgaben Österreichs im internationalen Vergleich – Begriffsabgrenzung und Meldepraxis in den Ländern Österreich, Deutschland, Finnland, Niederlande, Schweden und Schweiz, Zusammenfassung und Schlussfolgerungen, *Research Report*, *www.equi.at*

Lundsgaard, J. and D. Turner (2004), "Study Now, Pay Later", *OECD Observer*, No. 242, OECD, Paris.

Marin, B. (2004), NDC – A Magic All-European Pension Reform and Co-ordination Formula? Some Comments on the Robert Holzmann Model Design, Vienna, *mimeo*.

Martinez, C. and D. Guellec (2004), "Overview of Recent Trends in Patent Regimes in the United States, Japan and Europe", in: *Patents, Innovation and Economic Performance*, proceedings of the OECD Conference on IPR, Innovation and Economic Performance, 28-29 August 2003, OECD, Paris.

OECD (2001), *PISA Knowledge and Skills for Life: First Results from PISA 2000*, OECD, Paris.

OECD (2002), *Frascati Manual*, OECD, Paris.

OECD (2003a), *The Growth Study*, OECD, Paris.

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

OECD (2003c), *STI Scoreboard*, OECD, Paris.

OECD (2003d), *OECD Economic Surveys: Austria*, Vol. 2003/16, OECD, Paris.

OECD (2003e), *Education at a Glance,* OECD, Paris.

OECD (2003f), *Benchmarking Industry-Science Relationships,* OECD, Paris.

OECD (2004a), *OECDEmployment Outlook 2004*, OECD, Paris.

OECD (2004b), *Information Technology Outlook 2004,* OECD, Paris.

OECD (2004c), *PISA Learning for Tomorrow's World: First Results from PISA 2003,* OECD, Paris.

OECD (2004d), *Education at a Glance, OECD Indicators 2004*, OECD, Paris.

OECD (2004e), *On the Edge: Securing a Sustainable Future for Higher Education,* OECD, Paris.

OECD (2004f), *Public-Private Partnerships for Research and Innovation. The Austrian Experience*, OECD, Paris.

Paterson, I., M. Fink and A. Ogus (2003), "Economic Impact of Regulation in the Field of Liberal Professions in Different Member States", Study for the European Commission, DG Competition, Institute for Advanced Studies, Vienna.

Pechar, H. and A. Wroblewski (2002), Retrospektive Schätzung studienaktiver Studierender an Universitäten der Wissenschaften für den Zeitraum 1996/97 bis 2000/01, Studie im Auftrag des BMBWK, Vienna.

Rat für Forschung und Technologieentwicklung (2004), IKT in Österreich.

Schneeberger, A. (2004), Hochschule und Arbeitsmarkt – Trendanalyse und internationaler Vergleich, ibw-Bildung and Wirtschaft No. 30, Vienna, September.

Schönbeck, W. *et al.* (2004), Die Gemeinden im Netz der intragovernmentalen Transferbeziehungen – Finanzstatistische und funktionelle Analyse der Transfers im sekundären und tertiären Finanzausgleich der österreichischen Gemeinden, Summary.

Shale, D. (1999), "Alberta's Performance Based Funding Mechanism and the Alberta Universities", paper presented at the annual conference of the Canadian Institutional Research and Planning Association, Quebec City, 24-26 October 1999.

Spielauer, M. (2003), Familie und Bildung – Intergenerationelle Bildungstransmission in Familien und der Einfluss der Bildung auf Partnerwahl und Fertilität. Analysen und Mikrosimulationsprojektionen für Österreich.

Thom, N. (2004), Kennzahlen als Informations- und Steuerungsinstrumente – kritische Anmerkungen, paper presented at Fortbildungsseminar Universität Bern, 26-28 February.

Universität Oldenburg (1996), Konkurrenz, Leistungsindikatoren, Studiengänge, Uni-Info 9/1996, University Oldenburg Press Center, *www.uni-oldenburg.de/presse/uni-info/ui-9609/thema.htm*.

World Bank (2003), *Doing Business, Benchmarking Business Regulations*, *http://rru.worldbank.org/DoingBusiness/*.

Wroblewski, A. and M. Unger (2003), Studierenden-Sozialerhebung 2002 – Bericht zur sozialen Lage der Studierenden.

ZEW (2003), Venture Capital bedeutend für die Biotechnologiebranche, *Gründungs-Report*, No. 1.

Zinöcker, K. *et al.*, (2004), Evaluation FFF – Impact Analysis, *Plattform Forschungs – und Technologievealuierung*, Vienna.

ISBN 92-64-01104-8
OECD Economic Surveys: Austria

Glossary

ABA	Austrian Business Agency
AHS	Secondary education providing access to university (*Allgemeinsbildende Höhere Schule)*
APG	General Retirement Income Act (*Allgemeines Pensionsgesetz)*
AT	Old-age part-time scheme (*Altersteilzeit)*
AWS	*Austria Wirschaftsservice*
BGA	Federal health care agency (*Bundesgesundheitsagentur*)
BMSG	Federal Ministry for Social Security, Generations and Consumer Protection
CEEC	Central and Eastern European countries
DRGs	Diagnosis-related groups
EATR	Effective average tax rates
EPL	Employment protection legislation
EVCA	European Private Equity and Venture Capital Association
FAG	Fiscal Equalisation Law (*Finanzausgleichsgesetz*)
FCA	Federal Competition Authority
FDI	Foreign Direct Investment
FH	Universities of Applied Sciences (*Fachhochschulen*)
FLAF	Family Burden-Equalisation Fund (*Familienlastenausgleichsfonds*)
FWF	Austrian Science Fund (*Fonds zur Förderung der wissenschaftlichen Forschung*)
ICT	Information and communication technology
LGP	State health care agencies (*Landesgesundheitsplattformen)*
MFG	Mittelstand-Finance Corporations (*Mittelstandsfinanzierungsgesellschaft)*
NDC	Notional defined contribution system
NH	Unemployment assistance (*Notstandshilfe*)
OeNB	Austrian National Bank (*Oesterreichische Nationalbank*)
PES	Public Employment Service
PISA	Programme for International Student Assessment
R&D	Research and development
SH	Social assistance (*Sozialhilfe*)
SME	Small and medium-sized enterprises
VAT	Value added tax
VC	Venture capital
WF	Subsidy scheme for residential construction (*Wohnbauförderung*)
WKÖ	Austrian Federal Economic Chamber (*Wirtschaftskammer Österreich*)

OECD PUBLICATIONS, 2, rue André-Pascal, 75775 PARIS CEDEX 16
PRINTED IN FRANCE
(10 2005 08 1 P) ISBN 92-64-01104-8 – No. 54137 2005

Austria

Special Feature: Fiscal Federalism

Economic Surveys
Australia, February 2005
Austria, July 2005
Belgium, May 2005
Canada, December 2004
Czech Republic, January 2005
Denmark, March 2005
Euro area, September 2004
Finland, March 2003
France, July 2005
Germany, September 2004
Greece, July 2002
Hungary, July 2005
Iceland, April 2005
Ireland, July 2003
Italy, August 2003
Japan, March 2005
Korea, June 2004
Luxembourg, September 2003
Mexico, January 2004
Netherlands, July 2004
New Zealand, January 2004
Norway, June 2004
Poland, July 2004
Portugal, November 2004
Slovak Republic, March 2004
Spain, April 2005
Sweden, March 2004
Switzerland, January 2004
Turkey, December 2004
United Kingdom, March 2004
United States, May 2004

Non-Member Economies
Baltic States, February 2000
Brazil, February 2005
Bulgaria, April 1999
Chile, November 2003
Romania, October 2002
Russian Federation, September 2004
Slovenia, May 1997
Federal Republic of Yugoslavia,
January 2003

Subscribers to this printed periodical are entitled to free online access. If you do not yet have online access via your institution's network, contact your librarian or, if you subscribe personally, send an e-mail to:

SourceOECD@oecd.org

www.oecd.org

ISSN 0376-6438
2005 SUBSCRIPTION
(18 ISSUES)

OECD PUBLISHING

ISBN 92-64-01104-8
10 2005 08 1 P

9 789264 011045

Volume 2005/8 – July 2005