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This Survey *is published on the responsibility of the Economic and Development Review Committee (EDRC) 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 23 May 2013. The draft report was then revised in the light of the discussions and given final approval as the agreed report of the whole Committee on 10 June 2013.

The Secretariat's draft report was prepared for the Committee by Rauf Gönenç, Oliver Röhn and Christian Beer under the supervision of Andreas Wörgötter. Romina Boarini provided valuable contributions. Research assistance was provided by Béatrice Guérard, with contributions from Seung-Hee Koh.

The previous Survey *of Austria was issued in July 2011.*

Information about the latest as well as previous Surveys *and more information about how* Surveys *are prepared is available at* www.oecd.org/eco/surveys.

BASIC STATISTICS OF AUSTRIA, 2012

(Numbers in parentheses refer to the OECD average)[a]

LAND, PEOPLE AND ELECTORAL CYCLE

Population (million, 2011)	8.4		Population density per km² (2011)	100.4	(34.3)
Under 15 (%)	14.6	(18.4)	Life expectancy (years, 2010)	80.7	(79.7)
Over 65 (%)	17.7	(14.9)	Males	77.9	(76.9)
Foreign-born (%, 2010)	15.7		Females	83.5	(82.5)
Latest 5-year average growth (%)	0.4	(0.5)	Last general election September 2008		

ECONOMY

Gross domestic product (GDP)			Value added shares (%)		
In current prices (billion USD)	397.3		Primary	1.4	(2.5)
In current prices (billion EUR)	309.0		Industry including construction	29.8	(27.9)
Latest 5-year average real growth (%)	0.6	(0.5)	Services	68.8	(69.5)
Per capita, PPP (thousand USD, 2011)	42.2	(35.5)			

GENERAL GOVERNMENT

Per cent of GDP

Expenditure[b]	51.3	(43.0)	Gross financial debt[b]	85.1	(103.6)
Revenue[b]	48.8	(36.6)	Net financial debt[b]	50.9	(66.2)

EXTERNAL ACCOUNTS

Exchange rate (EUR per USD)	0.778		Main exports (% of total merchandise exports)	
PPP exchange rate (USA = 1)	0.848		Machinery and transport equipment	37.8
In per cent of GDP			Manufactured goods	22.4
Exports of goods and services	57.2	(53.5)	Chemicals and related products, n.e.s.	11.3
Imports of goods and services	53.7	(50.0)	Main imports (% of total merchandise imports)	
Current account balance	1.8	(-0.5)	Machinery and transport equipment	31.9
Net international investment position	-6.2		Manufactured goods	16.4
			Mineral fuels, lubricants and related materials	12.0

LABOUR MARKET, SKILLS AND INNOVATION

Employment rate (%) for 15-64 year olds	72.5	(65.0)	Unemployment rate (%)	4.3	(7.9)
Males	77.8	(73.1)	Youth (%)	8.7	(16.2)
Females	67.3	(57.0)	Long-term unemployed (%, 2011)	1.1	(2.6)
			Tertiary educational attainment		
Average worked hours per year (2011)	1 600	(1 776)	25-64 year-olds (%, 2010)	19.3	(30.7)
Gross domestic expenditure on R&D (% of GDP)[c]	2.8	(2.4)			

ENVIRONMENT

Total primary energy supply per capita			CO_2 emissions from fuel combustion		
(toe, 2011)	3.9	(4.3)	per capita (tonnes, 2010)	8.3	(10.1)
Renewables (%)	24.8	(8.2)	Water abstractions per capita (thousand m^3, 2010)		
Fine particulate matter concentration			Municipal waste per capita (tonnes, 2010)	0.6	(0.5)
(urban, PM10, µg/m^3, 2008)	29.0	(22.0)			

SOCIETY

Income inequality (Gini coefficient, late 2000s)	0.261	(0.314)	Education outcomes (PISA score, 2009)		
Relative poverty rate (%, late 2000s)	12.8	(17.7)	Reading	470	(493)
Public and private spending (% of GDP)			Mathematics	496	(496)
Health care (2010)	11.0	(9.7)	Science	494	(501)
Pensions (2009)	13.5	(8.2)	Share of women in parliament (%, February 2013)	28.7	(25.3)
Education (excluding tertiary, 2009)	3.9	(4.0)	Net official development assistance (% of GNI)	0.3	(0.4)

Better life index: *www.oecdbetterlifeindex.org*

a) Where the OECD aggregate is not provided in the source database, a simple OECD average of latest available data is calculated where data exists for at least 29 member countries.

b) 2011 for the OECD.

c) 2010 for the OECD.

Source: Calculations based on data extracted from the databases of the following organisations: OECD, International Energy Agency, World Bank, International Monetary Fund and Inter-Parliamentary Union.

Executive summary

Main findings

Austria has strong material well-being and quality of life. Steady growth in GDP per capita has been combined with low income inequality, high environmental standards and rising life expectancy. Supportive conditions for a dynamic business sector, generous cash benefits allowing families to provide extensive "in-house" services, a wide supply of public services and a well functioning social partnership system have helped achieve this performance. The Austrian population has therefore combined preferences for stability and work-life balance ("wealth in time") with a thriving economy pursuing an active globalisation strategy.

Post-crisis fiscal pressures persist. Fiscal consolidation is ongoing but public services and transfers are exposed to sizeable long-term spending pressures. The successful expansion of Austria's financial services in neighbouring transition countries has exposed the sector to considerable contagion risks, raising additional potential liabilities for public finances.

A number of tensions are building up. Outcomes in education and health care are no more than average and are subject to inequalities. Family services are still mainly carried out by women, who have closed the gap in education attainment with men and now face increasing tensions between work and family responsibilities, as in many other countries, and a large wage gap. Migrants with low human capital risk being trapped in a vicious circle of incomplete education, short labour market careers and high dependence on social benefits.

Policies to respond to these challenges should take into account both synergies and trade-offs between dimensions of well-being. Synergies between economic growth, quality of life and resource generation for public finances should be preserved, while in areas where there are trade-offs between well-being dimensions, public policies should enable citizens to make free choices. Public governance reforms are advancing, but are not yet fully in place to deliver solutions for these difficult and interwoven challenges. The federal government introduced the transition to performance-based budgeting, systematic regulatory impact assessment, and long-term public spending simulations, which are expected to help policy formation.

Particular attention will need to be paid to the following three areas, involving trade-offs among important well-being dimensions:

- **Pressures from demographic developments.** The ageing of the population may threaten the fiscal sustainability of the large public pension system, although important reforms are already under way; rising female labour force participation strengthens the demand for policies to reconcile work and care responsibilities within families; and the large weight of immigrant groups with low human capital calls for remedial policies to preserve the cohesion of society.
- **Environmental pressures arise from urban sprawl and the strong expansion of road transportation.** Externalities associated with road transport are not adequately priced and regional development policies are not sufficiently co-ordinated across different layers of government and integrated with housing and transport policies.
- **Changes in the global economy challenge Austria's strong position in international production chains** while domestic service sectors are not fully exposed to competition. About one third of the many family firms will need to change owners in the coming ten years as a result of generational transmissions. The education system is excessively fragmented and makes outcomes overly dependent on the socio-economic background of parents. As a result, the long-term innovation and growth potential of the economy cannot be taken for granted.

Key recommendations

Fiscal and financial policy

- Let automatic stabilisers operate freely around the announced structural consolidation path towards a balanced budget.
- Internationally active banks should be required to present clear strategies to strengthen their capital base taking into account the need to repay government capital. The restructuring of the nationalised banks should be pursued.

Public governance and policy formation

- Fully implement performance-based budgeting, regulatory impact assessment and long-term public spending simulations and extend them to the whole general government sector.
- Make sure that increasingly available indicators on different dimensions of well-being are integrated in the policy formation process. Encourage social partners to aim for representation of all stakeholders.

Ageing, work/family obligations and the integration of migrant groups

- Reduce all remaining obstacles to the employment of older workers and close the remaining loopholes into early retirement. Reflect changes in life expectancy more directly in the sustainability mechanisms of the pension system. Calculate the "redistributive" and "deferred saving" elements in the system in order to improve the evidence basis for future measures.
- Make high quality institutional child care available and affordable for children at all ages. Subsidies should be granted on a level-playing field between public, non-profit and private providers to stimulate entry and innovation in the sector.
- Improve the dialogue with communities with migrant background to foster the education and labour market prospects of the next generation.

Environmental sustainability

- Price externalities stemming from road transport better. Increase diesel taxes to reflect externalities. Consider extending the road pricing system. Abolish the favourable taxation of company cars and phase out the commuting subsidy.
- Develop instruments to improve co-ordination between the regional, Länder and federal levels to promote denser settlements well connected to public transport. To increase land supply in designated areas, raise property taxes by updating land values on which they are levied.

Responding to globalisation challenges

- Support the modernisation of corporate governance in family firms, notably in order to facilitate generational transmissions, and further foster venture capital supply. Reduce entry barriers for services, including social services, without reducing high quality standards and consumer protection.
- Implement policies to preserve high quality and labour market relevant education as the main driver of Austria's well-being in the future as in the past, as set out in the 2009 Survey and in the OECD's Skill Strategy.

Assessment and recommendations

Austria has enjoyed a remarkable performance in terms of low unemployment and steady convergence with top GDP per capita levels. This has been combined with low income inequality, high environmental standards and rising life expectancy. This was achieved with a unique combination of supportive conditions for a dynamic business sector, priority for family based care, a wide and deep supply of public services and a well functioning social partnership framework.

The challenge is to maintain these achievements and address tensions in a changing global environment. Particular attention will need to be paid to the following three areas: pressures arising from demographic developments; environmental sustainability; and changes in the global economy.

Public governance reforms are advancing. Notably, the transition to performance-based budgeting and systematic regulatory impact assessment will allow for a broader consideration of interactions between well-being dimensions. The social partnership approach has a potential to accelerate reforms but fiscal federal relations are opaque and a common platform for an evidence-based national policy dialogue across all dimensions of well-being and including all stakeholders is largely missing.

This *Economic Survey* will first describe the various dimensions of well-being using the rich data base of *Going Beyond GDP* and then address the policy challenges in the three areas of demographic developments, environmental sustainability and globalisation. All these areas involve trade-offs between different areas of well-being.

A moderate recovery is underway

The renewed weakness of the global economy and in particular the worsening of the euro area sovereign debt crisis in 2012 also affected Austria. GDP growth slowed over the course of 2012 and the economy contracted slightly in the last quarter. Export growth was weak and this spilled over to business confidence and business investment. Residential investment, however, supported growth in 2012, partly in response to rapidly increasing house prices in the recent past. Robust nominal wage growth and employment gains were partly offset by resurgent inflation (mainly from services), leading to only modest growth in real disposable income and private consumption.

After remaining subdued in the first half of 2013, GDP growth is set to gradually accelerate. Business and consumer confidence has improved from the lows of late 2012, but remains weak. Export-market growth is set to pick up and an increase in real incomes should

support consumption. Public spending will remain subdued due to ongoing consolidation efforts. Export growth will underpin a moderate recovery and growth will reach 0.5% in 2013. With a gradually improving external environment, increasing confidence is expected to support also domestic demand and growth is set to accelerate to 1.7% in 2014. Employment growth will nevertheless remain weak for some time and the unemployment rate, the lowest in the European Union for more than three years, will continue to edge up in 2013 before stabilising and then edging down towards the end of 2014.

Table 1. **Short-term economic outlook**

	2009	2010	2011	2012	2013	2014
	Current prices € billion	Percentage changes, volume (2005 prices)				
GDP at market prices	275.5	2.2	2.7	0.8	0.5	1.7
Private consumption	151.0	1.6	0.9	0.4	0.1	0.8
Government consumption	54.5	0.0	-0.4	0.4	0.4	0.1
Gross fixed capital formation	57.5	0.7	6.3	1.8	0.6	2.8
Final domestic demand	263.0	1.1	1.8	0.7	0.3	1.1
Stockbuilding[1]	1.9	0.6	0.5	-0.3	-0.4	0.0
Total domestic demand	264.9	1.8	2.4	0.0	-0.2	1.1
Exports of goods and services	137.3	8.9	7.1	1.8	2.1	5.9
Imports of goods and services	126.7	8.0	7.0	1.2	1.5	5.1
Net exports[1]	10.6	0.7	0.4	0.4	0.4	0.7
Memorandum items						
GDP deflator		1.8	2.2	2.2	1.5	1.3
Harmonised index of consumer prices		1.7	3.6	2.6	2.0	1.5
Private consumption deflator		2.0	3.5	2.9	1.8	1.4
Unemployment rate[2]		4.4	4.1	4.3	4.7	4.7
Household saving ratio, net[3]		9.1	7.4	7.7	7.9	7.9
General government financial balance[4]		-4.5	-2.4	-2.5	-2.3	-1.7
General government debt, Maastricht definition[4]		71.9	72.4	73.5	75.3	75.5
Current account balance[4]		3.4	1.4	1.8	2.4	2.9

1. Contributions to changes in real GDP, actual amount in the first column.
2. Based on Labour Force Survey data.
3. As a percentage of disposable income.
4. As a percentage of GDP.

Source: OECD Economic Outlook 93 Database.

The risks to the outlook are broadly balanced. On the positive side, a quicker restoration of confidence could lead to a stronger pick up in domestic investment and consumption in the near term. Downside risks relate mainly to a renewed deterioration of the sovereign debt crisis in the euro area and a weaker outlook in Central, Eastern and South-Eastern Europe (CESEE). Materialisation of these risks would harm export growth, confidence and could exacerbate financial sector tensions with potential negative spillovers to government finances. The resilience of the banking sector has improved since the global crisis but it remains considerably exposed to the CESEE region (see section below). A severe shock in one or several countries to which Austrian banks are substantially exposed may lead to a deterioration of domestic lending conditions. State support to the banking sector also remains substantial. The banking sector may require additional support, in order to deal with the legacy of bad assets, which should be debt financed in the short run so as not to endanger the fragile recovery. However, additional debt may push up currently low sovereign bond spreads. The debt burden could be reduced

by negotiating an appropriate sector contribution. Potential risks associated with the recent rapid house price increases should be assessed and monitored (see below).

Further efforts are necessary to strengthen the resilience of the banking sector

The banking sector is relatively large compared to the size of the economy and significantly exposed to CESEE countries, in contrast to more limited exposure to troubled peripheral euro area countries (Table 2). Concerns of generalised deleveraging of Austrian banks in the CESEE have not materialised. On the contrary, Austrian banks continued to increase their overall exposure to countries in the region, residents of which still hold large foreign currency (predominantly euro) loans. However, developments were not uniform and the exposure of Austrian banks to some CESEE countries with high political and economic risks decreased (Figure 1). These activities contribute to the profitability of Austrian banks, but they also imply higher risks as illustrated by the increase in loan loss provisions (Figure 1).

Table 2. **Foreign claims of Austrian banks**

Banks with headquarters in Austria, consolidated, December 2012

	EUR millions	% of GDP
Peripheral Europe[1]	15 950	5.1
New EU member states 2004/07[2]	150 670	48.6
Non-EU South-Eastern Europe[3]	35 080	11.3
Commonwealth of Independent States[4]	19 053	6.1
Top 5 countries		
Czech Republic	47 560	15.3
Romania	26 840	8.7
Slovak Republic	24 540	7.9
Croatia	23 200	7.5
Hungary	19 800	6.4

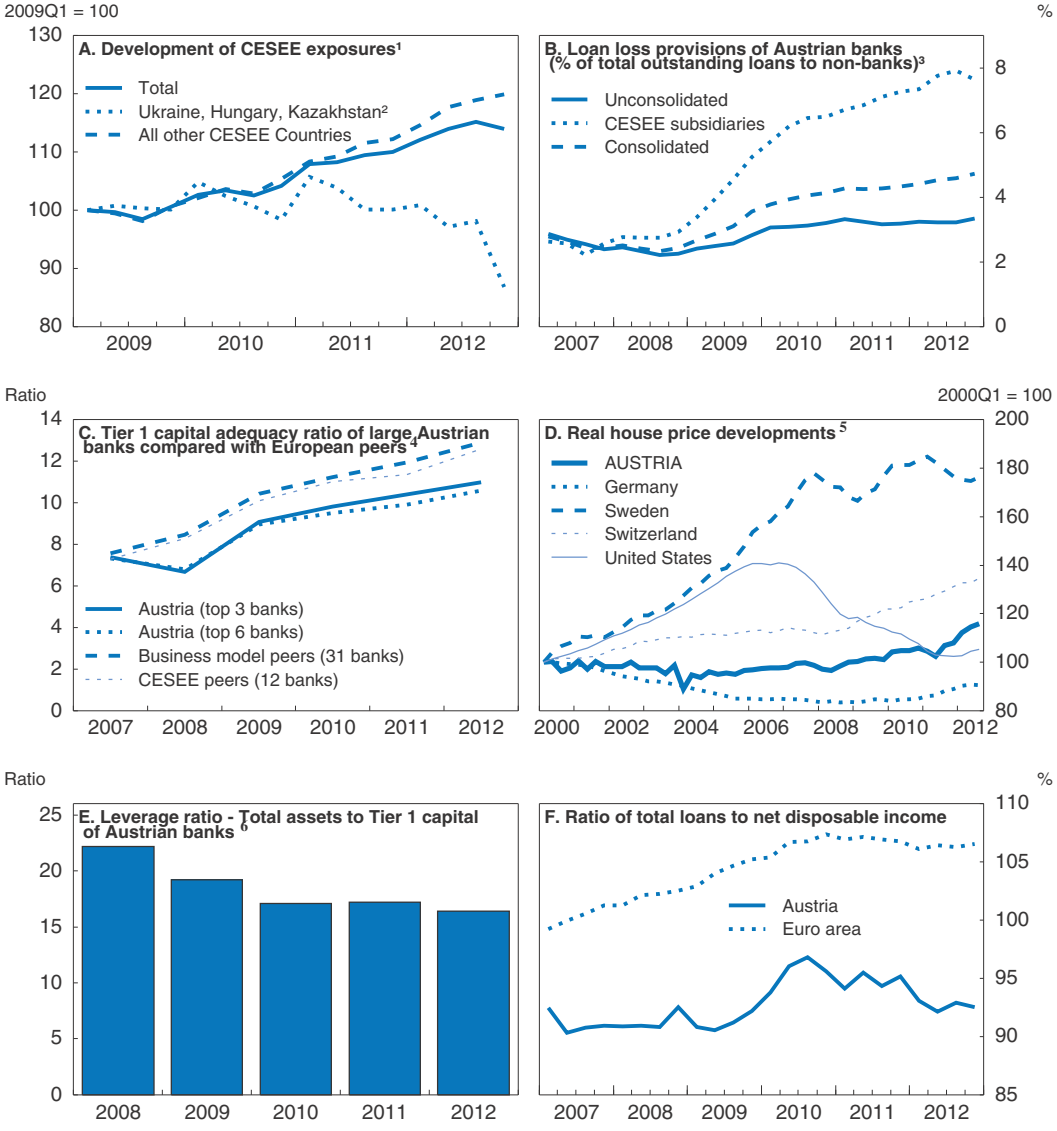
1. Italy, Spain, Ireland, Portugal, Greece.
2. Bulgaria, Estonia, Latvia, Lithuania, Poland, Romania, Slovak Republic, Slovenia, Czech Republic, Hungary.
3. Bosnia and Herzegovina, Croatia, Montenegro, Macedonia, Serbia, Turkey.
4. Azerbaijan, Kazakhstan, Russia (June 2012), Ukraine.

Source: BIS Banking Statistics. Consolidated claims of reporting banks – immediate borrower basis.

The authorities have introduced several measures to increase the resilience of large internationally active Austrian banks. For example, in March 2012, they introduced a regulatory guideline (currently concerning Erste Group Bank, Raiffeisen Zentralbank and UniCredit Bank Austria), which calls for the implementation of the Basel III capital standards already in 2013, and submission of groupwide recovery and resolution plans to promote quick restructuring in the event of a crisis. The guideline aims at avoiding boom-bust cycles in lending by requesting banks' CESEE subsidiaries to enhance stable funding from local sources, mainly deposits. At the same time, the initiative Vienna 2.0 was launched in February 2012. The new initiative focuses on fostering co-ordination between home and host financial market regulators in addition to the private sector co-ordination of its predecessor (Vienna Initiative), set up during the global crisis. By covering the whole CESEE region, it allows for co-operation with countries outside EU regulations and umbrellas.

In May 2013, the Austrian government approved a legislative proposal on bank intervention and restructuring. The law foresees early warning mechanisms, commits banks to write last wills in order to facilitate their restructuring, and strengthens the pre-

Figure 1. **Risks to financial market stability remain**



1. All banks with an Austrian banking licence (irrespective of ownership) including their respective CESEE subsidiary. Numbers are adjusted for exchange rate fluctuations and loan loss provisions. Exposure is measured as foreign claims including loans, debt securities, and equity.
2. The decline in Q4 2012 is amongst others due to the sale of a subsidiary.
3. Unconsolidated loan loss provisions cover primarily loans to domestic customers. Consolidated loan loss provisions are the sum of unconsolidated provisions and provisions of subsidiaries.
4. Tier 1 capital adequacy ratio is defined as eligible tier 1 capital (primarily core capital) over risk weighted assets at the end of the year. The CESEE peer groups consist of 12 banks with similar CESEE exposure and the business model peers of banks with a comparable business model as defined by the Austrian Central Bank.
5. Nominal house prices deflated by private consumption deflator. House price index for Austria is the population weighted index of Vienna and the rest of Austria.
6. End of the year data.

Source: OeNB (Austrian Central Bank); *OECD Economic Outlook Database*; OeNB (2012), *Financial Stability Report 24*.

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emptive powers of the financial supervisor. The proposal does not include a mechanism to wind up bankrupt banks. In this respect, Austria will likely adopt the future EU rules that are currently under discussion.

Loan growth to non-financial corporations has been subdued for several quarters. Nevertheless, credit growth has stayed consistently above the euro area rate. According to the euro area bank lending survey, Austrian banks tightened their credit standards for loans to non-financial corporations slightly for the fourth time in a row in the first quarter of 2013. At the same time, banks have also observed a decline in loan demand over the last seven quarters.

Foreign currency loans in the domestic market pose potential risks to Austrian financial stability. Since 2008, regulatory standards concerning new foreign currency loans have been tightened several times. However, the stock of foreign currency denominated loans (mainly Swiss Francs) is still considerable. As of September 2012, the share of foreign currency loans in total outstanding loans to households and non-financial corporations was 25% and 7% respectively. Moreover, outstanding foreign currency loans to households were in large part designed as repayment vehicle loans, i.e. the principal is paid back at maturity and capital for repayment is accumulated through investment in financial products. Potential price fluctuations of these financial products add further risks to this type of loans.

Two medium-sized banks have had to be fully nationalised since the onset of the global crisis, and one of the five largest banks was partly nationalised. In 2011/12 some of the participation capital (i.e. non-voting equity capital with preferential dividend payments) that was initially provided had to be written off and/or converted into common Tier 1 equity and additional capital injections became necessary to comply with regulatory requirements. Besides these measures, participation capital was also provided for the two largest banks, none of which has yet repaid these funds. As of September 2012, the total amount of capital injections and participation capital reached EUR 8 billion (2.6% of GDP). Dividends on participation capital are rising over time, providing strong incentives for repayment. In addition, the outstanding guarantees for debt and equity vehicles amount to more than EUR 12 billion (3.9% of GDP) (Schratzenstaller, 2013). As of May 2013, the nationalised banks were in the process of being restructured – including dealing with bad assets- in order to comply with the EU competition law. The privatisation process has started and further restructuring plans have been submitted to the European Commission.

Overall, the Austrian banking sector strengthened its capital position. Austrian banks' leverage ratio (unweighted assets over Tier 1 capital) declined from 24 to 16 between 2008 and 2012 (Figure 1) and the leverage ratio of the three largest banks, at 16, is below European peers with a comparable business model at 22. The aggregate Tier 1 capital adequacy ratio reached 11% in the fourth quarter of 2012, 2.9 percentage points higher than at the end of 2007. However, large internationally active Austrian banks still have a lower Tier 1 capital adequacy ratio than their peers (Figure 1). In addition to the lending portfolio risks, the repayment of participation capital and upcoming tighter regulatory requirements warrant a better capitalisation of these banks.

Recently, Austrian property prices soared markedly. In the third quarter of 2012 real prices rose 8.4% (year on year) (Figure 1) and the rise was particularly pronounced in Vienna where they rose by 12.7%. The rise in property prices was however only to a limited degree credit financed. Loans for housing purposes rose 1.7% year on year in the first quarter of 2013.Total household debt remains with about 90% of net disposable income lower than the euro area average (Figure 1). While house price increases are still moderate compared to developments in some other countries before the crisis, the authorities should closely monitor these developments, assess their potential impacts on financial stability and stand ready to tighten macro-prudential tools such as loan-to-value ratios.

Fiscal policy is on an appropriate consolidation path

The general government headline budget deficit was 2.5% of GDP in 2012, slightly up from 2011 but below the target of the 2012 Stability Programme of 3% of GDP. Improvements of public finances of the *Länder* and municipalities were stronger than foreseen, whereas the federal deficit was slightly higher. The latter is mainly due to additional banking support measures, which overall amounted to 0.8% of GDP. Public debt increased slightly from 72.4% of GDP in 2011 to 73.5% of GDP in 2012 and public spending edged up from 50% to 51% of GDP (Table 3).

Table 3. **General government finances**

% of GDP	2008	2009	2010	2011	2012	2012	2013	2014	2015	2016	2017
	OECD data					National data from the 2013 Stability Programme					
General government balance	-1.0	-4.1	-4.5	-2.4	-2.5	-2.5	-2.3	-1.5	-0.6	0.0	0.2
Structural balance	-2.5	-3.6	-2.9	-1.9	-1.1	-1.4	-1.8	-1.3	-0.8	-0.5	-0.4
Primary government balance	1.1	-1.9	-2.3	-0.3	-0.3	0.1	0.3	1.1	1.9	2.4	2.7
Structural primary balance	-0.4	-1.4	-0.8	0.3	1.1						
Total disbursements	49.6	52.8	52.5	50.5	51.2	51.2	51.3	50.4	49.4	48.9	48.6
Total receipts	48.6	48.6	48.1	48.1	48.7	48.7	48.9	48.8	48.8	48.8	48.8
Gross public debt (Maastricht)	64.2	69.4	71.9	72.4	73.5	73.4	73.6	73.0	71.3	69.3	67.0

Source: *OECD Economic Outlook Database* and BMF (2013), Austrian Stability Programme.

To put debt on a declining path after 2013 and reach a balanced budget by 2016, the government adopted a second consolidation programme in early 2012. Over the period 2012-17, further improvements of the structural balance are planned, about two-thirds of it coming from spending restraint.

On the spending side, the consolidation programme envisages savings by bringing the actual retirement age closer to the statutory one, including by imposing stricter eligibility criteria on several subsidised early retirement paths, in particular disability pensions. To cut costs in the public administration, pay and hiring freezes, better management of federal real estate holdings and the merger of small district courts are planned. Savings on the lower government level are envisaged from better targeting subsidies and a health care reform (see below). Along with these saving measures, additional funds for universities, full day care schools, research and development and thermal insulation totalling EUR 6 billion over the period 2012-16 have been made available to stimulate growth. On the revenue side, the main measures include changes in the capital gains tax on real estate, closing tax loopholes in the VAT, a tax hike for high-income earners, and a tax repatriation agreement with Switzerland.

Overall, in structural terms the pace of this consolidation path appears to strike an appropriate balance between debt sustainability and growth considerations. It also brings public finances in line with the provisions of the debt brake. The debt brake specifies that, as of 2017, the general government structural deficit may not exceed 0.45% of GDP and that, starting from 2017, if accumulated structural deviations from the target exceed 1.25% of GDP on the federal level or 0.35% of GDP on the lower government level, a deficit reduction plan has to be initiated. The authorities should adhere to the structural consolidation path, refrain from election-related spending increases or tax cuts and implement all planned measures to preserve fiscal credibility. The automatic stabilisers can be allowed to operate freely.

The second stage of the implementation of comprehensive fiscal framework reforms began in 2013, including most importantly the introduction of performance budgeting (see below) and regularly updated long-term public spending projections. As described in the chapter on medium-term fiscal policy in the *2009 Economic Survey of Austria* the first stage of fiscal framework reforms, implemented in 2009, consisted inter alia of legally binding medium-term expenditure ceilings covering about 75% of central government outlays and created saving incentives for line ministries by allowing the carry-over of unspent funds from one year to the next.

Fiscal risks and long-term spending pressures remain

The additional revenues from some consolidation measures are highly uncertain. For instance, extra revenues from the tax repatriation agreement with Switzerland, budgeted at EUR 1 billion in 2013, depend on individual uptake which is hard to predict. In addition, the budget assumes revenues of EUR 500 million a year from 2014 from the proposed European financial transaction tax, although the tax is not yet in place. On the spending side, some uncertainty exists around the implemented and planned measures to increase the actual retirement age and to better target subsidies and measures on the lower government level are not sufficiently specified. Furthermore, additional support measures for the banking sector might be necessary and pose a risk for fiscal outcomes. Fiscal risks also stem from general government public guarantees (for banking support, state enterprises and export credits) and off-budget debt (mainly in state-owned enterprises), which have reached EUR 194 billion (63% of GDP) and EUR 33 billion (11% of GDP), respectively (Schratzenstaller, 2013)

In the long-term, fiscal pressures will arise from population ageing, mainly affecting pension and health spending. Baseline OECD projections (not yet including the changes in pension parameters introduced in 2012) suggest that the share of public pension spending in GDP, currently 12% of GDP, will rise to around 14% after 2030. The most recent official projections of the Austrian government confirm an expected increase of 2 percentage points between 2011 and 2030 (BMF, 2013). Policymakers have some leverage on pension spending, for example by increasing pensions less than inflation, as will be done in 2013 and 2014, and by refining contribution and benefit parameters. The parameters subject to the largest uncertainty, however, are the employment rates of older workers and the distribution between full-time and part-time work, neither of which are under direct policy control. Government projections assume favourable developments in both areas, i.e. a higher average effective retirement age and an increased labour force participation of the 55-64 years old.

Government projections foresee an increase in public health spending from 7.0% of GDP in 2011 to 8.0% in 2030 and 8.8% in 2050 (BMF, 2013). Projections assume that additional years of life expectancy will be spent in good health, and non-demographic factors (relative prices of medical goods and services and technological innovation) will not inflate spending from 2020 onwards. Austria's policymakers have tools at their disposal to cap health spending in the short-term but experience shows that spending targets are subject to upward pressures in the long-term. Users have relatively unconstrained access to health services and goods, and spending is driven by demographic, health technology and medical price trends which have proved difficult to control, as outlined in the chapter on the health-care system of the *2011 Economic Survey* (OECD, 2011). Taking into account these uncertainties, the Ministry of Finance has produced a cost containment scenario (with expenditures rising to 7.3% of GDP in 2030 but then declining to 6.9% in 2050) and a high

spending scenario (expenditures are to reach 9.6% of GDP in 2030 and 12.6% in 2050). Response measures should be prepared in case total public spending trends diverge from the official baseline.

Box 1. **Main policy recommendations on fiscal policy and financial markets**

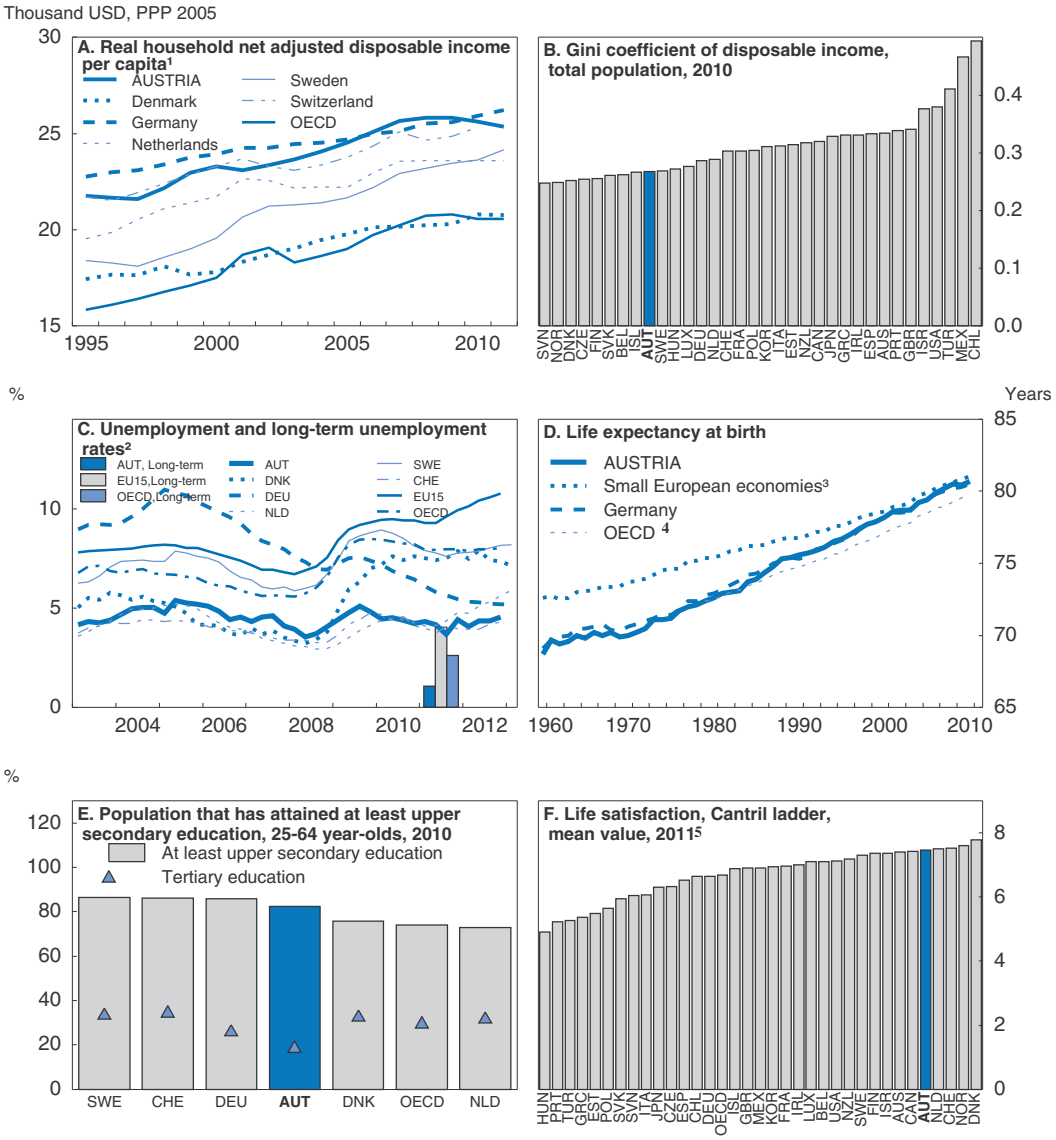
- Let automatic stabilisers operate freely around the announced structural consolidation path towards a balanced budget.
- Internationally active banks should be required to present clear strategies to strengthen their capital base taking into account the need to repay government capital. The restructuring of the nationalised banks should be pursued.
- Prepare response measures to be implemented if total public spending trends diverge from the official baseline.

Austria's well-being model draws on specific economic and social features

Overall, Austria has achieved a remarkable level of well-being. Strong gains in material living standards have been accompanied by social cohesion and gains in leisure time, especially time spent in retirement. Particularly remarkable for a small open economy has been the degree of stability, which may have contributed to Austria's high quality of life. Strong public and family services have played a role as well. Following the OECD's *How's Life* (OECD, 2011d) framework, well-being outcomes along the proposed 11 dimensions can be summarised as follows (Figures 2 and 3; for details see Chapter 1):

- *Income:* GDP per capita growth over the past decades translated into decisive improvements in household disposable incomes, while significant redistribution has ensured low inequality and poverty.
- *Jobs:* The unemployment rate is low and satisfaction with working conditions is generally high, which may reflect high average earnings combined with high job stability. Still, the labour market has weaknesses. Older, unskilled workers, in particular those with migrant background, have lower labour market attachments, as detailed in past *OECD Economic Surveys* (OECD, 2011, 2009). The intensity of female labour force participation appears to be hampered by difficulties to reconcile work and family obligations and the gender pay gap is relatively high and persistent in Austria.
- *Housing:* Gains in living standards also manifest themselves in good housing conditions overall and housing remains broadly affordable thanks in particular to a large and generously subsidised social and co-operative housing sector.
- *Health:* Health outcomes have improved considerably, but fall somewhat short of what can be expected given the scale of public resources devoted to the sector, as analysed in the chapter on health in the *2011 OECD Economic Survey* (OECD, 2011). Health outcomes vary widely with socio-economic background because of different life-style choices and prevention practices.
- *Education:* Austria's educational system and in particular its vocational training system, has been one of the backbones of strong productivity growth and low youth unemployment. However, university graduation rates fall behind international benchmarks and weaknesses exist in the ability of the education system to provide equal opportunities for all youth, as analysed in the chapter on education in the

Figure 2. **Well-being outcomes are remarkable**



1. Households include non-profit institutions serving households. Actual individual consumption of households is used as deflator.
2. Long-term unemployment rate refers to unemployment of one year and over.
3. Arithmetic average of other small European high income economies: Denmark, the Netherlands, Sweden and Switzerland.
4. Arithmetic average over OECD countries.
5. The Cantril ladder is measured on a scale from 0 to 10. Data refer to 2008 for Iceland and Norway; 2009 for Switzerland; and 2010 for Chile, Israel and Brazil.

Source: *OECD National Accounts Database*; *OECD Income Distribution and Poverty Database*; *OECD Economic Outlook Database*; *OECD Labour Force Statistics Database*; *OECD Health Statistics Database* and OECD calculations; OECD (2012), *Education at a Glance*; OECD (2012), *Closing the Gender Gap: Act Now*; Gallup World Poll.

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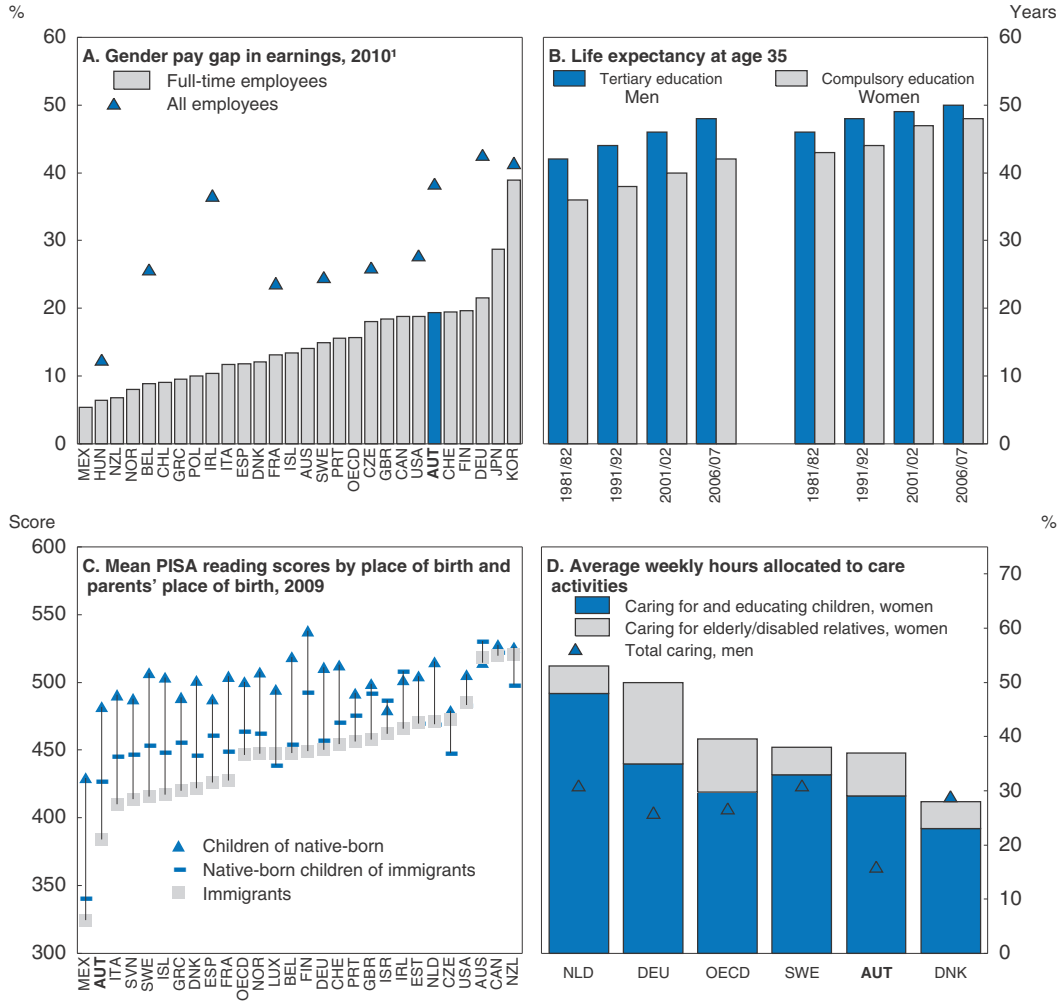
2009 OECD Economic Survey. Test outcomes vary significantly with socio-economic background, with students from some migrant backgrounds faring particularly poorly.

- *Work-Life Balance:* Working hours per day are longer than in other Western European countries, but periods out of work are also longer. Traditional gender roles have been more persistent than in other countries.

Figure 3. **Inequalities exist in several well-being areas**



Note: The wage gap is defined as the difference between male and female median wages divided by male median wages. Earnings used in the calculation refer to gross earnings of wage and salary earners excluding self-employed women and unpaid family workers. Data refer to 2009 (instead of 2010) for Austria, the Czech Republic, Denmark, Finland, Germany, Ireland, Israel, Korea, Sweden and Switzerland; to 2008 for Belgium, France, Greece, Iceland, Italy, Poland, Portugal and Spain. The values for the OECD are calculated as an unweighted average excluding Mexico and Chile.

Source: OECD (2012), *Closing the Gender Gap: Act Now*; Statistics Austria; OECD, *Settling In: OECD Indicators of Immigrant Integration* 2012; OECD (2011), *How's Life? Measuring well-being*.

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- *Social connections:* Social capital seems to be formed more locally in Austria, with well functioning social support networks among friends and family. In contrast, general trust in others in the society is not particularly high.
- *Civic engagement and governance*: Civic engagement and the degree of trust in public institutions appears to be similar to other OECD countries.
- *Personal Security:* Personal security/safety is high, as Austria has low levels of crime.
- *Environment:* Austria possesses rich natural assets and water and air quality is good. However, the negative effects of urban sprawl are becoming a concern and local concentrations of some air pollutants may be threatening health outcomes.
- *Subjective well-being:* Subjective well-being is high regardless of whether one considers life satisfaction, "affect balance" (the share of respondents who report having

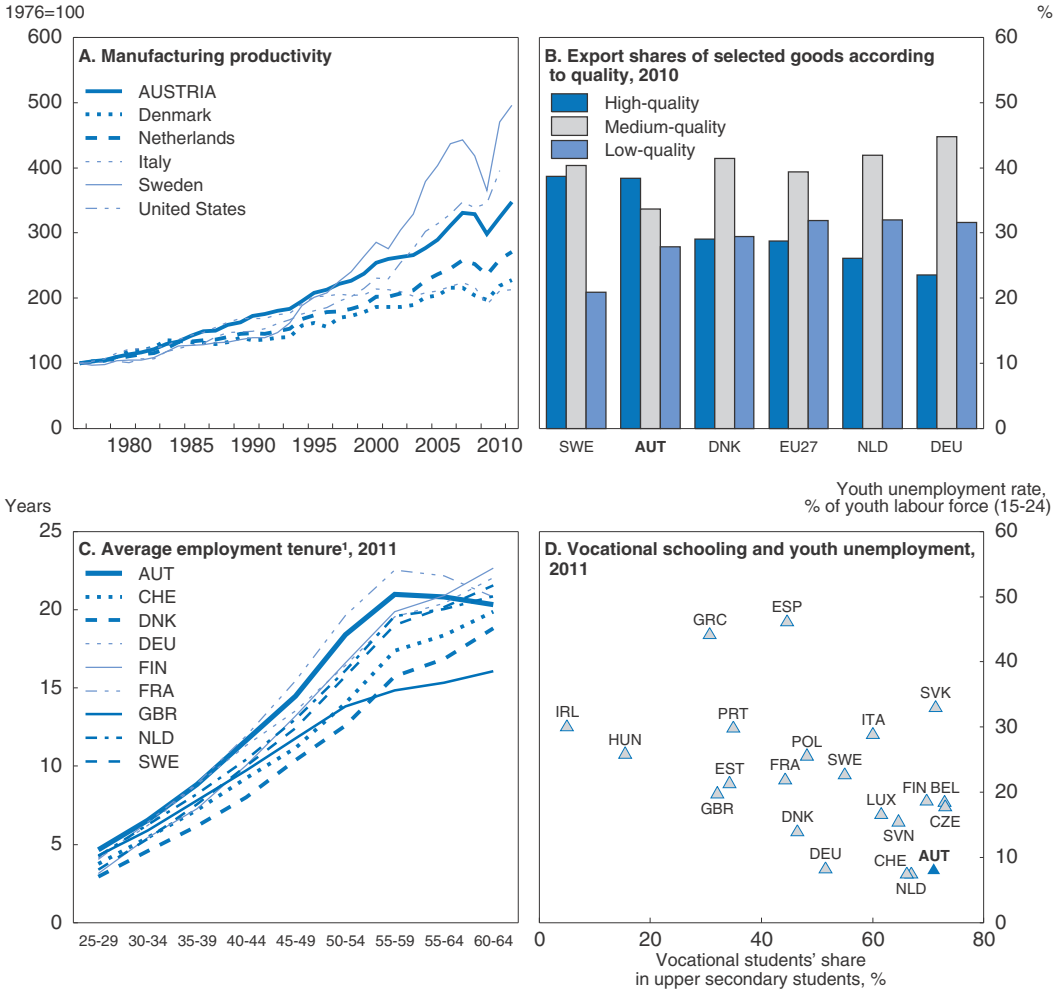
experienced more positive than negative emotions on the previous day) or "flourishing" (the set of potential and actual achievements that are available to an individual).

Outcomes along different dimensions of well-being are correlated and certain groups in the population tend to cumulate multiple disadvantages at the same time. Single parents and people with migrant background do not seem to have participated to the same degree as others in well-being gains. The gaps experienced by immigrants are in several dimensions larger than in the average OECD country.

Three economic and social features appear to have played a mutually reinforcing role in Austrian well-being (Chapter 1):

1. *Reconciling strong productivity growth with stable employment structures*. Strong productivity growth within established enterprise structures, good long-term labour relations, and stable geographical settlement patterns have been important (Figure 4). Domestically

Figure 4. **Productivity growth based on stable and vocational intensive employment**



1. Job tenure is measured by the length of time workers have been in their current or main job or with their current employer.

Source: OECD STAN Database; WIFO (2012), *Bildung 2025: Die Rolle von Bildung in der österreichischen Wirtschaft*; OECD, *Labour Force Statistics Database*; OECD, *Education at a Glance* 2012; OECD, *Employment and Labour Market Statistics Database*.

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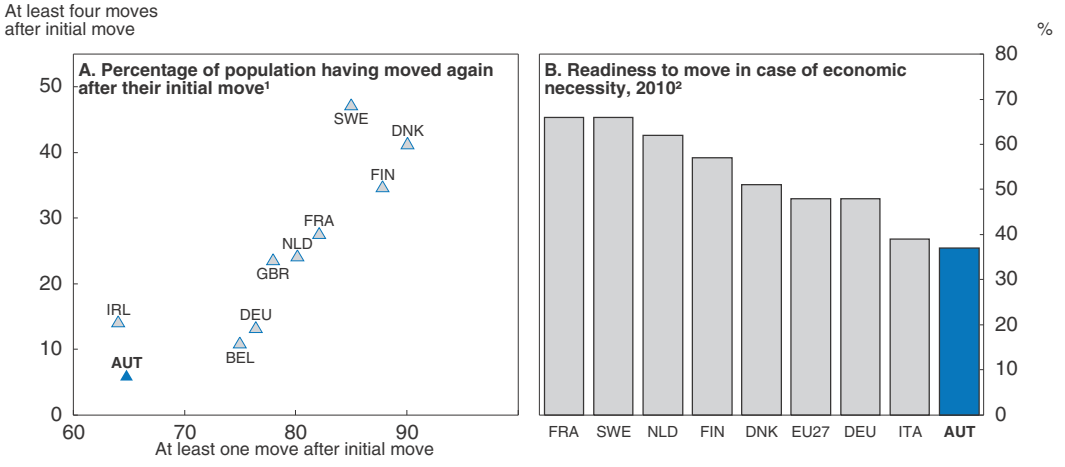
owned, trade-exposed manufacturing is largely based on medium-size and family owned firms, which achieve high productivity, generate high income and provide long-tenure jobs. Social partnership arrangements among employers, workers and farmers have helped keep real wage growth in line with productivity and have actively promoted human capital accumulation and technological change. Long-tenure jobs do not conflict with occupational flexibility within enterprises.

2. *Families providing intensive services to members, backed by local social capital*. The role of families, especially of women, in the care of young children and dependant elderly is particularly high in Austria, and families also play an important role in education. Public policies facilitate this pattern by offering family benefits in cash forms. The stability of living places supports these traditional family roles (Figure 5). The flip side is an increasing tension between work and family responsibilities for women, in particular if they wish to follow full-time employment careers. Furthermore, families with migrant background and low human capital find it difficult to provide similar education services for their children.
3. *Public governance based on federalism and social partnership*. The public sector is complex and costly, but delivers high quality services appreciated by the population (Figure 6). Large social expenditures help reduce income inequalities. Public governance draws on the unique social partnership system.

These features – however successful in the past – are, nevertheless, exposed to intensifying tensions today and their sustainability cannot be taken for granted. Sustainability challenges arise from demographic developments, environmental trends, and globalisation.

Figure 5. **Living patterns remain very stable**



Note: Internationally comparable mobility data is usually presented in terms of number of moves after initial move out of the parents' house.

1. With at least one of the four moves to another city. The initial move out of parents' house is not counted.
2. Percentage of responses to the question, "If you were unemployed and had difficulties finding a job here, would you be ready to move to another region or country to find one?".

Source: EC, Eurobarometer 64.1, "Mobility, Food Risk, Smoking, AIDS Prevention, and Medical Errors", September-October 2005; EC, Special Eurobarometer 337, *Geographical and labour market mobility*, June 2010.

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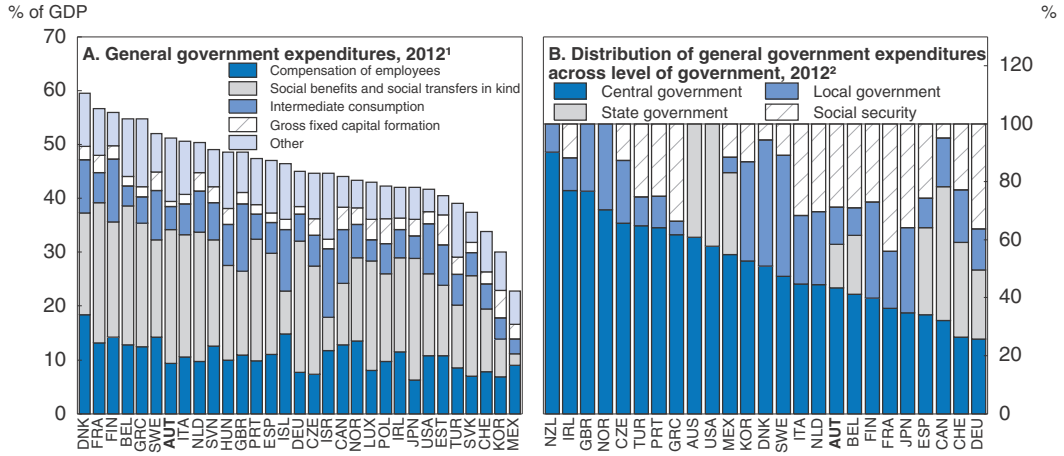
Figure 6. **Public expenditures are large and have a complex structure**



1. 2010 for Canada, Korea and Turkey; 2011 for Israel, Japan, Mexico, Switzerland and the United States.
2. 2010 for Canada, Korea, New Zealand and Turkey; 2011 for Australia, Japan, Switzerland, Mexico and the United States.

Source: OECD, *National Accounts at a Glance Database*; OECD, *National Accounts Database*.

StatLink http://dx.doi.org/10.1787/888932856171

Demographic changes: Achieving sustainable work-life balances for all

Demographic changes raise challenges for Austrian well-being in three main areas: *i)* the ageing of the population challenges the sustainability of the retirement and pension system; *ii)* rising female labour force participation strengthens the demand for policies to be implemented to support the reconciliation of work and care responsibilities; and *iii)* the large weight of immigrant groups with low human capital calls for adjustments in the channels of human capital formation and transmission of social capital.

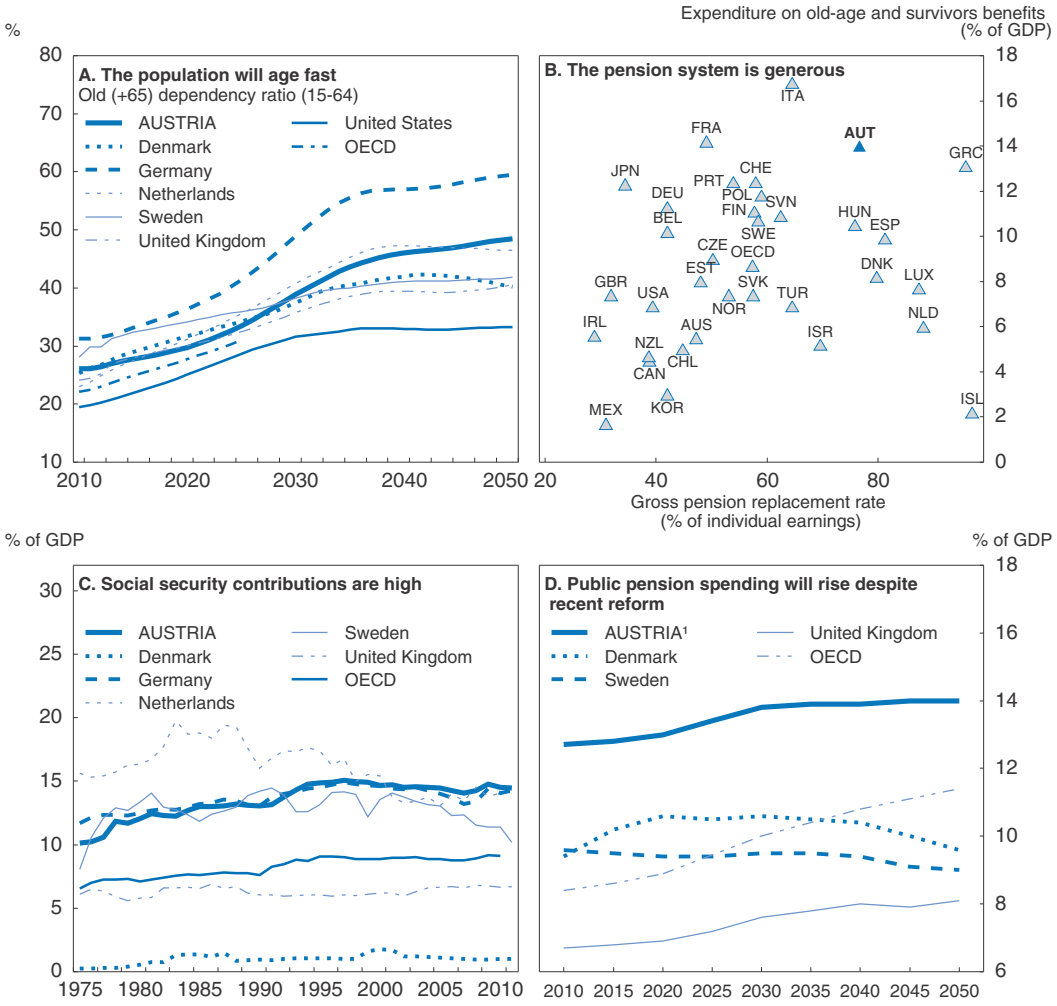
Labour force participation and retirement in an ageing society: Reconciling sustainability and choice

Long and healthy retirement periods funded by public pensions have been a major ingredient of Austrian well-being to date, for those retiring voluntarily. These benefits are becoming increasingly more costly to sustain with the ageing of the population, as the retirement benefits enjoyed by cohorts retiring up till the 2000s have been highly favourable relative to their life-time contributions. These tensions became more transparent in the 2000s and triggered a series of pension and health care reforms.

Sustainability calculations assume 20 years or more in retirement, under full public health insurance. In a society where the proportion of people above 65 currently represents 25% of people aged between 15-64 and will soar to 50% by 2050, the pension system is therefore both a core source of individual well-being and a major source of fiscal costs. Projections before adjustments in pension parameters in 2012 suggest that the share of public pension spending in GDP, which is already above 12%, is projected to reach 14% of GDP by 2030 and stabilise at about that level until 2050-60, one of the highest spending shares in the OECD (Figure 7).

A fundamental redesign of the pension system in 2005 unified the previously fragmented retirement schemes and re-set contribution and benefit parameters, with higher minimum retirement ages (formally for women and *de facto* for men) and longer

Figure 7. **There are strong demographic pressures on the pension system**



1. Pension spending projections for Austria do not take into account the adjustments in pension parameters introduced in 2012.

Source: OECD, *Historical population data and projections (1950-2050) Database*; *OECD Pensions Outlook 2012*; *OECD Social Expenditure (SOCX) Database*; OECD, *Revenues Statistics Database* ; OECD, *Pensions At A Glance 2011*: Retirement-income systems in OECD and G20 countries.

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contribution periods. The public pension scheme will remain the principal revenue source for future retirees, with high contribution rates when in activity (23% of gross wages) and high replacement rates in retirement (80% of average earnings in the best 40 years of activity, covering practically the entire working life). The reform is being phased in gradually from 2005 on for the cohorts born in 1987 and younger, while the pre-reform entitlements of the cohorts born between 1955 and 1986 will be credited to the new pension accounts (see below) by 2014.

According to recent OECD analysis in *Pensions at a Glance* (OECD, 2011), the Austrian pension reform is broadly in line with international standards, does not unduly penalise working at old age, and – notwithstanding remaining loopholes to early retirement – does not excessively encourage early retirement. Further parametric adjustments are however

desirable, such as a more rapid increase of the statutory retirement age for women (OECD, 2004a). Furthermore, raising the penalty for early retirement from the present 5.1% loss in benefits for each year of early retirement to above 6% is advisable (OECD, 2011). The OECD has welcomed the creation of individual pension accounts, which will allow benefits to be managed in line with contributions (OECD, 2005; OECD, 2011b). A Pension Commission with representatives from political parties, social partners, pensioner associations and experts was established to make proposals, every three years, for adjustments in contribution and benefit parameters in order to secure the long-term sustainability of the system. Its next report is due for autumn 2013.

While the pensions policy framework is today on a sound foundation, it continues to display certain important uncertainties and shortcomings. Additional action is required in the following areas:

- *Enhancing the transparency of the redistributive and contribution-related elements*. The still complex system, including the modalities of phasing-in of reforms, results in potentially high cross-subsidisation across cohorts, professional groups, income categories, married and single contributors, and survivors. To improve the evidence base for future pension measures, "redistributive" and "deferred saving" elements should be calculated. The Pension Commission should be mandated with this task.
- *Closing undue loopholes to early retirement*. In 2010, only 28% of new pensioners took the regular route to old-age pension, whereas 31% were granted a disability pension, and 41% benefitted from other early retirement schemes. Measures were taken to improve the labour force participation of older workers at the time of the pension reform, including amendments in the disability, heavy work and part-time work rules. The share of employed older workers increased as a result, but remains comparatively low. These new policies should be fully implemented and the development of the effective retirement age should be closely monitored so as to take appropriate measures if the gap between the effective and the statutory retirement age persists.
- *Improving employment opportunities for older workers*. The labour force participation rate of older workers remains low, in part because of dissatisfaction with working conditions (Chamber of Labour, 2009). Involuntary withdrawals from the labour force hamper individual well-being and thwart economic and fiscal performance. Measures taken to improve job prospects during the last decade at different government layers (Federal government, *Länder* governments, Social Security Institutions) should be developed as a package (OECD, 2004a and OECD, 2012f). High seniority-based wage increases in collective agreements also remain an obstacle to the employment of older workers in those cases where their costs exceed their productivity.
- *Strengthening the mandate of the Pension Commission to better take into account rising life expectancy*. Contribution and benefit parameters are supposed to be adjusted to reflect changes in life expectancy, but this adjustment has not been systematically implemented to date. The sustainability mechanism should be reformed on the basis of a clearly defined set of indicators and fully take into account changes in life expectancy.

The health care system will also come under pressure from ageing. The chapter on Austria's health system in the *2011 Economic Survey* provided a thorough review, pointing to its high appreciation by the population, but also its excessively high cost. It recommended aligning the fragmented financing, spending and provision responsibilities between the federal government, *Länder* and health insurance institutions. Integration of preventive,

curative and post-hospitalisation services is necessary for cost savings and quality gains. Co-ordination with "non health service" areas, such as life-styles and diets is also crucial. These co-ordination needs are relevant in an ageing society, notably in areas of mental health and increasing forms of dependence (for example Alzheimer disease). The policy framework should stimulate more innovative, less segmented and lower cost health services.

Box 2. **Main policy recommendations on ageing and retirement policy**

- Identify and reduce all remaining obstacles to the employment of older workers and close the remaining loopholes into early retirement.
- The Pension Commission should be mandated to better reflect changes in life expectancy in the sustainability mechanisms of the pension system. It should also calculate "deferred saving" and "redistributive" elements between cohorts in order to improve the evidence basis for future measures.
- Pension transfers serving social goals should be funded from transparent sources, minimising opaque cross-subsidies within the system. The future fiscal cost of the pension system should be assessed and controlled in the light of this analysis.

Female labour force participation and family policies: balancing family and work obligations

The balance between work and family responsibilities will continue to shape material sources of well-being, equality of opportunity for both genders, and family life patterns. The evolution of fertility will also depend on the way work and family responsibilities are reconciled.

Austria has a relatively high female labour force participation rate at 67%, against the OECD average of 57%, but this is below countries such as Sweden, Switzerland, Denmark and the Netherlands. In couple families, the standard employment pattern is one full-time and one part-time worker, as the majority of women combine family responsibilities with part-time work. This pattern faces sustainability challenges, however, for two reasons: *i*) strains between work and family responsibilities remain high, even for women working part-time (Eurobarometer, 2012); and *ii*) as women become better educated, their desire to work full-time increases, as does the opportunity cost of not doing so. Families need to find new ways of reconciling work and care responsibilities, including by rearranging gender roles. New policy initiatives, including a National Action Plan for Gender Equality in the Labour Market introduced in 2010, and a Charter for a Better Reconciliation of Family and Work adopted in 2012 aim at addressing these challenges (Chapter 2).

Labour force participation and choice between full-time and part-time work – for both genders- is subject to trade-offs between different dimensions of well being (material sources of well-being on one hand, and family time and leisure on the other hand). Low female labour force participation has costs in terms of lower family income, foregone GDP growth and gender equality. On the other hand, if reflecting a fully deliberate choice on how to balance work and family obligations, both men and women spending more time with the family could also have well-being advantages.

Growth projections range between 1.5% and 2.1% per annum until 2030, according to alternative paths of female labour force participation (Table 4).

Table 4. **Growth under different scenarios of labour force participation (2011-30)**

	Projected average annual growth rate in GDP per capita (USD 2005 PPP, percentage, 2011-30		
	No change in present labour force participation rates (LFPR)	Male and female LFPR gap reduced by 50%, by 2030	Male and female LFPR gap reduced by 100%, by 2030
Austria	**1.5**	**1.8**	**2.1**
Denmark	1.2	1.4	1.5
Finland	1.9	2.0	2.2
Germany	1.6	1.8	2.1
Netherlands	1.6	1.9	2.1
Sweden	1.9	2.1	2.2
Switzerland	1.9	2.2	2.4
United Kingdom	1.4	1.7	1.9
United States	1.7	1.9	2.2
OECD	1.8	2.1	2.4

Source: OECD (2012), *Closing the Gender Gap*.

Austria provides significant support to families with child and elderly care responsibilities. Family benefits accounted for about 3% of GDP in 2009, compared to the OECD average of 2.6% (OECD, 2013). The share dedicated to young children and institutional care remains lower than in comparable countries, while benefits last longer. Support to old-age dependent care is also one of the most generous in the OECD, with 1.5% of GDP, and is expected to claim more fiscal resources in the future (Eurocentre, 2013). The organisation of these policies is complex: cash transfers (via a variety of means-tested and non means-tested schemes) are granted by the federal government, subsidised in-kind care facilities for old-age dependants mostly by the Länder, and child care facilities mostly by municipalities.

From the perspective of maximising well-being, public policies should help family members combine work and family responsibilities according to their preferences. The availability of high quality external care for children and the elderly is crucial in this regard. Despite efforts at Federal, Länder and municipal levels, these services are currently not available at the required degree of accessibility and affordability (OECD, 2012b). Enterprises are also expected to contribute to better work-family balances in the future. The success of the voluntary "Work and Family Audits", which help companies develop a family friendly corporate culture, is evidence of the commitment of firms. Such audits are being extended to small-and-medium sized enterprises and to hospitals and nursing homes, which employ large proportions of female workers.

Subsidies to kindergarten help keep their fees low, but constraints on opening hours and accessibility in holiday periods are difficult to reconcile with full-time employment for both parents. The entry of new providers, additional capacity from existing providers and service innovations in this sector would facilitate families' work-life balances. Further attention is necessary to make sure that entry barriers for providers are not higher than necessary to maintain high quality standards.

Family support is generally provided in forms permitting families to organise care needs according to their preferences – even if complex interactions between income-

contingent child benefits and direct subsidies to care providers make it difficult to pin down the actual degree of neutrality (see Chapter 2 for a detailed discussion). In all instances, the neutrality of the policy framework has not proven sufficient to date to improve gender balances in care responsibilities within families (OECD, 2013c). New policy initiatives have been introduced to support the re-balancing of care responsibilities within families and foster the engagement of male family members (Chapter 2).

Free choices between internal and external care may be altered by public policies for good reasons. For example, there is a legitimate case in favour of external care for children above 2 years old, given the benefits for their development from socialisation – notably for the children of disadvantaged families (OECD, 2011c). As a result of recent policy emphasis, the enrolment rate of children above 2 in institutional care has now reached international standards (see Annex A1 for details). In contrast, the case for institutional care for children under two years is more open to discussion and should continue to be evaluated (OECD, 2011c; OECD, 2004b; US Committee on Integrating the Science of Early Childhood Development, 2000). Austria has different policies for children below and those above 2. Parental leave entitlements and child subsidies are capped when children are aged 2-2½, and subsidised external care is made more broadly available above that age. External care for children below 2 is available mainly on a part-time basis and supply falls short of demand. Parents who opt for shorter periods of parental leave often lack adequate care facilities.

A comprehensive analysis of current instruments to balance work and family responsibilities would help with a systematic assessment of their fiscal costs to the government and well-being outcomes for families, children and dependant elderly. Improving transparency would contribute to the long-term fiscal management of family policies, and help direct spending toward families most in need via the most well-being enhancing instruments.

Box 3 outlines recommendations in this area, drawing on the comprehensive recent OECD project "Closing the Gender Gap" and the last *OECD Economic Survey of Austria* (OECD, 2012a; OECD, 2012b; OECD, 2011).

Box 3. **Main policy recommendations for improving families' work-life balances**

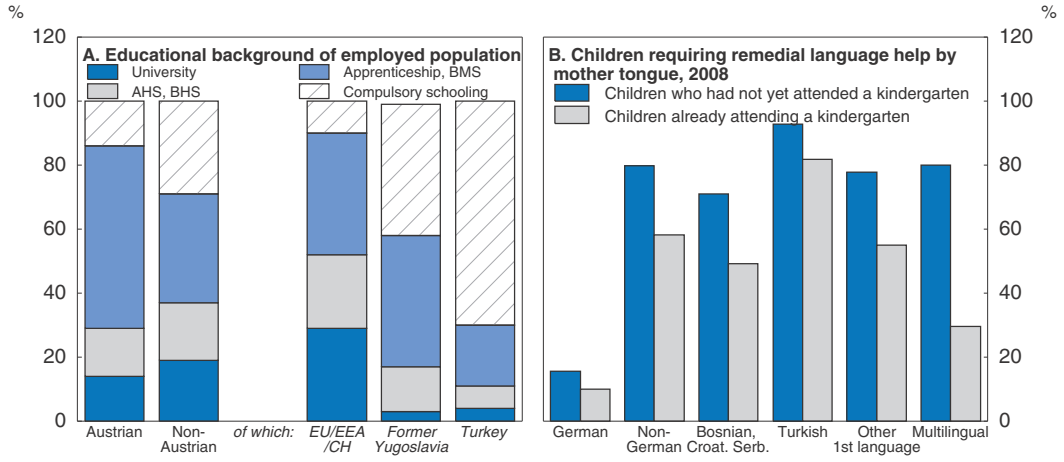
- To make parents' choice between in-house and external care feasible, make high quality external care available for children at all ages, including in rural areas. Improve the compatibility of child care services with parents' work hours and conditions.
- For very young children, combine existing cash benefits with affordable and accessible external child care. For older children at pre-school age, continue to give policy preference to high quality institutional care.
- Keep the regulatory framework open for new providers and capacity growth in child care and elderly care, under proper quality and security regulations. Subsidies to these services should be granted on a level-playing field between public, non-profit and commercial providers to stimulate competition and innovation.
- Analyse the full range of policies to help balance work and family responsibilities. Evaluate outcomes against fiscal costs. Focus policies on the most effective instruments.

Improving the quality of education for people with migrant background and low human capital

People with a migrant background now represent 19% of the population and the share is steadily growing. Nearly one third of them were born in Austria as the children of immigrants (second generation). The largest group of first generation immigrants is from Germany (23%), followed by people from former Yugoslavia (22%) and Turkey (19%), with the latter having a higher share among second generation migrants. The proportion of the population with a migrant background is projected to increase in the coming decades assuming constant immigration and birth rates.

Immigration contributes importantly to Austrian well-being by supporting labour force growth and adding to the skill supply (OECD, 2011b). A recent in-depth OECD analysis of the labour market integration of immigrants concluded that there has been significant progress in Austria's integration framework over the past few years, but policies still lag behind those of other OECD countries (OECD, 2012). The recent creation of a Secretariat of State in charge of integration issues has been an important step forward. This section addresses only the education challenges of children of families with migrant background and low human capital. Given the important role of the family-based education and human capital building (including good health care practices – see the *2011 OECD Economic Survey*) in Austria, the starting gaps of such families perpetuate across generations and undermine the integration of their young members in the Austrian well-being model (Figure 8).

Figure 8. **Migrants' human capital gaps remain significant**



Source: Statistics Austria, *Migration and Integration 2012*.

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A recent survey by Statistik Austria (Statistik Austria, 2012) finds that some children who do not use German at home begin their education in a special school (*Sonderschule*, intended for children with disabilities), rather than in a standard elementary school. Nearly 30% of all pupils in special schools came from non-German speaking families in 2011. Furthermore, children with a migrant background constitute a high proportion (28%) of pupils in "non-academic lower secondary" schools. The quality of these schools in rural areas and small towns is good, but is admittedly lower in large urban areas where migrants

are concentrated. The proportion of migrants attending schools providing a university entrance qualification is also below average. High drop-out rates from the education system is another area of divergence. Nearly 15% of pupils who do not speak German at home and completed their 8th grade in 2010, did not continue their education. Only 4% of their German-speaking peers were in this situation. These educational handicaps of migrant families are a source of accumulated well-being disadvantages.

Policymakers have taken important initiatives in this area, as reviewed by an in-depth OECD investigation on the education of immigrants (OECD, 2011b):

i) Offering high quality early child care support. These efforts focus on improving language capabilities from a very early age, both in German and in the mother tongue. Exposure to an environment where both good quality mother tongue and German are practiced and taught appear essential for children's linguistic and mental development (OECD, 2012g). However, offering such support has not proven easy. Adequate professional capacities in the kindergarten, and co-operation by families themselves are both critical for success, but are not always available. More weight is now put on linguistic abilities in "fit for school" tests before children's entry into primary school, to direct pupils with inadequate linguistic abilities to an additional pre-school preparation year.

ii) Another key goal has been to make schools more inclusive in the subsequent stages of education, as discussed in the chapter on education of the *2009 OECD Economic Survey of Austria*. The objective is to eliminate excessively early tracking of students before they have developed their full potential, which is particularly important for the children of immigrant families. One planned instrument is to upgrade non-academic lower-secondary schools into higher quality *Neue Mittelschule*. These will be generalised by 2018 and are intended to provide graduates aged 14 better access to higher education opportunities (see Annex A1 for more details). Successful upgrading of non-academic lower-secondary schools in urban areas might require additional pedagogical and material resources. On the other hand, currently only few academic lower secondary schools adopt the *Neue Mittelschule*. Ways should be explored to broaden this welcome initiative.

iii) Curbing early drop-out rates is also a key target. The proportion of school drop-outs in Austria is lower than the EU average for natives, but higher for migrants. New initiatives included youth and apprentice coaching, free-of-charge programmes to provide qualifications to pupils who have not completed schooling (second-chance education), and training guarantees for students who have not found company based apprenticeships (by training them in dedicated public facilities). Early results from these initiatives are encouraging. Between 2007-2010, Austria succeeded in reducing the average school drop-out rates more than in the other EU countries (despite starting from a lower average level) and reduced the rates for migrant children – while these rates increased in the EU (EC, 2012).

iv) More actively involving immigrant groups in public policy efforts, for instance through inclusion in social partnership institutions which play an important role in the policy debate, could facilitate a more effective communication with such groups and ease their participation in human capital strengthening programmes through a better understanding of what is expected from families. Best practices from OECD countries suggest that programmes which provide education and integration support to migrant

children are more effective when they are administered in close co-operation with beneficiary groups, including in dedicated facilities open to parents (OECD, 2012g).

Box 4. **Main policy recommendations for strengthening migrants' human capital**

- Provide migrant children with high quality German language education from a very young age and provide mother tongue support where necessary.
- Transform all non-academic lower-secondary schools into *Neue Mittelschule* by 2018, as planned. Fully enforce their quality standards, including in disadvantaged urban areas. Encourage academic lower secondary institutions to join this welcome intitiative.
- Open social partnership institutions for immigrant groups to enhance immigrant families' awareness and capacities in supporting their children's health, education and other socialisation needs.

Ensuring environmental sustainability

Austria's rich natural asset base, its forests, mountains, biodiversity and natural beauty, as well as the improving air and good water quality, have contributed to the population's high level of well-being. Good environmental quality positively affects life satisfaction (Boarini et al., 2012) and natural assets generate important revenues and employment thanks to a thriving tourism sector. High quality recreation opportunities and satisfactory air and water quality also have positive health effects and thereby increase well-being (e.g. Prüss-Üstün and Corvalán, 2006; Ellaway et al., 2005).

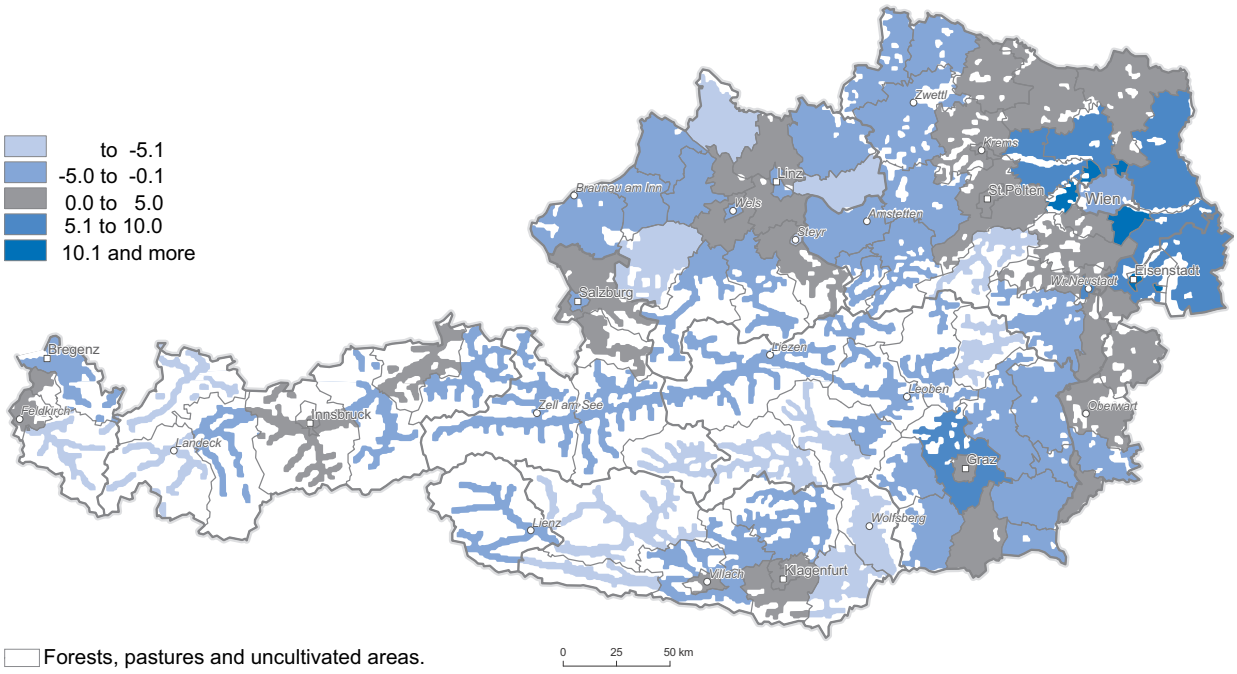
Environmental pressures arise from urban sprawl and a strong increase of road traffic. The rural population is declining, as new employment is mainly created in urban areas, but new housing is mostly built in suburban areas, leading to urban sprawl and more commuting (Figure 9). Higher incomes and the desire to live in larger dwellings have reinforced suburbanisation. Land-use changes due to new built-up area have far outpaced population growth and are far above the national target (Figure 10). The sealed area (paved land, for example) has more than doubled since 1995, increasing the risk of floods and endangering biodiversity. Regional population projections suggest a continued trend of suburbanisation.

Nevertheless, the population living in rural areas is still high in international comparison, which may in part be due to the low residential mobility described above. With declining employment opportunities in rural areas and limited access to public transportation, this has contributed to a rapid increase in car commuting. However, low residential mobility also strengthens local ties, contributing to local social capital (see above and David et al., 2008). Strong social capital may result in both private and social benefits, for example through reduced crime rates (OECD, 2011, Putnam, 2000; Halpern, 2005).

Increased car commuting has coincided with a strong acceleration of road freight traffic, in particular cross-border and transit traffic, owing mainly to Austria's high trade intensity and central location after the fall of the Iron Curtain. Despite declining trends, thanks mainly to better car emission standards, road traffic's contribution to air pollution is significant and concentrations of particulate matters (PM10), ozone and nitrogen dioxide (NO_2) in several urban areas and along transport routes are above national limits set to

Figure 9. **Net internal migration flows**

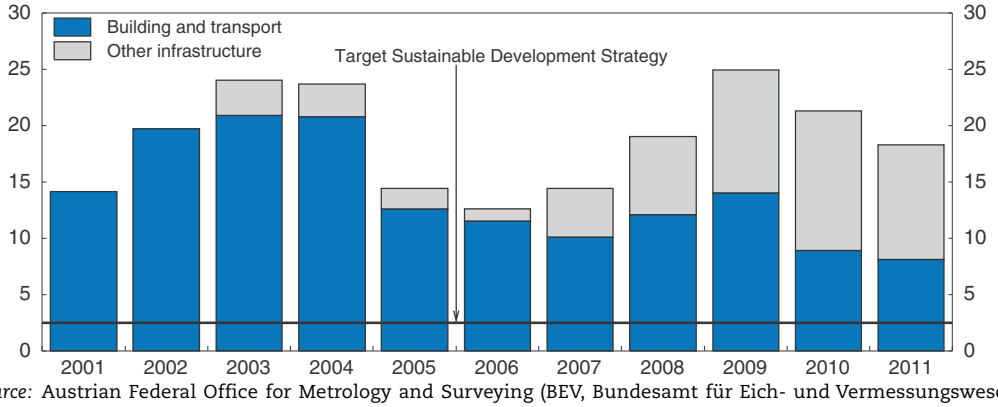
Average 2002-11, per 1 000 inhabitants



Source: Statistics Austria.

Figure 10. **Land-use changes due to new built-up area are above target**

Average annual increase in hectares per day



Source: Austrian Federal Office for Metrology and Surveying (BEV, Bundesamt für Eich- und Vermessungswesen), aggregated by Environment Agency Austria (UBA, Umweltbundesamt).

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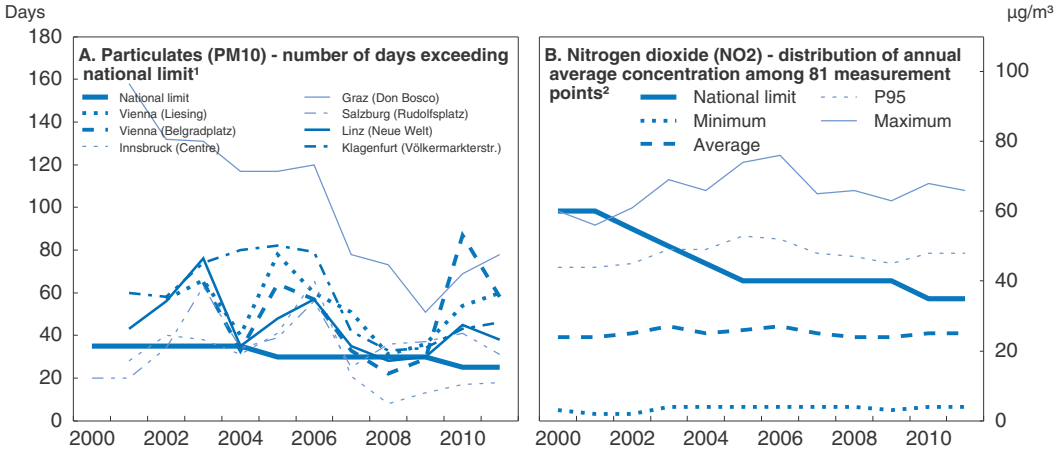
avoid adverse health effects (Figure 11). In addition, road transport is the largest emitter of GHG emissions outside the EU emissions trading system and emissions have increased strongly since the 1990s (Table 5). This is partly due also to fuel sales to non-residents owing to lower taxes than in neighbouring countries. Meeting Austria's EU 2020 GHG reduction targets will be difficult without reducing emissions from road transport.

Turning around these environmental trends will require more appropriate pricing of the externalities associated with transport and better regional development policies to foster denser settlements that are well connected to public transport. This entails a need

Figure 11. **Air pollution**



1. The national limit requires that the daily maximum should not exceed 50 µg/m³ more than 35 (until 2004), 30 (until 2009) and 25 (since 2010) days a year to limit health effects.
2. National limit includes margin of tolerance. From 2012 onwards the national limit is 30 µg/m^3.

Source: Umweltbundesamt (Environment Agency Austria).

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Table 5. **GHG emissions from road transport**

	Change in emissions 1990-2010 (%)	Share in total emissions 1990	Share in total emissions 2010
Freight transport	113	5.5	10.9
Light trucks	35	1.7	2.1
Heavy trucks	147	3.9	8.8
Passenger transport	37	11.8	15.0
Diesel cars	397	1.8	8.2
Petrol cars	-30	9.6	6.2

Source: Umweltbundesamt (Environment Agency Austria).

to strengthen co-ordination between different government layers and better integration of regional development with transport and housing policies to foster policy consistency.

Improving the pricing of road externalities

The government is aware of the environmental pressures arising from increased road traffic and has launched a range of initiatives. Most notable is the *klima:aktiv mobil* initiative, which includes consulting and information campaigns and subsidies for climate friendly mobility projects. The government has recently rolled out its action plan to promote electric cars and more generally electricity based transportation (e-mobility). While these initiatives are welcome, their effects are likely to be visible only in the long-term and a more appropriate pricing of externalities associated with transport would be a more cost-efficient way to reduce externalities. By increasing the costs of car commuting, this would also provide incentives to move closer to the workplace or places with better access to public transportation.

Lower fuel prices compared to neighbouring countries, owing both to lower pre-tax prices but also lower excise taxes, in particular compared to Germany, Italy and Switzerland, contribute to sizeable fuel sales to non-residents. While some emissions are simply diverted from neighbouring countries to Austria, as especially lorry drivers in

transit or cross-border traffic use the opportunity to fill-up their tanks, there are quite likely additional emissions and congestion as a result of extra trips and detours taken exclusively to exploit fuel price differences.

Diesel fuel is taxed at a lower rate than gasoline. Partly as a result, the share of diesel cars in the local fleet has increased sharply. However, local externalities associated with diesel imply higher social costs, mainly owing to more severe pollution, notably through particulate matter. Hence, Austria should increase taxation on diesel fuels above gasoline taxes to better reflect externalities. More generally, Austria should participate in efforts to harmonise fuel taxation at the European level to reduce fuel price competition and assure that each country can price externalities appropriately.

While fuel taxes can address externalities, including congestion, other instruments are more precise. In particular, Austria could extend its system of road and congestion pricing. While congestion is less of a problem in Austrian cities than in comparable European metropolitan areas, traffic does temporarily lead to above-limit local emissions and capacity constraints in cities and areas around urban centres. Lorries and heavy vehicles pay a kilometre-based road toll on motorways and expressways depending on emission class. Passenger cars pay a fixed yearly fee independent of the distance travelled. In addition, there are special tolls for certain roads and tunnels mainly for Alpine passes.

The benefits from congestion and road pricing could be further expanded in Austria by extending distance-based prices to passenger cars and by targeting them in time and geographically. Geographical pricing would take into account the higher social costs of pollution in mountainous areas, where air pollution will frequently be trapped and cause extended exposure (EEA, 2013). Higher user charges at peak hours and in congested areas would give incentives to road users to adapt their daily schedule, spreading the peaks in demand over the day and leading to a more efficient use of road capacity and less demand for infrastructure expansion. Extending road prices in this way should be feasible at relatively low additional costs, as an electronic toll system for trucks is already in place in Austria.

Car use and commuting is subsidised through the tax deductibility of commuting trips and the tax treatment of company cars as a low taxed fringe benefit. Commuting allowances are distance dependent and higher if public transport is not available. Their eligibility has recently been widened to part-time workers. Removing the distorting effects of car usage subsidies, would strengthen the incentives from pricing road externalities to reduce private transportation.

Higher prices for road transport along with fostering competition in rail transport to reap full cost-efficiency gains may also divert more traffic to the train, in line with government goals. In freight transport the share of rail is slightly above 30%, already high in international comparison. However, Austria aims to increase this share to 40% by 2025 (BMVIT, 2012) mainly through a modernisation of the existing rail infrastructure to increase capacity. Fostering competition in railway could help to lead to a more cost-efficient service provision and lower prices. The railway market in Austria was formally liberalised in 1998 and according to the Rail Liberalisation Index (IBM, 2011) the degree of market openness is among the highest in the EU. However, despite progress in recent years, the market share of the incumbent still remains at above 80% in freight and above 90% in passenger transport (IRG, 2013). Open tenders for the provision of transport services under a public contract could help boost competition.

Better integrating regional, transport and housing policies and improving policy coherence

While better pricing of road externalities can help internalise some of the environmental costs of urban sprawl, namely air pollution, noise and congestion associated with car commuting, other costs, such as a loss of natural space and biodiversity, are harder to quantify and price. In this case regulations may be more appropriate, which will call for improving regional development policies to foster denser settlements around urban cores. Denser settlement favours walking or biking, is a prerequisite for the cost-efficient provision of public transport and reduces the loss of natural space and biodiversity. These goals are broadly incorporated in the *Austrian Spatial Development Concept* (ÖREK, 2011). In addition, the Austrian *Sustainable Development Strategy* of 2002 (BMLFUW, 2002) specifies an annual national upper limit for new built-up areas. This target has, however, never been met (Figure 10). This may be due to a lack of co-ordination between the federal level and Länder and municipalities, that are mainly responsible for regional planning.

The national regional development strategy should be complemented with instruments to improve co-ordination between different layers of government. Criteria for priority areas for development could be set out at the federal level, while leaving the responsibility for implementation at lower levels of government. To assure compliance with national targets, regional development plans of lower levels of government could be subject to central government approval as is envisaged in the new national territorial development concept of Luxembourg (see OECD, 2012c).

Better integration of regional planning and transport policies would help to assure that settlement is well connected to public transport. The new comprehensive transport plan (*Gesamtverkehrsplan*, BMVIT, 2012) is an important step in this direction. It suggests that by 2020 50% of all new construction development areas should be within 500 metres of an existing or planned public transport stop. This should be complemented by improved co-ordination of spatial and public transportation planning between regional authorities and especially between central cities and the surrounding municipalities. Provision of (regional) public transportation is mainly the responsibility of municipalities and provision is often not well co-ordinated between municipalities.

Public financing of supply is highly complex and fragmented between different levels of the government. To improve the co-ordination of public transportation supply, a federal fund could be established, similar to the agglomeration fund in Switzerland. Municipalities could compete for the federal funds, the allocation based on rigorous cost-benefit analysis, criteria related to sustainable transport, and spatial planning goals and preference be given to projects that improve inter-regional co-operation.

With effective regional development policies in place, other policies can help increase land supply, in particular in urban areas and agglomeration centres, and strengthen incentives to settle in these areas. The price responsiveness of housing supply is particularly low in Austria compared to other OECD countries (Caldera Sánchez and Johansson, 2011). Low supply responsiveness drives up prices in places with abundant employment opportunities, providing incentives to live further away from workplaces. The large social and co-operative housing market and rent regulations in the private sector may have improved the affordability of housing, but may have also put pressure on expected returns and hence lowered rental supply.

Housing supply could be increased and land hoarding reduced by updating outdated land-values on which property taxes are levied. Raising currently low property tax revenues in this way could also be growth enhancing if the revenues are used to reduce more growth detrimental taxes such as labour taxes, as argued in the *2011 OECD Economic Survey*. To foster demand for housing in urban areas and agglomeration centres, ecological considerations of existing housing subsidies could be strengthened and extended by, for example, differentiating subsidies according to access to public transport.

To strengthen policy coherence and efficiency, the consistency between different subsidies and other polices related to regional development, transport and housing should be reviewed. Trade-offs between different well-being dimensions exist. Housing policies, such as housing subsidies, rent control and social housing, may have increased the affordability of housing. They may have also reinforced low residential mobility which has contributed to stability of living spaces with positive effects on social connections and local social capital (see above). However, by lowering residential mobility, housing policies may have also increased commuting pressures.

Austria also spends a large amount of subsidies on the development of rural spaces. While a large share of these subsidies are tied to environmental goals, such as organic farming or nature preservation, they may have kept a larger share of the population in rural areas, where settlements are more fragmented and the car is the main mode of transportation. It may therefore be useful to conduct a comprehensive study on the interaction and combined impact of these and other policies on overall well-being.

Box 5. **Main policy recommendations to ensure environmental sustainability**

- Better price externalities stemming from road transport. Increase diesel taxes to reflect externalities. Consider extending the road pricing system. Abolish the favourable taxation of company cars and phase out the commuting subsidy.
- Develop instruments to improve co-ordination between the regional, Länder and federal level to promote denser settlements well connected to public transport. To increase land supply in designated areas, raise property taxes by updating land values on which they are levied.
- Review the consistency between different subsidies and other polices related to regional development, transport and housing. Conduct a comprehensive study on the interaction and combined impact of these policies on overall well-being.

Responding to structural changes in the global economy

As discussed in previous *Economic Surveys* (OECD, 2007 and OECD, 2009), changes in the patterns of competition in the global economy may affect the drivers of Austrian well-being through three channels: *i)* Austria's strong position in international manufacturing chains becomes more contestable; *ii)* the service sectors, which have a large share in the economy, need to adapt to a different and considerably more competitive environment; and *iii)* the education system needs to produce more sophisticated and more generic and portable skills. Successfully coping with these challenges would help keep Austria's long-term growth on a strong path and would support both the material sources of well-being and strong and sustainable fiscal resources for public policies.

Changes in global manufacturing chains may imply deeper and more frequent adjustments in the business sector

The circumstances of integration of enterprises in the international economy are changing, including in Austria, as discussed in a chapter on economic integration in the 2007 *Economic Survey* (OECD, 2007). The main areas of change are:

- Production chains are unbundled across borders with deeper vertical specialisation (McKinsey, 2012; Deloitte and Touche, 2012). This development generates a new environment for many medium-sized Austrian enterprises.
- Geographical proximity to one of the three "global industrial nodes" (North America, East Asia and Continental Europe) becomes more important than in the past (Baldwin, 2012). Austria is well placed in this regard. The manufacturing industry draws inputs from Eastern neighbours and is mostly a supplier to German system assemblers (Ragacs et al., 2011). According to recent OECD-WTO *Trade in Value Added* (TIVA) indicators, the imported input content of Austrian exports, at 33% in 2008, has reached one of the highest levels among similar countries. The integration of Austria's exports in downstream global manufacturing chains is also significant (OECD, 2012e).
- Corporate governance of family enterprises may need to be further modernised in this environment, for two reasons. First, joint ventures and mergers with foreign firms become more viable business strategies, calling for formal governance arrangements. Second, generational ownership transmissions will be necessary for one third of family firms within the next ten years (BMWFJ, 2012), requiring formal transmission plans and clearer governance arrangements. According to a recent review, family ownership in Austria has not hindered organisational change so far (Altomonte et al., 2012), but the prevailing high degree of informality in governance may become a handicap in more strategic restructurings (KMU Forschung Austria, 2008).

New firms will likely play a more important role in the reallocation of business assets and labour resources in the future (Andrews and Cingano, 2012). Austria is implementing policies to support R&D and innovation (total R&D spending has reached 2.8% of GDP in 2011) but is not yet fully mobilising its innovation potential. Relative underdevelopment of venture capital is one of the reasons. Venture capital investment represented 0.008% of GDP in 2012 against an EU27 average of 0.024% (EVCA, 2012) and Austria is behind other countries in new enterprise birth rates and business angel networks (Figure 12). More firms should be allowed to emerge and grow at their full potential and the financial sector should further diversify to accompany these transformations (Jud et al., 2013). A range of recent policy initiatives aim at leveraging private venture capital supply – without overcrowding it.

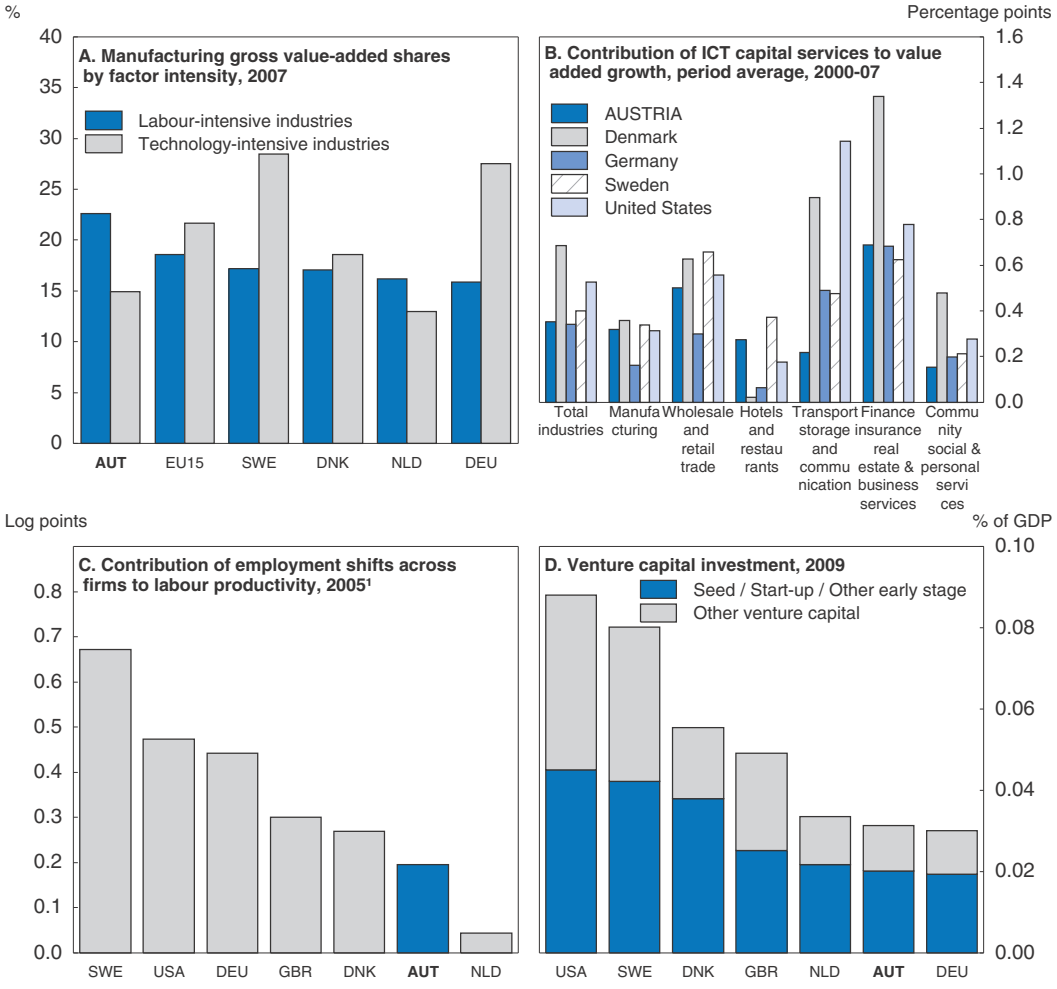
Box 6. **Main policy recommendations for facilitating the adjustment of the business sector to changes in global production chains**

- Promote further the ongoing private sector efforts to formalise the corporate governance arrangements of family-owned firms, including concerning ownership transmissions.
- Venture and other equity capital provision for new firms as promoted by new programmes (*Jungunternehmeroffensive* initiated in 2013) should be encouraged. International expertise in the area of venture capital, private equity and business angel networks should be better diffused (Chapter on product market reforms of the 2007 *Economic Survey*).

Box 6. **Main policy recommendations for facilitating the adjustment of the business sector to changes in global production chains** *(cont.)*

- Austria's and Vienna's favourable geographical position should continue to be built on. Logistical and legal infrastructures servicing global production networks should be adapted to international best practices (Chapter on international integration of the 2007 *Economic Survey*).

Figure 12. **The technological intensity of industry may be falling behind**



1. The figure reports the estimated values of allocative efficiency, as obtained applying decomposition of industry-level productivity developed by Olley and Pakes (1996), "The Dynamics of Productivity in the Telecommunications Equipment Industry", Econometrica, 64(6), pp. 1263-97. Positive values indicate that the actual allocation of employment boosts labour productivity (e.g. by around 50% in the US) compared to a situation where employment is allocated randomly across firms.

Source: WIFO (2012), *Bildung 2025: Die Rolle von Bildung in der österreichischen Wirtschaft*; EUKLEMS, *NACE 1.1 Database* (*www.euklems.net*); D. Andrews and F. Cingano (2012), "Public Policy And Resource Allocation: Evidence From Firms In OECD Countries", *OECD Economics Department Working Papers* No. 996; *OECD Science, Technology and Industry Scoreboard 2011*.

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Adapting service sectors to a more competitive environment

The 2007 and 2009 *Economic Surveys* analysed the sheltered character of service sectors in Austria and highlighted negative impacts on productivity (OECD, 2007; OECD, 2009). Recent analyses further emphasised the links between market structures and service productivity in neighbouring Germany (Coricelli and Wörgötter, 2012) and the same indicators confirm that this type of gaps exist in Austria. Services are less exposed to international competition than manufacturing (with the exception of specific sectors such as tourism and financial services) and many service activities have long been regulated in competition unfriendly ways (OECD 2007, Janger and Schmidt-Dengler 2010). The OECD has regularly recommended to Austria to converge its regulatory framework for services with pro-competitive international best practices (OECD 2012b, EC 2012). Progress has been achieved in recent years, notably after the adoption of a "Horizontal Services Act" to implement the EU Services Directive, but outcomes should be monitored.

More lively competition in services is essential today for two reasons. First, cost-efficient and high quality services are vital for trade exposed manufacturing. OECD-WTO *Trade in Value-Added* (TIVA) indicators confirm that service inputs account already for 50% of the gross value added of Austrian exports. Second, new entries in social services such as child care, elderly care and health care would increase the cost-efficiency and quality of these critical services for well-being.

Box 7. **Main policy recommendations for promoting vibrant services**

(From the chapter on product *market* reforms of the 2007 *Survey* and the 2009 *Survey*)

- Open service sectors to new suppliers while maintaining high quality standards and consumer protection.
- Extend competition law and further strengthen the powers of the competition authority over service sectors.
- Ensure that infrastructures in network industries are accessible to new entrants and value-added service providers at cost efficient levels and competition-friendly conditions.
- Continue to relax restrictive rules in regulated trades and liberal professions to allow more competition.

The education and training system will have to produce more generic and advanced skills

Austria's well-being model has largely drawn on the quality of its vocational education system, but the education system as a whole faces important challenges, as discussed in the chapter on education in the *2009 OECD Economic Survey* (OECD, 2009). A major study on Austria's evolving skill needs concluded that the education system has been responsive to changing skill needs in quantitative terms, but the quality of academic skills falls short of requirements (Bock-Schappelwein et al., 2012). The proportion of students below minimum proficiency levels in international tests has increased, while the share of those reaching the highest proficiency levels has diminished (Janger, 2013). Strong generic skills are particularly needed for systemic, non-incremental innovations in services (Andrews, 2013).

Ambitious education policy measures were introduced in recent years. A compulsory pre-school year and a central upper secondary school leaving examination (to test student competences according to national standards from 2015) are among them. Social partners proposed one additional compulsory, free pre-school year, and compulsory education graduation standards with an emphasis on German, English and Mathematics. Such measures require additional fiscal resources, but room is available for rationalising existing school and class structures and reinvesting freed resources in improving quality (OECD, 2009).

The university system faces serious challenges. Student numbers have expanded without a parallel increase in resources, study years have lengthened, and drop-out rates are very high. Efforts to introduce student selection and tuition fees faced resistance, but convergence with international best practices in the funding and governance of tertiary education appears indispensable. In the face of these needs, the projected nominal increase of 2% per year in budgetary allocations for tertiary education may fall short of needs. Universities should be allowed to select their students (see Annex A1 on the most recent measures in this area), charge tuition fees and avoid socioeconomic segregation with the help of a comprehensive student grant and loan system with income-contingent repayment.

Box 8 summarises recommendations based on recent OECD investigations (OECD, 2009) – pending conclusions from an important ongoing *Skills Strategy* project based on a *Programme for the International Assessment of Adult Competencies* (PIAAC) (OECD, 2013a). PIAAC will shed light on the structure and level of competencies in the Austrian labour force (as well in other countries) and will lead to a further refinement of the policy recommendations (OECD, 2012d).

Box 8. **Main policy recommendations for strengthening Austria's education system**

(From the chapter on education of the 2009 *Economic Survey*)

- Enhance the participation of all children into full-day pre-school education from age three onwards.
- Re-assess the present school infrastructure, class sizes and teaching personnel against demographic trends and develop a rationalisation plan and re-invest freed resources into improving teaching quality.
- Permit universities to select students and charge tuition fees, while avoiding socioeconomic segregation with the help of comprehensive income-contingent student grant and loan system.

Sectoral policy initiatives would benefit from horizontal public sector reforms

As reviewed in the public sector chapter of the 2011 *Economic Survey* (OECD, 2011) the introduction of modern public management tools will facilitate sectoral reforms through several channels. Systematic cost-benefit assessments in all policy areas will help take into account social benefits in all well-being dimensions, while minimising fiscal costs:

- *Performance-based budgeting* from 2013 will facilitate the integration of many government programmes in various ministries and government layers around key functional

objectives. Policy responses to demographic, environmental and economic challenges will be more clearly spelled out. This should help improve policy synergies and minimise programme overlaps.

- *Regulatory impact assessment* is expected to permit a re-evaluation of Austria's extensive tax and benefit policies. Impacts on various well-being dimensions should be taken into account. Re-assessments would be particularly useful in areas such as environmental taxation and family tax allowances and benefits.
- *Long-term projections and scenarios* in the key public spending areas should clarify fiscal costs and help increase spending efficiency within and between the key well-being areas.
- *The increased empirical evidence on well-being beyond GDP* should be properly used in the policy formation process.Monitoring the various dimensions of well-being allows for a more complete identification of synergies and tensions, helping base policies on a more systemic approach. Social partners should aim at representing all stakeholders and continue to be active issuing policy proposals.

These management tools are expected to give a new stimulus to the somewhat stalled federal/fiscal reforms. Policy overlaps, cost overruns and quality shortcomings in complex federal/fiscal arrangements for service provision are expected to become more transparent, which should facilitate the political economy of reforms.

Box 9. **Main policy recommendations for horizontal public sector reforms**

(Based on the public sector chapter of the 2011 *Economic Survey*)

- Fully implement performance-based budgeting, regulatory impact assessment and long-term public spending simulations and extend them to the whole general government sector.
- Make sure that increasingly available indicators on different dimensions of well-being are integrated in the policy formation process. Encourage social partners to aim for representation of all stakeholders.

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ANNEX A1

Follow-up to previous OECD policy recommendations

Macroeconomic policy priorities	
Recommendations of the 2011 Survey	**Action taken**
Accelerating fiscal consolidation to bring the debt to GDP ratio below 60%.	Consolidation program 2012 with a total volume of 27.8 bn EUR (2012-2016); national debt brake rule; Inner-Austrian Stability Pact 2012 with Länder and Municipalities; new Federal Budget Law introducing easier reserves, accrual budgeting and long-term budget projections. Government´s target: balanced budget in 2016, surplus in 2017. First positive developments: Budget execution in 2012 with lower than planned deficit and lower debt level.
Taking more frontloaded action to meet foreseeable medium-to-long-term spending pressures.	Pay freeze and hiring freeze as well as moderate pension increases are curbing public personnel costs also in the long run. Disability pensions will be reduced, the factual retirement age increased and pension laws further harmonized. Health care expenditure dampening path includes for the first time all levels of Government and will limit health care expenditure growth to GDP growth. Prevention programs in the health care sector are also implemented.
Reforming the Domestic Stability Pact and the Fiscal Equalisation Act and implementing the fiscal framework reforms at all levels of government.	The new Internal Stability Pact 2012 sets out a balanced Maastricht budget until 2016, introduces a structural balance rule as of 2017; expenditure growth must stay below the medium-term reference rate of potential output and a reduction of debt ratio is determined. These rules are binding on all levels of government and have been implemented effectively.
Seeking efficiency gains in all major spending areas.	Pension and health care reform (see above); Public administration reform: fewer courts, fewer disbursing agencies for long-term care allowances; less and more targeted subsidies to transport and agriculture. The Austrian Stability Pact 2012 provides regulations on the allowable expenditure growth, on the debt ratio adjustment, on limits of liability and to improve the co-ordination of financial management between local authorities.
Switching the tax burden away from labour and entrepreneurship toward less distortive taxes.	Despite a necessary fiscal consolidation the tax burden on labour and entrepreneurship has not been raised, in fact a reform on taxation on gains from sales of private real property has been implemented. In terms of commuting issues, the burden was reduced for both employees and employers. Among others public transportation costs borne by employers for commuting employees are tax exempted.

Structural policy priorities	
Recommendations of the 2011 Survey	**Action taken**
All subsidised avenues into early retirement should be eliminated.	Pension subject to very long insurance period ("Hacklerregelung"): Access to this pension scheme was substantially tightened by increasing the respective retirement age (62 for men, 57 for women and further increasing to 62). Amendment "Corridor Pension": Early retirement age: 62 years. Necessary contribution period will be increased stepwise from 37.5 to 40 years by 2017. The yearly deduction for early retirement is increased from 4.2% to 5.1%. New Disability scheme: Disability pension only in cases of permanent disability; no "limited" disability pension for those born after 1964. Implementation of a competence center (= organisation where decisions are taken on disability – either in a medical or an occupational rehabilitation path). Rehabilitation and retraining measures will be obligatory. Gradual increase of the present benchmark for qualifying for disability pension from 57 years to 60 years in 2017. Costs for "repurchasing" university and school years (to be added to the contribution record) were increased and this provision will be phased out from 2014.
The work incentives of low-skilled workers should be strengthened and their cost of employment reduced. Successful up-skilling programmes should be further developed.	From 1 July 2009 on, a modified in-work benefit for low-skilled workers (Kombilohnbeihilfe) targeted at the elderly (> 50 years), handicapped persons and those returning to work with dependent children, who have unemployment spells longer than six months, was introduced. The new in-work benefit is granted in form of a monthly wage top-up of € 300 (full-time) or € 150 (part-time) as an incentive to take up low-paid employment (between € 650 and € 1 700). This measure is an instrument of active Labour Market Policy for unemployed with reduced chances of Labour Market inclusion aiming at encouraging taking up work (administration by the Public Employment Service). "Skilled workers package", which will be implemented from mid-2013 will help raise the qualifications of low and medium skilled workers by supporting fur-ther education. The newly introduced up-skilling programme "Qualifikationsplan 2020" is a comprehensive strategy to reduce the proportion of people in Vienna who have only compulsory education.
Early child care infrastructure and full-day schooling should be expanded, with recent government initiatives going in the right direction.	2011: Decision on continuing the expansion of childcare facilities – especially for children aged up to 3 years – via a mix of in-kind and monetary measures. Aim: creation of about 5 000 additional childcare places p.a. to raise institutional child care rate to 28% of all under 3-year-olds by 2014. To this end, federal and regional governments will each invest a total amount of € 55 million from 2011 to 2014. Starting with the school year 2013/2014, only child-care facilities with minimum weekly and yearly opening hours will be funded, as well as additional personnel costs arising from extended opening hours. The City of Vienna is a forerunner in providing and expanding (free) early child care infrastructure. The development of childcare ratios of 3, 4 and 5-year-old children in the last ten years shows that in all three age categories increases are significant: the attendance rate of the 3-year-olds increased from 57.8% in 2001 to 80.2% in 2011/2012. In the 4-year-olds, an increase of 88.3 to 94.2 % was recorded in the last ten years, with the 5-year-olds from 89.7 to 96.3%. However, for children from 3-6 years, regional gaps should be closed. The number of school-based day care programmes has doubled compared to the school year 2007/08. Currently, 119 000 pupils take advantage of school-based afternoon care or attend a combined all-day school. They measures are welcome by 78% of parents according to surveys.

Structural policy priorities	
Recommendations of the 2011 Survey	**Action taken**
Education reforms should continue, to overcome the excessively early streaming of students, and to permit universities to select students and charge tuition fees, accompanied by a comprehensive grant and income-contingent loan system to avoid socioeconomic segregation.	All in all, the federal government has adopted 54 projects in the field of educational reform since 2007, ranging from early childhood education to the university entrance examination. The graduates of the first generation of Neue Mittel Schule (NMS) succeed in their educational career: The share of pupils admitted to academic secondary school (AHS) and VET college (BHS) at the end of the school year 2011/12 (1st generation NMS) was 53% in the 67 "pioneer schools". Compared to the last age group at lower secondary school (in 2010/11) at these locations, this corresponds to an increase by 12 percentage points. By 2015/16, all lower secondary school locations will be upgraded to NMSs. By the school year 2018/19, all 1 176 lower secondary school locations and classes will be converted to new secondary schools and this type of school will be attended by some 238 000 pupils or 70% of 10-14 year-olds. Student guidance initiative: Widening guidance for educational and career choices ("Studienchecker") to all schools, "Trying out studying" ("Studieren probieren"), opportunity to attend university lectures. Introduction of new university funding measures are implemented with "performance agreements 2013-2015". In March 2013, an amendment to the law concerning universities was enacted. Universities will be allowed to limit the number of students in defined fields of study (architecture, biology, IT, management, pharmacy). The law stipulates a new framework for financing Austrian universities from 2016 onwards (lump sum budgets for teaching, research and infrastructure). The main goal is to increase the quality and funding of Austrian Higher Education in teaching as well as in research.
Competition should be further enhanced in network services such as rail, postal services and electricity, as well as in liberal professions.	Railway sector: The private train operating company „Westbahn AG" has been offering passenger transport services between Vienna and Salzburg since December 2011. Postal Services: The European legal framework consists of three EU directives from 1997, 2002 and 2008. The European framework was implemented In Austria in the Postal Market Act which went into effect on January 2011 and fully liberalised the market and opened it to competition. Electricity/Gas: A new switching ordinance entered in force in January 2013 to better enable customers switch energy suppliers. A new gas market model was also implemented, with an entry-exit system facilitating access to the network and creating a virtual trading point. Liberal Professions: amendments to the Accounting Law (Bilanzbuchhaltungsgesetz) and the Chartered Public Accountants Law (Wirtschaftstreuhandgesetz) came into force in 2012. The amendment of the Accounting Law has facilitated the access of accountants to the profession of tax advisors and increased competition in accounting professions.

Health policy priorities	
Recommendations of the 2011 Survey	**Action taken**
More clearly assign performance, financing and spending responsibilities in the area of health care.	Federal government, Länder and social insurance institutions have agreed on a health reform. With the agreed health care expenditure dampening path, all levels of government are bound by law to share responsibilities for health care services and financing. A financial target control system aims to align the increase in public health expenditure with average GDP growth (+3.6% p.a.) by 2016, reducing the expected growth of health spending by € 3.4 bn.
Fully enforce the national capacity plan for inpatient and outpatient care.	The national capacity plan (Österreichischer Strukturplan Gesundheit, ÖSG) is subject to a continuous review process and was last updated in 2012. One objective of the latest adaptation was the optimization of inpatient care capacities.
Introduce performance-based payment mechanisms in both inpatient and outpatient care and increase competition in the pharmaceutical market.	The health care reform explicitly addresses performance-based payment mechanisms. The Land Vienna has implemented and employs a performance-based payment mechanism (Wiener LKF-Modell), last updated in 2012, to improve the steering of service levels in municipally-funded hospitals.
Promote disease management programmes in all chronic care areas.	One disease-management program is currently being implemented (Diabetes Mellitus II). Other programs are in preparation but not yet implemented.
Set out challenges of the medium-term fiscal outlook of the system, through detailed health and long-term care spending projections and scenarios.	The health care reform is based on the principle of outcome orientation. In fact, for any objective being set and any action being taken, the outcome will be analyzed ex ante and ex post. A monitoring framework is in the state of development. The 2012 Federal Budget Law introduced regular long-term budgetary projections (until 2050), including for health and long-term care. The first report on long-term projections addresses related challenges for public finances.

Chapter 1

Austria's well-being goes beyond GDP

Austria enjoys strong material well-being and high quality of life. Steady convergence with top GDP per capita levels translated into decisive improvements in household disposable incomes while significant and effective redistribution has ensured low income inequality and poverty. This has been combined with gains in leisure time, especially time spent in retirement, low unemployment, high environmental standards, rising life expectancy, a well-functioning social support network and high subjective well-being. This performance was achieved with a unique combination of supportive conditions for a dynamic business sector, priority for family based care, a wide and deep supply of public services, and a well functioning social partnership framework. Particularly remarkable for a small open economy has been the degree of stability, which may have contributed to Austria's high quality of life. However, a number of weaknesses also exist. Older, unskilled and in particular people with migrant background, have lower labour market attachments. Outcomes in education and health care are no more than average and are subject to inequalities. Family services are still mainly carried out by women, who have closed the gap in education attainment with men but face increasing tensions between work and family responsibilities and a high wage gap. Single parents and people with migrant background do not seem to have participated to the same degree as others in well-being gains. The gaps experienced by people with migrant background are in several dimensions larger than in the average OECD country.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

This chapter deals with Austrian well-being outcomes and drivers. The discussion about the outcomes follows the *OECD How's Life* framework which assesses well-being achievements along 11 dimensions categorized under two broad pillars: *i)* material living conditions (income and wealth, jobs and earnings and housing); and *ii)* quality of life (health status, work and life balance, education and skills, social connections, civic engagement and governance, personal security, subjective well-being). This framework allows to go "beyond GDP" as a measure of a nation's well-being (see Box 1.1) and can help inform policy-making (see Box 1.2). The chapter then emphasises three different and

Box 1.1. **Beyond GDP: International and Austrian initiatives to measure and monitor well-being**

GDP is the most important indicator for measuring the macro-economic performance of countries and for informing macro-economic policy about the position of the economy in the business cycle. However, GDP (and the system of national accounts) has a range of shortcomings as a measure of well-being. For instance, some factors that affect individual well-being such as a person's health status, leisure, happiness, safety or social connections are not (or not fully) reflected in GDP as they are not transacted on markets and are thus not evaluated in monetary terms. At the same time, concerns have emerged about how economic growth led in many countries to environmental depletion and an erosion of social cohesion, elements that are also not appropriately reflected in GDP. Thus, GDP alone will not provide the right guidance for policies aiming at sustainable well-being. This dissatisfaction has generated a widespread consensus to search for robust statistical concepts which go beyond GDP. While measures augmenting GDP with data for example on health, leisure and inequality are usually highly correlated with GDP per capita, deviations are often significant in particular over time (e.g. Jones and Klenow, 2010; Boarini et al., 2006).

The OECD was at the forefront of efforts to construct indicators that go beyond GDP, for example by developing guidelines for social statistics already in the 1970s, and participating in the influential Stiglitz-Sen-Fitoussi Commission (Stiglitz et al., 2009) established by French President Nicolas Sarkozy in 2008. The framework and recommendations of the Commission, as well as earlier OECD work, underpins OECD's *How's Life* report (OECD, 2011a), the flagship publication of the OECD *Better Life Initiative* launched in May 2011. Both the Commission and OECD's *How's Life* stress the multidimensionality of well-being including both indicators of material well-being and quality of life. Moreover indicators of well-being should emphasise the household perspective, highlight distributional issues and differentiate between current well-being and its sustainability. The OECD Economics Department has recently devoted a chapter in its flagship publication *Going for Growth* (OECD, 2013c) on trade-offs and complementarities of growth-enhancing structural reforms on other dimensions of well-being, namely income distribution and the environment.

Box 1.1. **Beyond GDP: International and Austrian initiatives to measure and monitor well-being** *(cont.)*

At the European level, the European Commission (EC) issued a communication on "GDP and beyond" in 2009 to identify actions to improve metrics of progress (EC, 2009). Some of these issues have been reflected in the targets of the EU growth strategy *Europe 2020*. Eurostat initiated a process to develop recommendations in line with the Stiglitz-Sen-Fitoussi Commission to be implemented within the European Statistical System. Apart from international initiatives, many OECD countries have by now launched well-being related initiatives. Examples include Australia (*Measures of Australia's Progress*), Finland (*Findicators*), Germany (*Enquete Commission "Growth, Prosperity and Quality of Life"*), Italy (*Measuring Equitable and Sustainable Well-being* (BES)), the Netherlands (*Sustainability Monitor*) and the United Kingdom (*Measuring National Well-being Programme*).

In Austria, several initiatives exist to measure and monitor well-being beyond GDP such as the *Growth in Transition* (*Wachstum im Wandel*) initiative led by the Ministry of Environment (in co-operation with other government agencies and think-tanks), which was already launched in 2008. *Growth in Transition* is a platform to strengthen dialogue about ecologically and socially sustainable growth to enable the transition towards a resource-efficient and environmentally compatible economy. At the end of 2012 the initiative organised a second international conference which concluded with a broad 10 point programme including suggestions to foster: *i)* sustainable development, *ii)* quality of life and workplaces, *iii)* measurement of well-being, *iv)* renewable energies, *v)* efficient natural resource use, *vi)* civic engagement in the political process, *vii)* generational fairness and social connections, *viii)* quality of urban and rural living spaces, *ix)* appreciation of natural assets, and *x)* sustainable agriculture. In addition, one of the main economic research institutes, WIFO, co-ordinates a pan-European project on "Welfare, Wealth and Work for Europe", in co-operation with other European policy think-tanks, which aims to provide an analytical framework and policy recommendations to the European Union's "Europe 2020" strategy.

The Ministry of Economy together with WIFO recently published a study (*Mehr als Wachstum*), which complemented the *OECD How's Life* indicator set with additional indicators judged especially relevant for Austrians. Based on survey responses, which provided Austria specific rankings of the importance of indicators and dimensions for their well-being, weights were constructed and the indicators aggregated accordingly (see Box 1.3). Since 2004, *Statistik Austria* (the central statistical office) has published regularly an indicator report to monitor progress on goals formulated in Austria's *Sustainable Development Strategy* for the Ministry of Environment. It also launched in October 2012 a new dataset (*How's Austria – Wie geht's Österreich?*) comprised of 30 headline indicators in three areas: material wealth, quality of life and environmental sustainability.

specific features of the Austrian economy and society as the drivers of these outcomes: *i)* Steady productivity growth within stable enterprise and production structures, *ii)* families providing intense services to their members with the support of local social connections, and *iii)* the important role of social partnership for policy formation and implementation.

Box 1.2. **Well-being indicators and analysis: What lessons for policies?**

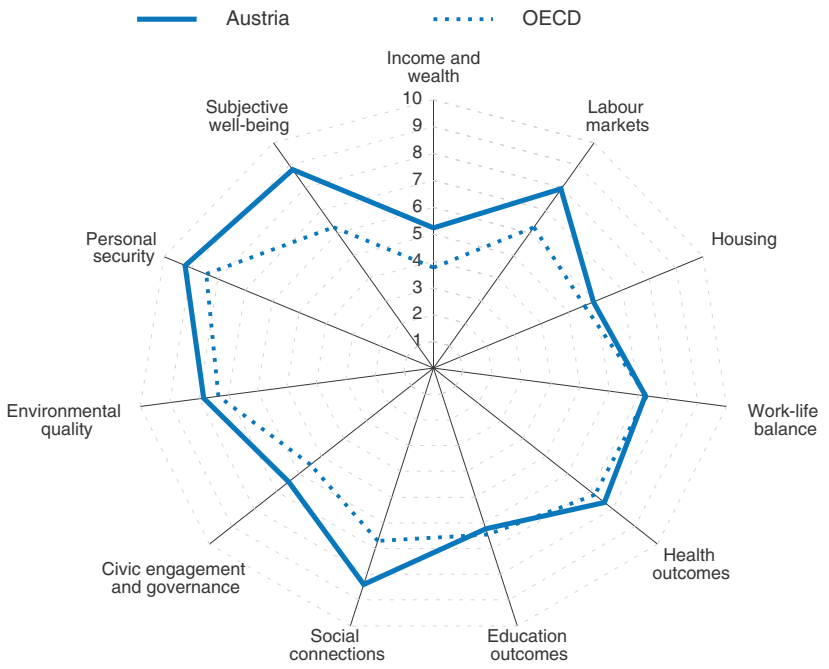
There has been significant convergence in the understanding and measurement of the notion of well-being over the past ten years (see Box 1.1). Statistical advancements on well-being are strengthening the case for using well-being indicators in policy-making on a regular basis (see e.g. UK Green Book, New Zealand Treasury living Standards Framework). While still not a widespread practice, well-being indicators are increasingly used to inform policy-making:

- First, because well-being indicators focus on households and individuals, they allow to monitor whether countries are effectively making progress in a number of important outcomes and their distribution that are important for people's lives. In this respect they provide a comprehensive picture of both material and non-material conditions of households and individuals, and in particular to assess whether economic growth goes hand in hand with key well-being outcomes and to what extent these outcomes are shared across population groups.
- Second, well-being indicators may help to identify policy priorities in three ways: *a)* by providing information on individuals and societal preferences (see e.g. Box 1.3); *b)* by providing a diagnostic of the relative strengths and weaknesses of countries; this diagnostic may then inform on the areas where there is larger scope for improvement; *c)* by shedding light on the interrelations across well-being outcomes, that might be leveraged when designing policies.
- Third, well-being analysis makes it possible to implement a joined-up approach to policy making, enhancing the coherence and effectiveness of policies across the board. Well-being analysis allows to better grasp and manage trade-offs between policy objectives and identify possible synergies.
- Finally, embedding well-being in policies may increase the legitimacy and thus public acceptance of these policies as directly grounded in people's preferences and values. More generally, people's trust in policies and governments may increase when policies are explicitly conceived to improve people's lives.

Austrian well-being outcomes

Figure 1.1 provides an overview of Austria's average well-being outcomes in each of the 11 dimensions based on the OECD *Better Life Index* (BLI) indicator set. It shows that Austria scores better than the OECD average in almost all dimensions. Outcomes are particularly more favourable in the areas of income and wealth, labour market and subjective well-being. The overview provided in Figure 1.1 is broadly consistent with the results from the following sections, which provide in-depth discussions of each well-being dimension, drawing on a larger set of indicators than the BLI. A more nuanced picture emerges in the area of work-life balances, which appear to be somewhat special in Austria. Working hours per day are longer than in other Western European countries, but periods out of work, for example on holidays or retirement, are also longer. Additional insights emerge when inequalities in well-being dimensions, for example across income groups, gender or educational attainment groups, are investigated. Inequalities arise especially in education and health outcomes. Moreover, women face a high wage gap, despite closing the gap in education attainment with men. Finally, single parents and people with migrant background do not seem to have participated to the same degree as others in well-being gains.

Figure 1.1. **Average well-being outcomes, 2011**



Note: Each well-being dimension is measured by one to three indicators from the OECD Better Life indicator set. Normalized indicators are averaged with equal weights. Indicators are normalized to range between 10 (best) and 0 according to the following formula: (indicator value - minimum value)/(maximum value - minimum value) multiplied by 10.
Source: OECD Better Life Index.

StatLink http://dx.doi.org/10.1787/888932856285

Austria has achieved remarkable gains in material well-being

Income and wealth grew steadily while income inequality and poverty remains low

Income and wealth are essential components of individual well-being as they provide the ability to command resources to satisfy basic needs and pursue other goals deemed important in people's lives. Wealth, as the accumulation of personal savings, also protects individuals against economic and personal risks and allows them to smooth consumption over time, thereby ensuring the sustainability of material living conditions over time. On a national scale, income and wealth provide the most important tax bases to finance public services such as health, education and safety that benefit the society as a whole.

The standard measure of income is GDP per capita. According to this measure Austria performed very well over the last four decades. Real GDP per capita growth averaged 2¼ per cent per year, the highest among peer countries, which includes Germany as well as a group of small open European economies (Figure 1.2). Through this long-term catching up process, Austria now has one of the highest GDP per capita levels at USD 40 145 (at current PPP, 2010) in the OECD.

This good performance was underpinned by steady gains in productivity (Figure 1.2) in particular in the export-oriented manufacturing sector (see below). Aspects of labour utilisation were more varied and partly offset each other. The employment rate increased over the past decades, thanks to a substantial increase in female labour force participation

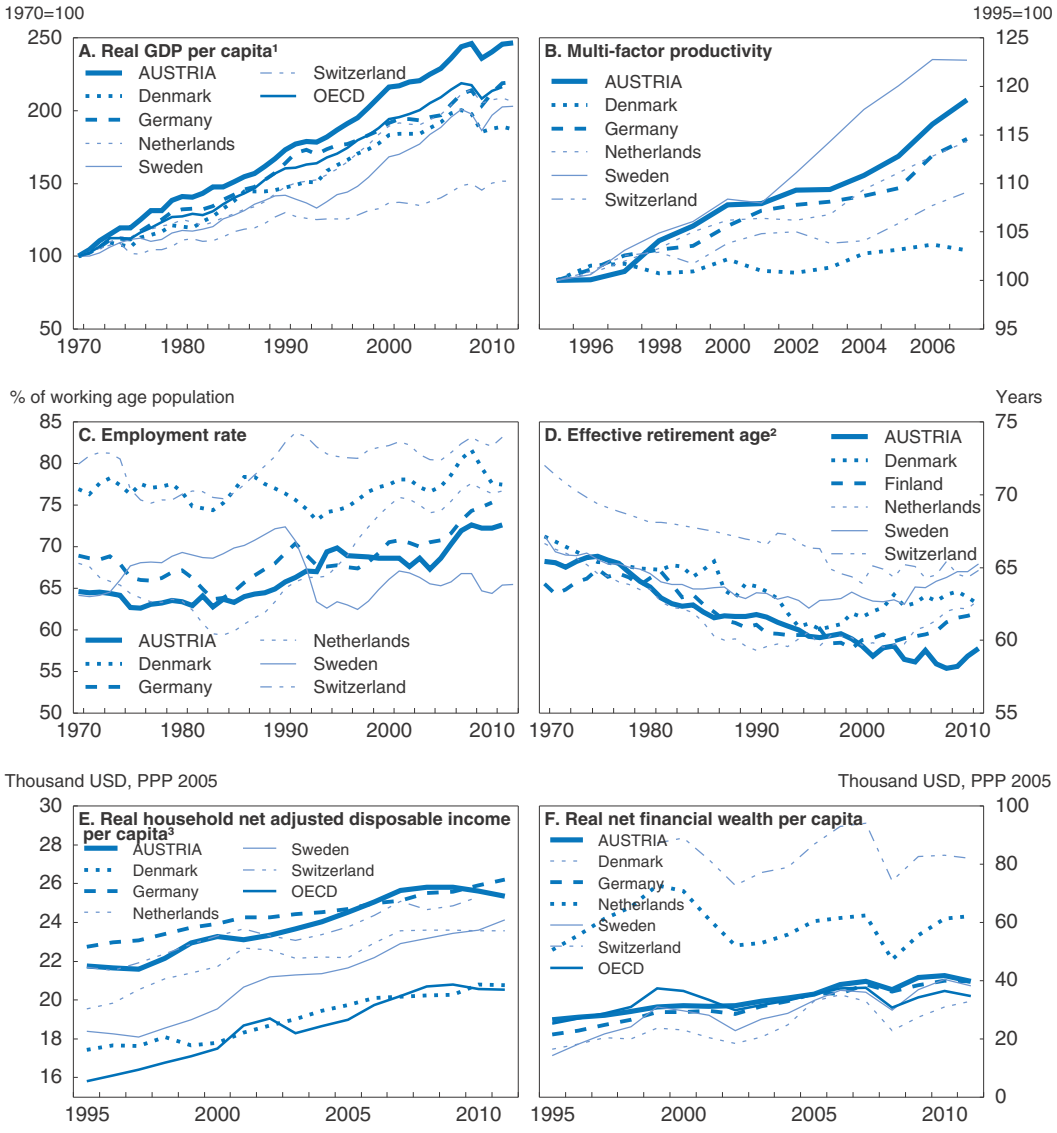
(Figure 1.2). However, the employment rate of older workers fell continuously until the early 2000s and is only more recently starting to trend up again owing to a range of pension reforms. Nevertheless the effective retirement age remains among the lowest in the OECD (Figure 1.2). While overall employment increased, average annual hours worked declined, similar to many other continental European countries, partly reflecting the increased share of part-time employment (see sections on jobs and work-life balance).[1]

Compared to GDP per capita, household net disposable income adjusted for in-kind transfers received from government and non-profit institutions is a more appropriate measure of the individual command over economic resources. In 2009, the average household net disposable income per capita adjusted for in-kind transfers stood at USD 27 951 (at current PPP) in Austria, well above the OECD average of USD 22 827. However, disposable income per capita rose less rapidly than GDP per capita, with a gap of 0.7 percentage points on average annually over the period 1995-2011. Some shifts have taken place in the components of disposable income over time in Austria. While earnings from dependent employment remains the largest component of disposable income, its share fell slightly from 49% in 1995 to 47% in 2011. In contrast, the share of profits and self-employed income increased from 12% to 15% of total disposable income, while the shares of property income, cash transfers and in-kind transfers remained broadly stable at 6½ per cent, 21½ per cent and 10½ per cent, respectively (Statistik Austria, 2013).

Growth in net financial wealth averaged 2.7% per year over the period 1995-2011 in Austria (see Figure 1.2). Growth in net financial assets was more stable than in many other countries and the drop during the crisis in 2008 less pronounced. This may reflect the fact that Austrians hold a higher share of deposits in their financial portfolios and comparatively lower share of stocks (OECD, 2011). In 2009, the average net financial wealth of Austrians amounted to about USD 45 000 (in current PPPs), above the OECD average of USD 37 000. A newly established Survey, the *Household Finance and Consumption Survey* (HFCS) (Fessler et al., 2012), provides additional information on household wealth, including non-financial assets. Non-financial wealth according to this Survey comprises primary residential property, other real estate, vehicles, company assets if the company is owned by the household and one person of the household works in the company, and other valuables such as gold, jewellery and art collections. According to this survey, about 85% of Austrian households hold non-financial assets with a little under 50% possessing a primary residential property. On average the value of non-financial assets exceeds financial asset by a factor of 6. According to the survey, only about 36% of households are indebted and debt is primarily held to finance a residence and, to a much lesser extent, for consumption purposes. However, about a third of all outstanding loans for housing purposes are in foreign currency (mainly Swiss francs), constituting some risk for households and financial market stability.

In addition to high average material living standards, household disposable income inequality is low in Austria in international comparisons (Figure 1.3). While inequality has risen in many OECD countries over the past decades, a comparison with Austria is difficult due to changes in official data sources. Nevertheless it appears that disposable income inequality rose only slightly between the mid-1980s and the early 2000s, and it stayed relatively constant between 2004 and 2009. As in most other OECD countries, wages and salaries are the main driver of household income dispersion in Austria while self-employed income and capital income play a smaller role due to their lower share in overall market income (Hoeller et al., 2012). However, self-employed and capital income plays a

Figure 1.2. **Income and wealth**



1. Real GDP per capita is converted in US dollars using constant 2005 PPPs.
2. The average effective retirement age is calculated as a weighted average of (net) withdrawals from the labour market at different ages over a 5-year period for workers initially aged 40 and over.
3. Households include non-profit institutions serving households. Actual individual consumption of households is used as deflator.

Source: OECD National Accounts Database; *OECD Productivity Database*; *OECD Economic Outlook Database*; OECD Statistics on average effective age of retirement; OECD Secretariat estimates.

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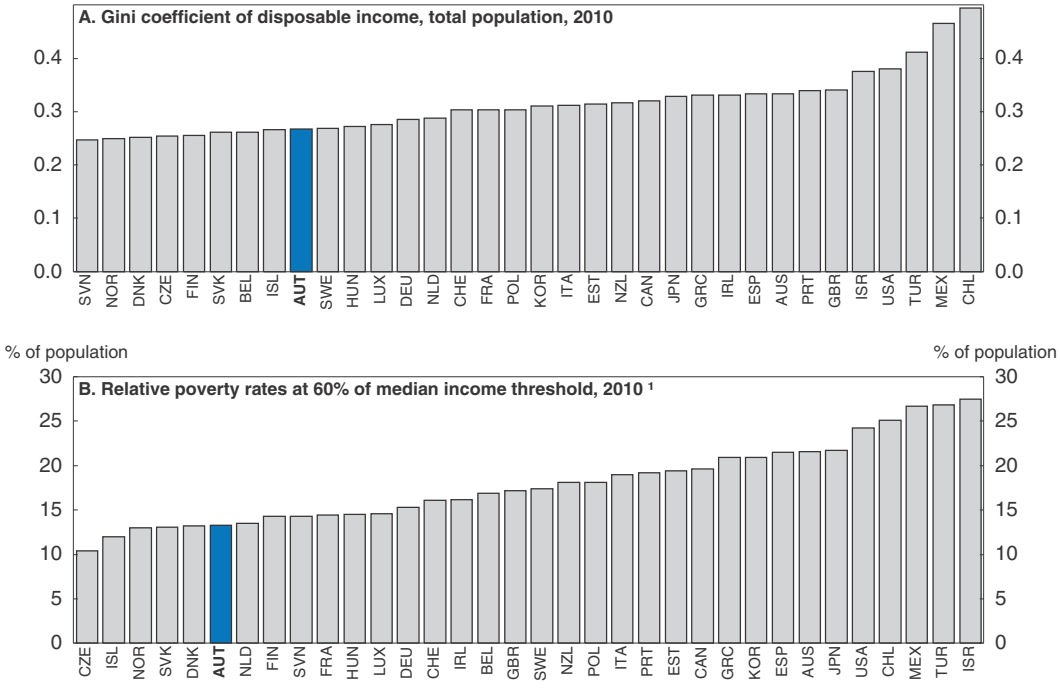
role in the changes in the income distribution over time in many countries. Labour market income inequality is discussed in the section on jobs.

Relative poverty, defined as the share of people with income less than 60% of the median income, is also low in Austria compared to other OECD countries (Figure 1.3). In contrast to many other OECD countries, relative poverty did not increase in Austria during the crisis. Similar to most OECD countries, poverty rates among women are higher, and this

Figure 1.3. **Income inequality and poverty**



1. Relative poverty rate is the share of individuals with disposable income adjusted for household size after transfers and taxes less than 60% of the median for the entire population. Latest income distribution and poverty data refer to 2010 and 2009 for the majority of countries: 2011 for Korea; 2008 for Switzerland and 2006 for Japan.

Source: OECD Income Distribution and Poverty Database.

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difference is particularly pronounced for women in retirement in Austria (Pisu, 2012), reflecting their more fragmented employment history. Till et al. (2012) report some evidence that hints at a stronger polarization of Austrian society in the recent past. They show that the share of the population that simultaneously falls below the relative poverty threshold (60%) *and* is financially deprived,[2] a measure which takes account of developments in purchasing power, has increased from 4.6% in 2005 to 6.2% in 2010. In addition, the share of the people who have been financially deprived for at least two consecutive years has been trending upward since 2005 and now stands at about 10% of the total population.

Information on wealth inequalities in international comparisons is still scarce, though several new initiatives in OECD countries have been launched. A recent study (Fessler et al., 2012), using the new HFCS mentioned above, shows that wealth inequality is significantly larger in Austria than income inequality, in line with international evidence (Fredriksen, 2012; ECB, 2013). While the bottom 50% of households in the (gross) wealth distribution only hold 4% of total wealth, the top 5% hold 45%. Inequality is particularly high for non-financial assets (Table 1.1). This reflects the almost equal split between homeowners and tenants in the population as primary residential property is in terms of value the most important non-financial asset. Not surprisingly, high income households also tend to be high wealth households, as income is an important source of wealth accumulation, higher income households tend to hold higher risk and hence return assets,

Table 1.1. **Wealth inequality in Austria, 2010**

	Gini coefficient	Percentile ratios		
		75/25	90/50	90/10
Non-financial assets	0.77	75.8	9.2	-
Financial assets	0.74	11.1	7.8	196.5
Total assets	0.73	22.4	6.2	233.7
Net worth	0.76	24.3	7.1	581.1
Household disposable income[1]	0.27	-	1.8	5.7

1. Household disposable income of the total population adjusted for household size in 2009.
Source: Fessler et al. (2012) and *OECD Income Distribution and Poverty Database*.

and high income households tend to receive larger inheritances (Fredriksen, 2012). Comparing data from the HFCS across 15 euro area countries, a recent study (ECB, 2013) suggests that wealth inequality is high in Austria. Average wealth is about three times higher than median wealth compared to an average across all countries of 1.8. This proportion is only higher in Germany. The high values in Austria and Germany are partly due to the fact that the median household does not own a primary residence. As in other countries, wealth inequality is likely to be underestimated in Austria as measurement relies on household surveys, which likely suffer from underreporting in particular at the upper end of the distribution. This distortion is likely aggravated by the fact that participation in the HFCS is voluntary (Fessler et al., 2012).

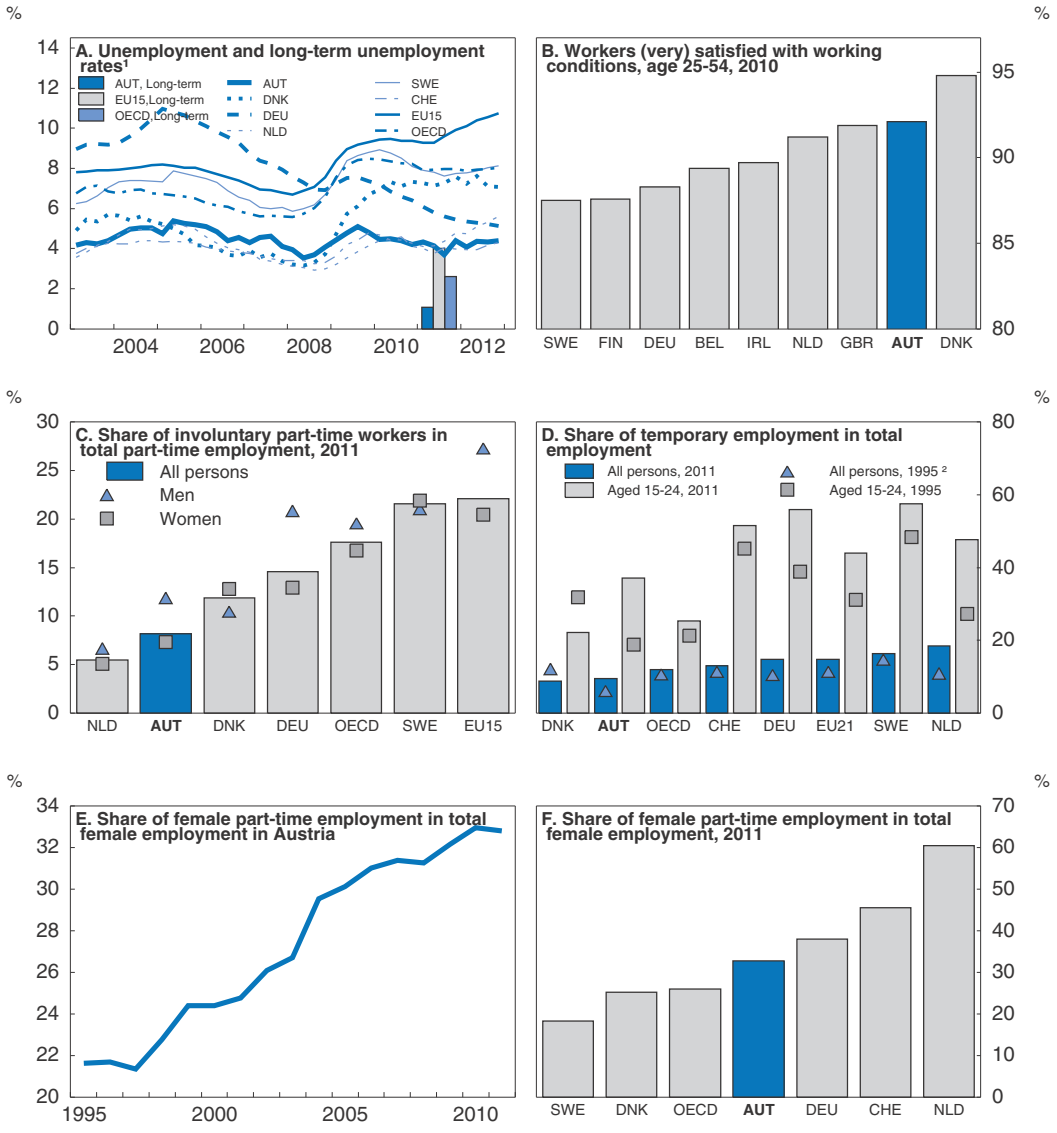
Labour market performance is strong but non-core groups are vulnerable

The availability of jobs and their quality is essential to individual's well-being well beyond its role as a generator of income as having a job also helps individuals stay connected with society and develop skills and competencies. Unemployment has also been shown to be particularly detrimental to subjective well-being (e.g. Boarini et al., 2012) and physical and mental health (Wilson and Walker, 1993). In addition, societies with high levels of employment are also more politically stable (OECD, 2011).

As alluded to above, the employment rate has continuously increased in Austria since the mid-1980s, thanks in particular to the increasing share of women and more recently of older workers in employment, and is higher than the OECD and EU averages, but somewhat below that of several peer countries such as Sweden, Denmark, the Netherlands and Switzerland (Figure 1.2). In addition, the unemployment rate, after temporarily edging up during the crisis, is currently the lowest in the European Union (March 2012) and both the long-term and youth unemployment rates are low in international comparisons (Figure 1.4).

Satisfaction with working conditions is high in international comparison (Figure 1.4). This may reflect high average earnings in Austria, where people earn USD 41 904 (2010, in current PPP) per year on average compared to the OECD average of USD 34 033. But high job security may also play a role. The share of temporary contracts has been rising somewhat but is still below EU or OECD averages (Figure 1.4). The share among the young (aged 15-24) is higher than the OECD average, yet below many EU countries, despite the high share of apprenticeship contracts. In addition, the average employment tenure is high and perceived job insecurity is low (see below; OECD, 2011). Perceived job insecurity is measured as the percentage of employees and self employed declaring that they might lose

Figure 1.4. **Labour market**



1. Long-term unemployment rate refers to unemployment of one year and over.
2. Data refer to 1997 for Sweden and 1998 for Switzerland.

Source: OECD Economic Outlook Database; *OECD Labour Force Statistics Database*; OECD calculations based on Eurofound (2012), Fifth European Working Conditions Survey.

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their job in the next six months. In Austria this percentage was 8.9% in 2005, lower than the OECD-EU average of 15% and most peers.

As described in detail in past *OECD Economic Surveys of Austria* (OECD, 2011b, 2009) the Austrian labour market is characterised by a well-performing core of skilled male prime-age workers, but also a number of more vulnerable groups, particularly older, unskilled, female and workers with migrant background. Employment rates of older workers (55-64) have increased since the pension reform in the early 2000s but are still well below OECD averages. However, unemployment rates of low-skilled workers with only compulsory

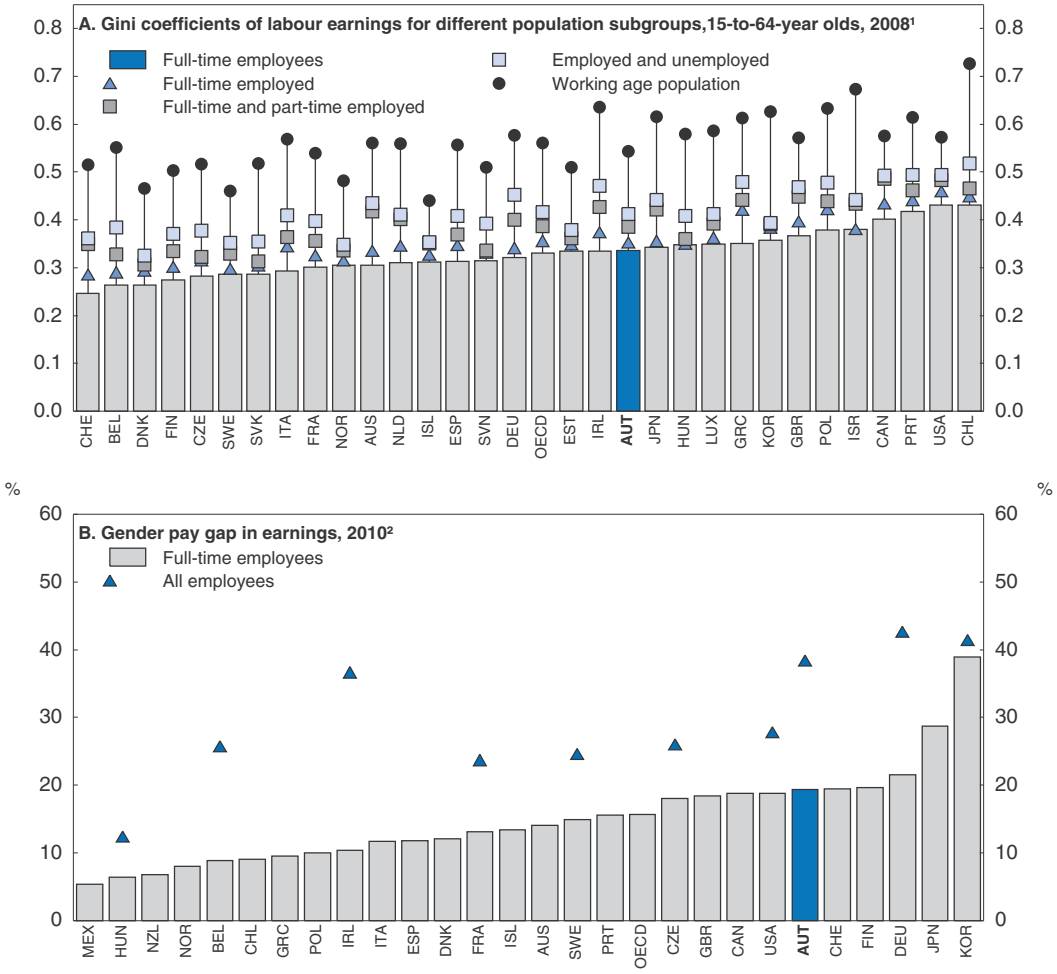
schooling are high and have recently been rising. Finally the gap between employment rates of men and women has been narrowing over the last decade but has not closed.

The increase in female employment has predominantly taken place in the form of part-time work. Between 1995 and 2011 the employment rate of women increased from 60% to 68%. At the same time the share of part-time working women increased from 22% to 33%, encouraged also by the right to part-time work for parents introduced in 2004 (the legal right is available in companies with more than 20 employees, in smaller firms this may be granted via company agreements). Mothers with children under 15 years are indeed particularly likely to work part-time in Austria (OECD, 2012d). This development seems to be mainly voluntary, however, as involuntary part-time remains low (see Figure 1.4 and below). While part-time work facilitates combining work and family responsibilities, it frequently comes at a cost to women's long-term career and earning prospects. Evidence also suggests that in particular in Europe only a very small proportion of workers use part-time work as a stepping stone into full-time employment. Only 3% of European women and 1.5% of European men who have worked part-time for up to six years move into full-time employment (OECD, 2012d).

The gaps in labour market performance are particularly high for workers with migrant background. Their unemployment rate is about twice as high as that of natives and the unemployment rate of second generation migrants is almost four times that of other native born in the same age group (OECD, 2012). Women with migrant background fare particularly poorly. When coming from lower-income countries, their employment rate is almost 20 percentage points lower than that of native-born women. Women from Turkey are particularly disadvantaged: their unemployment rate is five times higher than that of native-born women, and only 38% of those in working-age are in employment, 30 percentage points less than native-born women. Likewise, native-born children of immigrant parents aged 20-29 are four times more likely than the offspring of natives to be both low-educated and neither in employment nor education or training. Again, these gaps are particularly large for those from Turkish families and for women (see OECD, 2012c). In addition, income gaps exist for migrants in employment. Those from former Yugoslavia and Turkey in continuous employment earned about 20% less than the average, and this gap appears to have increased since 2006 (Statistik Austria, 2012).

As mentioned above, labour market income inequality is the main determinant of household income inequality in Austria as well as in most other OECD countries. Earning inequality among full-time employees is slightly above the OECD average in Austria and higher than in all peers (Figure 1.5; Koske et al., 2012). The relatively large share of part-time workers increases earnings inequality but less so than for example in Germany and the Netherlands. Once the entire working age population is taken into account, labour income inequality falls below the OECD average thanks to low unemployment and despite the relatively high share of early retirees in the working age population without labour income. While earnings inequality has increased over the recent decades, a relatively large share can be attributed to the rise in part-time work, in particular for women, and other forms of atypical work including seasonal employment (Guger and Marterbauer, 2007; Glocker et al., 2012). The increase in female employment, however, had a muting effect on the labour income distribution of the entire working age population and on labour income inequality of households, as the increase in employment rates was stronger for women with low-income husbands (OECD, 2011d).

Figure 1.5. **Earnings inequality**



1. Data refer to 2005 for Israel, 2006 for Brazil, 2007 for France, Korea and the United States, 2009 for Chile and Japan. The values for the OECD are calculated as unweighted averages across all OECD countries for which data are available.
2. The wage gap is defined as the difference between male and female median wages divided by male median wages. Earnings used in the calculation refer to gross earnings of wage and salary earners excluding self-employed women and unpaid family workers. Data refer to 1999 (instead of 2000) for the Czech Republic. Data refer to 1999 (instead of 2000) for the Czech Republic. Data refer to 2009 (instead of 2010) for Austria, the Czech Republic, Denmark, Finland, Germany, Ireland, Israel, Korea, Sweden and Switzerland; to 2008 for Belgium, France, Greece, Iceland, Italy, Poland, Portugal and Spain. The values for the OECD are calculated as an unweighted average excluding Mexico and Chile.

Source: Koske, Fournier and Wanner (2012), "Less income inequality and more growth are they compatible? Part 2. The distribution of labour income", *OECD Economics Department Working Paper* No. 925; OECD (2012), *Closing the Gender Gap: Act Now*.

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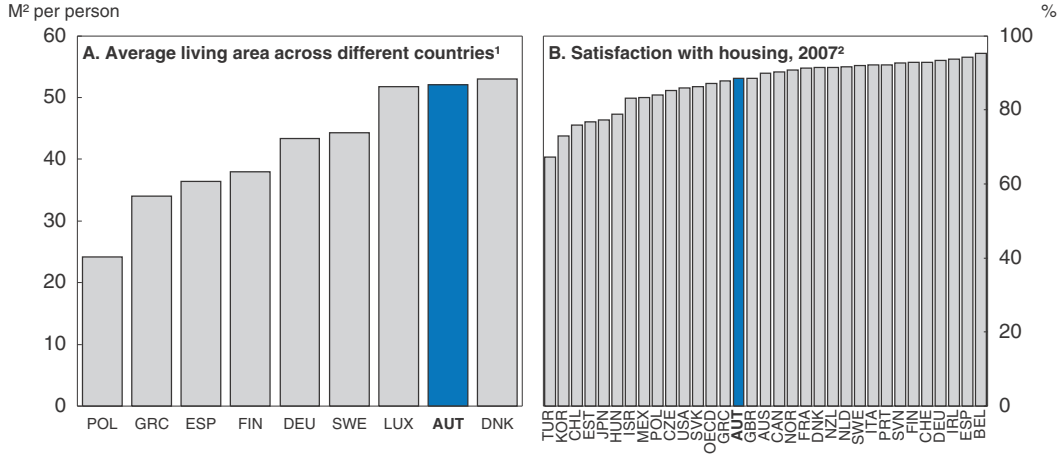
The gender pay gap for full-time employees is larger in Austria than in the average OECD country and has fallen only slightly over the last decade (Figure 1.5). Progress in educational attainment of women and a convergence in the returns to education have both narrowed the pay gap. However, they have been largely offset by the decline in relative wages of unskilled workers, particularly in the service sector, where women are still overrepresented (Böheim et al., 2012a). The gender gap can be partly explained by

observable characteristics such as occupational and sectoral differences in employment and the choice of the field of study. For instance the share of female graduates in lower-paying health related fields in Austria is more than three times higher than the share in computer sciences, and only a minority of young women complete vocational training in technical fields. In addition, the longer periods of parental leave (up to 2 years) and child care benefits (up to 3 years) in Austria appear to be associated with a higher wage gap (OECD, 2012d). Nevertheless, Böheim et al. (2012b) estimate that a wage gap of 11% remains even after accounting for a wide range of observable characteristics. This remaining wage gap may reflect discrimination but also factors such as differences in risk aversion, wage bargaining behaviour or attitudes towards competition (Böheim et al., 2012a). Recent OECD analysis (OECD, 2012d) finds that this unexplained wage gap is rather low in Austria in international comparison after accounting for differences in education, hours worked, age/work experience, job characteristics and other demographics.

Housing conditions are satisfactory and housing remains affordable

Housing is essential to meet basic needs such as shelter and give a sense of personal security, privacy and personal space. With about 1.7 rooms per person, living space requirements are well met in Austria and less than 2% of the population live in dwellings without basic sanitary facilities (Figure 1.6). In addition, the housing stock offers a large amount of square meters per person compared to other European countries (Figure 1.6). Almost 90% of the population state that they are overall satisfied with their housing conditions, which is slightly above the OECD average (Figure 1.6).

Figure 1.6. **Housing conditions**



1. Data refer to the period 2007-09 for Poland, Greece, Finland, Germany, Sweden, Luxembourg (Grand Duchy) and Austria. Data refer to the period 2003-06 for Spain and Denmark.
2. Data refer to people satisfied with the current housing, dwelling or place where they live. Data refer to 2009 for Turkey; 2006 for Austria, Finland, Ireland, Norway, Portugal, the Slovak Republic, Slovenia, Switzerland and the United States; and 2005 for Canada.

Source: EUROSTAT; OECD (2011), *How's Life? Measuring Well-Being*.

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Housing also appears to be affordable in Austria, which is related to sizeable housing subsidies, a large social and co-operative housing market and widespread rent control in the private market. People spend about 22% of their disposable income on housing, which

is in line with the OECD average, and less than 5% of the population spend more than 40%, below the OECD average of about 10% (OECD, 2011). However, despite the general affordability, about 12 000 people in Austria were homeless in 2010, an increase of 8% compared to 2008, with Vienna accounting for ¾ of all homeless (Till et al., 2012).

Housing conditions vary quite significantly with income in most OECD countries and Austria is no exception. People below the relative poverty threshold are significantly more likely to live in overcrowded places, face insufficient housing quality and/or are overburdened by housing costs according to the national definition (over 25% of disposable income). Perceived disturbances through crime, pollution and noise are also twice as high for this group (Till et al., 2012). Again, the population with a migrant background appears to be particularly disadvantaged. Immigrant households face a significantly higher risk of living in overcrowded or deprived housing conditions compared to natives and this difference is larger than in many OECD countries (OECD, 2012).[3] However, some improvements in the living conditions of immigrants have taken place recently for example thanks to better access to social housing (Till et al., 2012).

Quality of life is high but some inequalities remain

Health outcomes have improved considerably but inequalities in the society persist

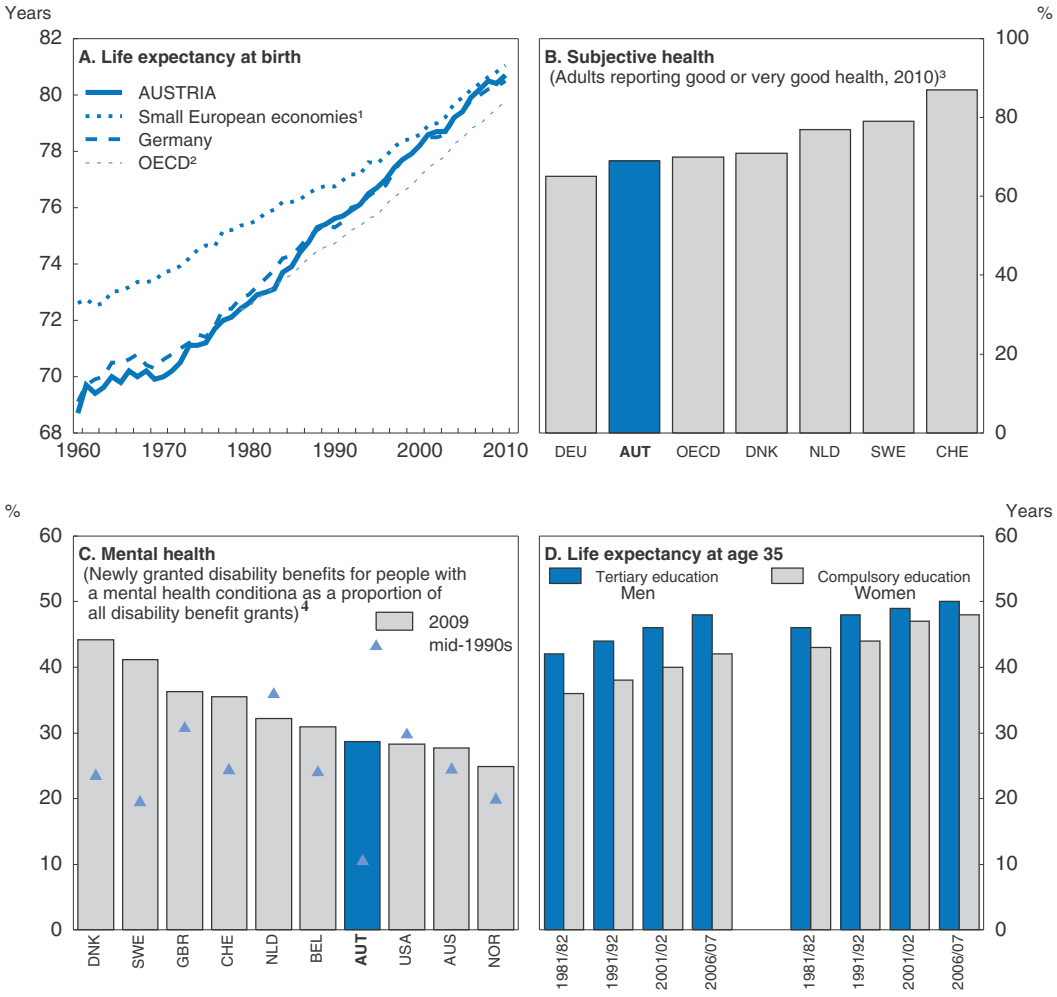
Good health is one of the most valued aspects of people's well-being and strongly affects other aspects of well-being such as the probability of having a job and sufficient income as well as participating in social activities (OECD, 2011).

As analysed in detail in the special chapter on health of the previous *Economic Survey of Austria* (OECD, 2011b), health outcomes in Austria have improved considerably in the past half century on the back of ambitious public health policies. Total health spending accounted for 11% of GDP in Austria in 2010, more than one percentage point above the OECD average, and health insurance coverage is almost universal. Life expectancy at birth reached almost 81 years in 2010, a gain of more than 12 years since 1960 and slightly above the OECD average of 80 years (Figure 1.7). Gains in older ages have also been important: an Austrian woman aged 65 is expected to live an additional 21 years today (a difference of 6.7 years over 1960), and a man an additional 18 years (an improvement of almost 6 years). Living conditions at old ages have also improved and have become healthier (OECD, 2011b) as have life-style choices. Smoking rates among adults have been falling slightly since the mid-1980s and are close to the OECD average; obesity rates are below the OECD average (12.4% versus 17%). As analysed previously (OECD, 2011b), some imbalances in the provision of health services exist (e.g. between preventive and curative care) and health outcomes fall somewhat short of what could be expected given the size of the public resources devoted to this area.

Sixty-nine per cent of people in Austria report to be in good health, close to the OECD average (Figure 1.7). This share has fallen slightly since the crisis when it peaked at 72%. About 32% of the population reports suffering from chronic diseases, close to the OECD-EU average, and 28% report being limited in their daily activities (10% strongly, and 18% limited to some extent) somewhat higher than the OECD-EU average of 25%.

Concerns about the adverse effects of mental ill-health are rising in all OECD countries. This is despite the fact that the prevalence of mental disorder has not increased (OECD, 2012b). But because of the gradually reduced stigma and discrimination and greater public awareness, more cases of mental disorders are being identified and disclosed.

Figure 1.7. **Health outcomes**



1. Arithmetic average of other small European high income economies: Denmark, the Netherlands, Sweden and Switzerland.
2. Arithmetic average over OECD countries.
3. Adults are generally defined as people aged 15 years and over.
4. Data include mental retardation/intellectual disability, organic mental disorders and unspecified mental disorders for: Austria, Belgium, Sweden and the United States (of which mental retardation/intellectual disability, accounts for 4.6% of the total inflow in 2006). Data for Australia include organic disorders and Switzerland mental retardation.

Source: *OECD Health Statistics Database* and OECD calculations; *European Union Statistics on Income and Living Conditions* (EU-SILC); OECD (2011), *Sick on the Job? Myths and Realities about Mental Health and Work*; Statistics Austria.

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Austria is among the countries with the most rapid increase in disability claims due to mental health problems between the mid-1990s and 2009 (Figure 1.7). According to OECD research (OECD, 2012b) people of prime age are among the most distressed groups of workers due to higher family responsibilities, while younger and older people may have to cope with fewer financial pressures. However, Austria is peculiar in that reported mental-illness is highest at older ages (55-64). Mental health problems are also more prevalent for women and low skilled in Austria in line with OECD trends. Almost three out of four unemployed aged 55-64 experience mental health problems (severe and common)

(OECD, 2012b). Causality is potentially running both ways, with mental illness leading to unemployment but being unemployed also affecting mental health.

Despite a high degree of equity in accessing services, health outcomes vary quite strongly with socio-economic background in Austria (Figure 1.7). For instance, the differences between the life expectancy at age 35 between people with compulsory and tertiary schooling remained surprisingly constant between the early 1980s and the late 2000s. For men this difference is 6 years and for women 2 years. The gap in reported health between the highest and lowest income quintile is also higher than in many other OECD countries (OECD, 2011). In the lowest income quintile, about 53% report good or very good health whereas this share increases to over 80% in the highest income quintile (Statistik Austria, 2013). Finally, people in Austria with a migrant background were almost twice as likely to report unmet medical needs as the native-born, even after adjusting for differences in age, education and income level (OECD, 2012).

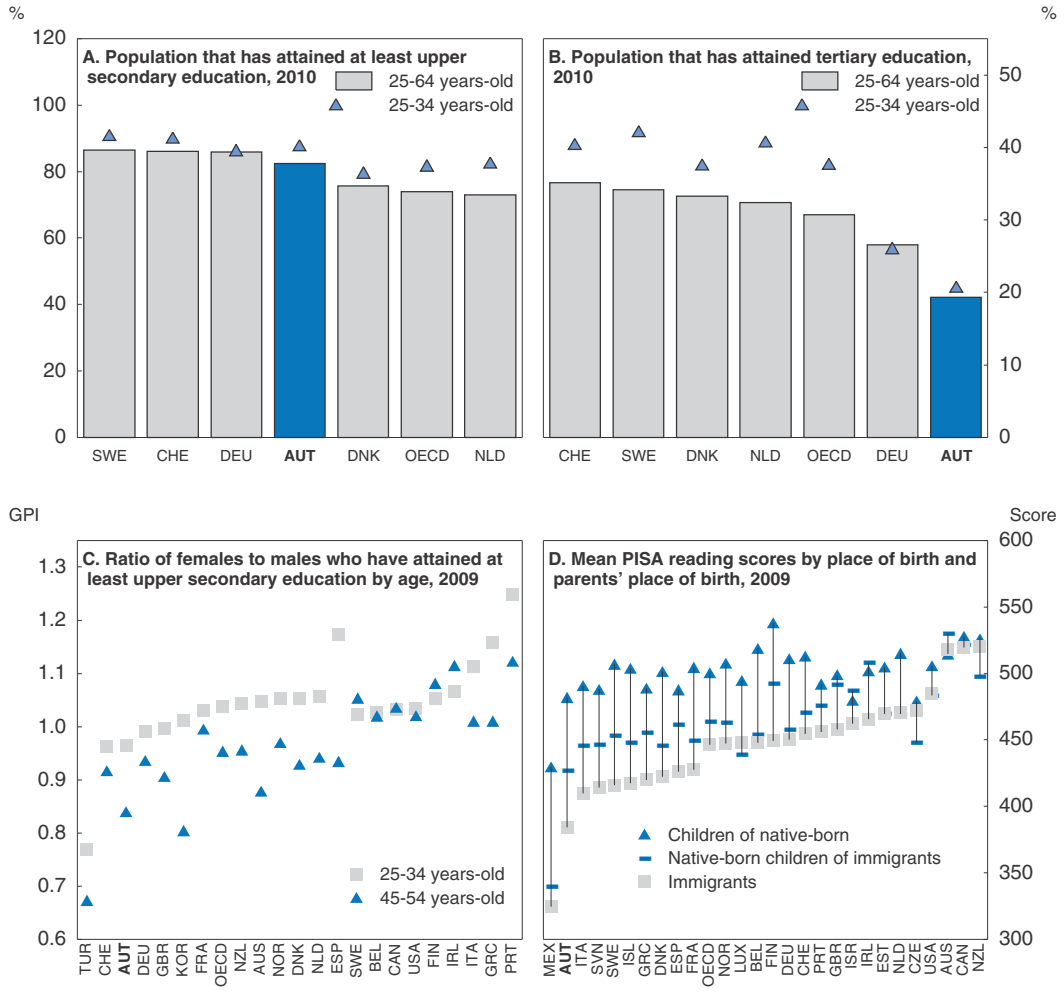
As analysed in the previous *Economic Survey* (OECD, 2011b), there is evidence that life-style choices and a lack of prevention are becoming significant sources of differentiation in health status across social groups and regions. Particularly large gaps exist in these areas for groups with migrant background (especially from Turkey and former Yugoslavia). These gaps are particularly worrying in the case of obesity, notably at younger ages, given the serious long-term health and cost implications. Migrants also tend to resort more to curative than preventive care.

Educational attainment rates are high but there are quality and equity challenges in the educational system

Education affects well-being through several channels. Education and skills have intrinsic values for individuals and enhances the control over one's life (OECD, 2011). Education is also correlated with many of the other well-being dimensions, in particular with income, wealth, employment and health. Besides private returns, the social returns include higher macroeconomic and political stability and lower crime rates (e.g. Grossman, 2006). Education can also foster resilience by enabling individuals to better cope with structural changes and is crucial to tackle earnings and income inequalities and hence social cohesion (OECD, 2010).

As analysed in the in-depth chapter on education of the 2009 *OECD Economic Survey* (OECD, 2009), Austria's educational system and in particular its very effective vocational training system has been one of the backbones of strong productivity growth and comparatively low youth unemployment (see below). The share of adults aged 25-64 having attained at least upper secondary education is higher than the OECD average and in line with peers (Figure 1.8). The share is even higher among the younger generation. The share of early drop-outs (people aged 18-24 with a maximum education level up to ISCED 3a/b) is low in comparison with the EU countries (8.3% vs. 13.5%) and is already below the Europe 2020 goal of 9.5%. However, the share of the population that has attained tertiary education is lower than the OECD average and drop-out rates from tertiary education are high (Figure 1.8). Austria's national Europe 2020 goal, however, includes post-secondary vocational streams deemed equivalent to tertiary education (ISCED 4a) and the adjusted tertiary attainment rate among the 30-34 year old was with 37% in 2011 already close to the goal of 38% by 2020 (Statistik Austria, 2013).

Figure 1.8. **Educational outcomes**



Source: OECD (2012), *Education at a Glance*; OECD (2012), *Closing the Gender Gap: Act Now*; OECD, Settling In: *OECD Indicators of Immigrant Integration 2012*.

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Adult learning is important to acquire new skills and improve performance in the labour market. In Austria, adults' participation in formal and non-formal education is around the OECD average of 40%, but below most of its peers and especially Sweden, where more than 70% of the population is involved in lifelong learning activities (OECD, 2011). Nevertheless, Austrians seem satisfied with the availability of lifelong learning opportunities provided within enterprises (Eurofound, 2009).

Overall education outcomes are not more than average. According to the latest OECD Programme for International Student Assessment (PISA, OECD, 2010b), test scores of the average 15-year old student in reading ability, maths and science are below the OECD average. These findings are also confirmed in the more recent Trends in International Mathematics and Science Study (TIMSS, 2012) and Progress in International Reading Literacy Study (PIRLS, 2012), which test skills of fourth graders. In maths, Austria ranked 23rd out of 50 countries. Test scores have improved slightly since 2007 but are significantly below the scores in 1995. In science, Austria ranked 12th. Test scores have

moderately improved since 2007 but were still below the scores in 1995. Austrian pupils scored considerably worse in reading and ranked only 25th out of 45 countries. More worryingly, test scores have deteriorated since 2006 and there are mounting complaints from recruiters about shortcomings in the general education of certain groups of school graduates (see Chapter 2).

Weaknesses exist in the ability of the education system to provide equal opportunities for all youth. As analysed in the 2009 *Economic Survey* (OECD, 2009), Austrian students' academic achievements in PISA tests exhibit a bi-modal distribution, with one group of strong academic performers and another group of weak performers. Students' performance varies considerably with the school type, into which they have been streamed. Students in academic schools and advanced vocational colleges perform well in academic tests, while students from intermediary vocational and apprenticeship schools fall behind.

Gender differences in educational outcomes persist, but have become smaller. In Austria, 87% of men have successfully completed upper secondary school compared with 76% of women**.** This 11 percentage point difference is much higher than the OECD average of 2 percentage points (Figure 1.8). The difference is smaller among younger cohorts (age 25-34), but contrary to most other OECD countries, men continue to have somewhat higher attainment rates. In contrast, women have overtaken men in tertiary education, with 23% of women and 19% of men aged 25-34 years having attained a tertiary degree compared with 15% of women and 22% of men aged 45-54 years (OECD, 2012d). Girls score significantly lower in maths and science tests, but the TIMSS results suggest that the gap has narrowed in maths. In contrast, girls score higher in reading, as in most OECD countries.

Educational outcomes depend particularly strongly on socio-economic background. The difference in average PISA scores between the top 20% of the PISA index of socio-economic background and the bottom 20% is 117 points, higher than the OECD average of 99 points. Again, people with a migrant background (in particular from Turkey and the former Yugoslavia) fare especially poorly (Figure 1.8). Even after accounting for their socio-economic background, immigrants and native born children of immigrants do worse than the offspring of natives in PISA reading tests (OECD, 2012). The educational disadvantages of groups with migrant background are discussed in detail in Chapter 2.

Work-life balance

Obtaining a balance between work and other activities is central for well-being. Paid work is important to secure a desired material standard of living and a sense of purpose in life while leisure ("wealth-in-time") ensures health and a personal life. However, it is challenging to measure the optimal balance as this will be different across individuals and depend on preferences.

Austrians work long hours while at work, at least compared to Western European countries, but they seem to enjoy longer periods out of work, for example through public holidays, vacation or early retirement. The share of employees working long hours (50 or more per week) is 9%, around the OECD average (Figure 1.9). Average actual annual hours worked per employed have declined continuously since the mid-1990s in Austria.[4] With roughly 1 600 hours per employed and year (2011), Austrians work less than the OECD average, yet more than most peers. The average collectively agreed normal annual working

time per full-time employee is 1 746 hours (2011) in Austria, higher than the EU average (EIRO, 2012). This is entirely due to higher average hours per week. In contrast, leave days (vacation and public holidays) are at least as high or even higher than in most peers (Table 1.2) and the expected time spent in retirement approaches 30 years for the recently retired cohorts (see below and Chapter 2).

Table 1.2. **Average collectively agreed normal annual working time, 2011**

	A. Weekly hours	B. Gross annual hours (A x 52)	C. Anual leave (days)	D. Public holidays (days)	E. All leave (C + D) expressed in hours	F. Annual hours (B - E)
Hungary	40	2 080	20	7	216.0	1 864.0
Romania	40	2 080	21	6	216.0	1 864.0
Estonia	40	2 080	20	8	224.0	1 856.0
Poland	40	2 080	20	9	232.0	1 848.0
Latvia	40	2 080	20	10	240.0	1 840.0
Lithuania	40	2 080	20	10	240.0	1 840.0
Slovenia	40	2 080	20	10	240.0	1 840.0
Bulgaria	40	2 080	20	11	248.0	1 832.0
Greece	40	2 080	23	10	264.0	1 816.0
Luxembourg	40	2 080	25	8	264.0	1 816.0
Malta	40	2 080	24	12	288.0	1 792.0
Ireland	39	2 028	24	8	249.6	1 778.4
Slovakia	39	2 028	20	12	249.6	1 778.4
Portugal	38.9	2 022.8	22	11	256.7	1 766.1
Austria	**38.8**	**2 017.6**	**25**	**10**	**271.6**	**1 746.0**
Cyprus	38	1 976	20	12	243.2	1 732.8
Belgium	37.6	1 955.2	20	10	225.6	1 729.6
Spain	38.5	2 002	22	14	277.2	1 724.8
Czech Republic	38	1 976	25	9	258.4	1 717.6
Norway	37.5	1 950	25	8	247.5	1 702.5
Netherlands	37.1	1 929.2	25	6	230.0	1 699.2
United Kingdom	37.5	1 950	24.7	9	252.8	1 697.3
Finland	37.5	1 950	25	9	255.0	1 695.0
Sweden	37.2	1 934.4	25	9	253.0	1 681.4
Italy	38	1 976	28	11	296.4	1 679.6
Germany	37.7	1 960.4	30	10	301.6	1 658.8
Denmark	37	1 924	30	9	288.6	1 635.4
France	35.6	1 851.2	30	8	270.6	1 580.6
EU27	**38.1**	**1 981.2**	**25.3**	**8.9**	**260.9**	**1 720.3**
EU15	**37.6**	**1 955.2**	**26.7**	**9.2**	**269.6**	**1 685.6**
NMS12	**39.7**	**2 064.4**	**20.8**	**8.6**	**233.6**	**1 830.8**

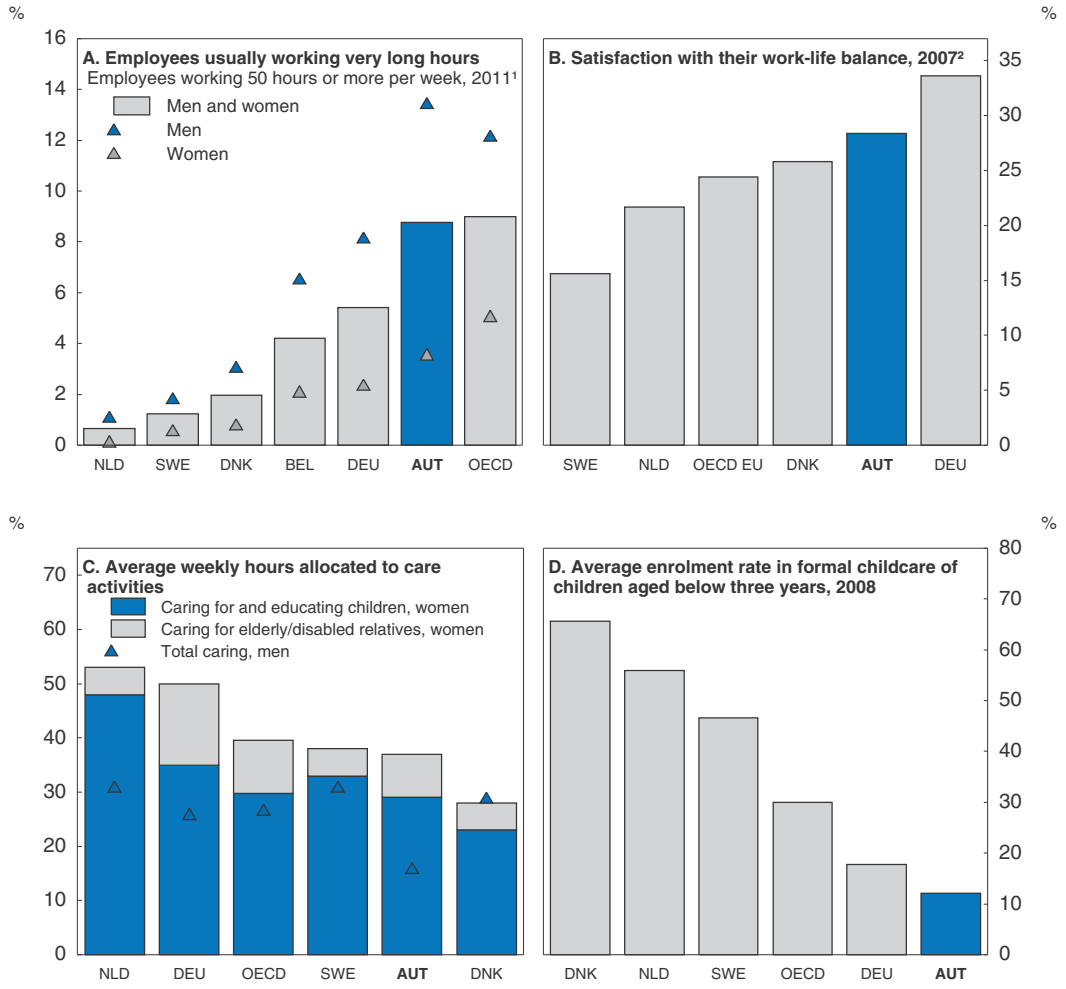
Notes:

1. Note by Turkey: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".
2. Note by all the European Union member states of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

Source: Eurofound (2012c).

Austrians seem relatively satisfied with their work-life balance (Figure 1.9). In addition, according to the *Second European Quality of Life Survey* (Eurofound, 2009) the majority of Austrians (62%) thinks that they spend the right amount of time in paid work, slightly below the OECD-EU average (66%). While the share of respondents feeling that they work too much is at the OECD-EU average (28%), the share of respondents stating that they

Figure 1.9. **Work-life balance**



1. Data refer to employees usually working 50 hours or more per week. Jobs covered are the main job for Austria and Sweden.
2. The figure shows the proportion of people feeling that they spend "just the right amount" of time in each of the following areas: job/paid work; contact with family members living in this household or elsewhere; other social contact (not family); and own hobbies/interests.

Source: OECD Labour Force Statistics Database; OECD (2011), *How's Life? Measuring well-being*; *OECD Family Database*.

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work too little (7.1%) is higher than the OECD-EU average (4.3%) and higher than in all peers. Despite the general satisfaction with the work-life balance, there are some signs that work-related stress (work strains) has increased in Austria, especially in low skilled occupations (OECD, 2012b).

According to the *Third European Quality of Life Survey* (Eurofound, 2012), the share of people participating in unpaid voluntary work is highest in Austria, followed by Sweden and Ireland. Fifty-three per cent of respondents stated to take part regularly or occasionally in voluntary work, compared to 32% in the EU.[5]

Working time arrangements provided by Austrian employers are among the most flexible in the EU (EC, 2010a); however, flexible work time is mainly used by women. This

may have contributed to a stronger persistence of traditional gender roles than in most countries. Women spend more than twice as much time caring for children and/or elderly per week than men, the largest difference among OECD countries (OECD, 2011c) (Figure 1.9).

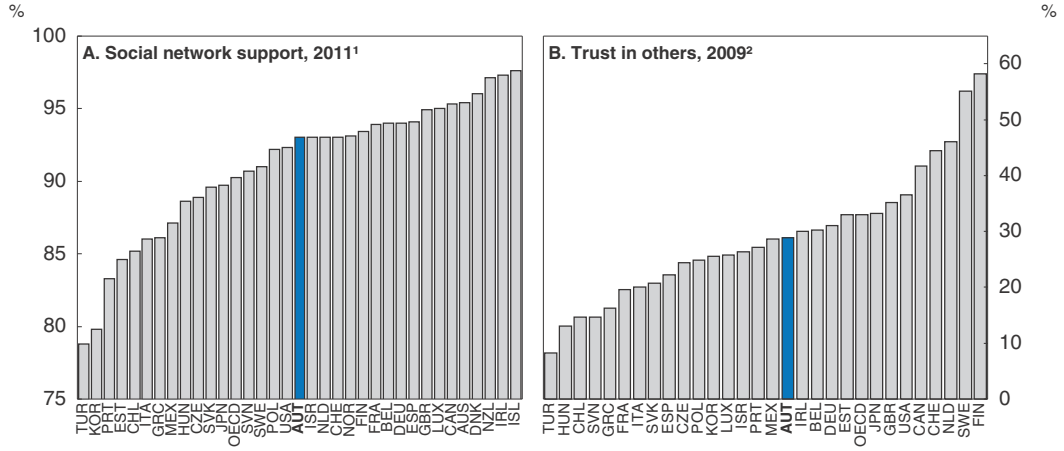
A strong local social support network

Social connections are important for individual's well-being as people derive pleasure from spending time with others (Kahneman and Krueger, 2006). Besides, social networks can provide material or emotional support in times of need as well as jobs and other opportunities (OECD, 2011). Social networks and the shared values and norms are crucial for social capital, which may facilitate co-operation within or among groups and positively affect growth (e.g. Ishise and Sawada, 2009).

In Austria social support networks appear to be functioning well. Ninety-three per cent of people report that they have friends or relatives who they can count on in times of need, somewhat higher than the OECD average of 90% (Figure 1.10). The social support network appears weaker for lower income groups, but still 87.5% of respondents from this group state that they have someone to count on (Statistik Austria, 2013).

In contrast, general trust in others is not particularly high in Austria. About a third of the population states that most people can be trusted, similar to the OECD average (Figure 1.10). But in Denmark and Sweden, more than 50% of the population believes that others can be trusted. These findings suggest that social capital is formed more locally in Austria than with respect to the entire society (see below).

Figure 1.10. **Social connections**



1. Percentage of people declaring having friends or relatives they can count on in case of need. Data refer to 2008 for Iceland and Norway; and to 2009 for Estonia, Israel, Switzerland and South Africa.
2. Percentage of people saying that most people can be trusted. Data refer to 2010 for Austria, Belgium, Chile, the Czech Republic, Denmark, Finland, Hungary, Luxembourg, Mexico, the Netherlands, Poland, Portugal, the Slovak Republic and Sweden.

Source: Gallup World Poll.

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Civic engagement and governance

Through civic engagement and participation people express their political voice, contribute to the functioning of society and shape the political decision process. Moreover,

by expressing their preferences and needs, public policy is better informed and policies can be better shaped, thereby increasing the effectiveness of public policy (Knack, 2002). Governance relates to the quality of setting regulations, defining and implementing public policy and establishing the rule of law. Effective governance thus also contributes to building confidence in the government and public administration. Measuring these concepts is particularly difficult and the few indicators that exist are limited.

In Austria, voter turnout rates have been slightly higher than in the OECD on average, but have been falling over the last two decades, as in most other OECD countries. The degree to which governments have open and formal consultation procedures differs widely across the OECD, but in general has become more formalised, according to an OECD indicator (OECD, 2009b). Austria scores around the OECD average but had lost some ground between 2005 and 2008 as other countries caught up. In Austria, the social partnership process plays a crucial role in forming consensus for political decisions on a wide range of issues including structural, regulatory and redistributive issues (see below for more details).

Trust varies across different public institutions. In 2010, more than 60% of Austrians stated that they highly trusted the judicial system, while this figure dropped to around 50% for the national government and to slightly below 40% for the media. A similar ranking of trust can be found in other OECD countries as well (OECD, 2011). In addition, about 72% of Austrians believe the political system works sufficiently well (Statistik Austria, 2013). More recently, the disclosure of several corruption cases in the political and economic sphere dating back to the last decade appear to have had a negative impact on the perceived level of corruption and may well have affected public trust (Transparency International, 2012).

Personal safety is high

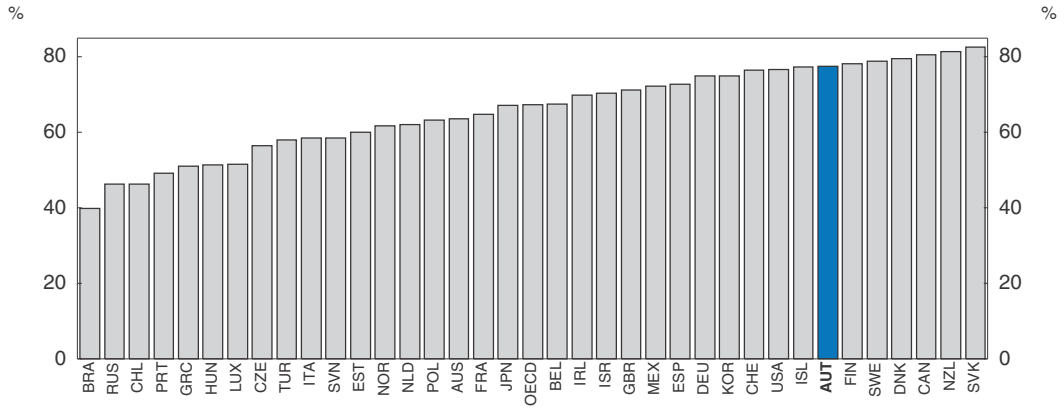
Personal security, in the sense of being sheltered from personal harm or crime, prevents people from suffering from long lasting and severe effects on personal well-being. Crimes can directly affect an individual's physical or mental health or indirectly affect it through an increase in worry and anxiety hampering daily activities (Amerio and Roccato, 2007). Living in safe communities can also foster closer inter-personal relationships (Detotto and Otranto, 2010).

Austria enjoys a high level of personal security. The intentional homicide rate in Austria is 0.5 per 100 000 people, one of the lowest in the OECD, and has fallen continuously since the early 1990s. The share of the population that reports having fallen victim to assault over the last 12 months is 3%, also below the OECD average of 4% (OECD, 2011). In addition, robberies and domestic burglaries are less frequent than in other EU countries, although both have increased since the early 2000s[6] (Eurostat, 2012). These low crime levels are also reflected in a high perception of safety in Austria (Figure 1.11).

Men are more likely to fall victim to homicide and assault, although women report slightly lower perceived security. In most OECD countries, people with higher income and higher education usually report higher feelings of security and indeed face lower risks of crime. This can be explained by the fact they can afford better security and are less exposed to criminal activity in their neighbourhoods. This is, however, not the case in Austria, where both the assault rates and perceived insecurity seem somewhat higher among the highest income groups (Statistik Austria, 2013).

Figure 1.11. **Perceived security**

Percentage of the population declaring feeling safe when walking alone at night in the city or area where they live, 2010



Note: Data refer to 2008 for Iceland and Norway; and to 2009 for Estonia, Israel, Switzerland, and the Russian Federation.

Source: OECD (2011), *How's Life? Measuring Well-Being*.

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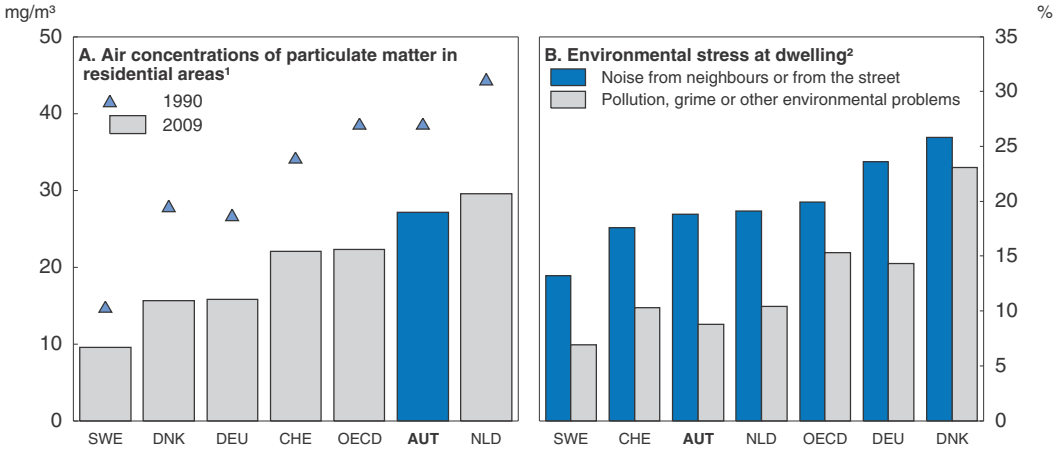
Environmental quality is satisfactory

People's well-being and quality of life is strongly affected by a healthy physical environment (Khan, 2002; Holman and Coan, 2008). Environmental pollutants, hazardous substances and noise have a strong impact on people's health. More extreme environmental events such as natural disasters may cause death, injury and disease. The environment may also affect citizens intrinsically as they attach a value to the beauty and healthiness of the place where they live and they benefit directly from environmental assets such as clean water and air, and access to green space. This section looks at the importance of the environment for current well-being. The question of environmental sustainability is dealt with in the second chapter.

Austria has rich natural assets. Forests and other woodlands represent nearly half of the territory with a wide diversity of flora and fauna, but urban sprawl and land sealing has become a concern (see Chapter 2). The natural assets are likely to contribute to the value of leisure time activities. Furthermore, Austria's cultural and environmental assets also attract tourists. Tourism's direct value added is estimated to have contributed 5.5% to GDP in 2011 (excluding business trips: 5.1%) and tourism accounts for 7.3% of total employment (2011).

Air pollution can have severe effects on human health, ecosystems and cultural heritage. Austria has managed to reduce air pollutants further and cleared the targets set by the EU National Emission Ceilings (NEC) directive for sulphur dioxide (SO_2), non-methane volatile organic compound (NMVOC) and ammonia (NH_3) in 2011. However, emissions of nitrogen oxides (NO_x), while declining more recently, are still well above the NEC target. Emissions of total suspended particulates are also on a slowly declining trend since 1990. Despite these trends, in several urban areas and along transport routes concentrations of air pollutants, especially of particulate matters (PM10), ozone and nitrogen oxides, have been above the national limits set by the Ambient Air Quality Act and the Ozone Act (Umweltbundesamt, 2012). PM10 concentrations in urban areas are also above the OECD average (Figure 1.12).

Figure 1.12. **Environmental quality**



1. Data are urban-population weighted particulates PM10 levels in residential areas of cities with more than 100 000 residents.
2. Percentage of total population feeling disturbed by environmental stress at dwelling.

Source: World Bank; Eurostat, EU-SILC.

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According to the latest *OECD Environmental Performance Review* of Austria (OECD, 2013b), water quality is good and has generally improved, owing to more advanced wastewater technology, increasing connection rates to wastewater treatment plants, specific action programmes to reduce nitrates and more widespread use of environment-friendly agricultural practices, all supported by government investment aid. Water is an abundant resource in Austria and only a small proportion of it is used: annual abstractions are around 4% of total available water resources. The share of Austria's population connected to public wastewater treatment plants increased from 88% in 2001 to 94% in 2010, one of the highest shares in Europe. However, extensive flood protection measures, intensive use of hydropower, and diversions of water flows for irrigation purposes have altered river morphology and hydrological conditions. As a result, 11% of surface water bodies are heavily modified or artificial; of these more than 80% fail to meet "the good ecological potential" required by the EU Water Framework Directive (WFD).

According to the *EU Survey of Income and Living Conditions* (EU-SILC), about 19% of the population state that they feel disturbed by noise from the streets or neighbours, similar to the European average and most peers (Figure 1.12). In contrast, only about 10% of the population complain about pollution, grime or other environmental problems in the areas where they live which is lower than the European average and most peers. In addition, 94% of Austrians state that they are satisfied with water quality, higher than the OECD average of 85% and most peers (OECD, 2011).

Nevertheless, some inequalities also appear to exist in the domain of environmental quality. According to EU-SILC, about 21% of the population in the highest income quintile feels disturbed by noise, grime or pollution in their living environment, while this share increases to 30% in the lowest income quintile.

Subjective well-being is high in international comparison

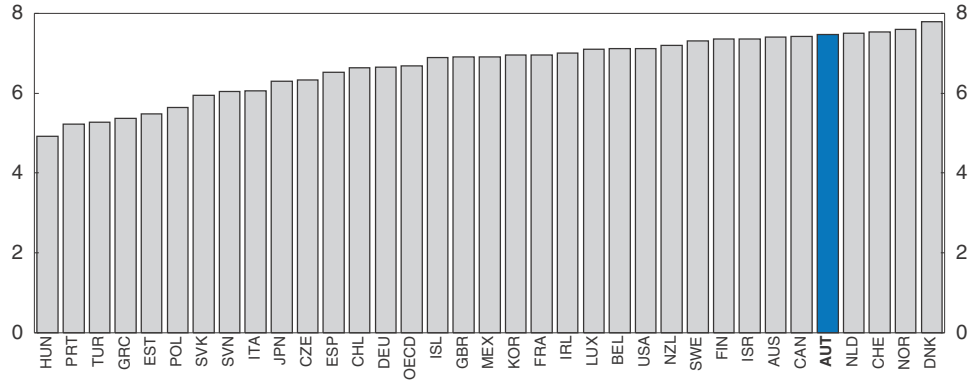
Subjective well-being tries to capture the notion that the way people experience a set of circumstances is as important as the circumstances themselves, and that people are the best

judges of how their own lives are going. Three concepts of subjective well-being are often distinguished: life satisfaction, "affect balance" (the share of respondents who report having experienced more positive than negative emotions on the previous day) and "flourishing" (the set of potential and actual achievements that are available to an individual).

Life satisfaction captures cognitive assessments of one's life. It presents an overall assessment of well-being that is grounded in people's preferences rather than in a-priori judgments about the important drivers of individual well-being. Affect measures emotions at a point in time such as happiness, joy and excitement (positive affect) or anger, pain and sadness (negative affect). Affect balance is the difference between positive and negative affect. Flourishing is a more fundamental concept to capture notions of "capabilities and functionings", which reflect the set of potential and actual achievements that are available to an individual (Sen, 1992). While functionings are usually thought of as objective circumstances of an individual, some researchers have also sought to measure them via individuals' subjective appreciations and have, for example, combined survey questions on autonomy, determination, interest and engagement, aspirations and motivation, and a sense of meaning, direction or purpose in life (Clark and Senik, 2011).

Austrians appear to be satisfied with their lives. When asked to rate their general satisfaction with life on a scale from 0 to 10, Austrians assigned it a score of 7.5, higher than the OECD average of 6.7 (Figure 1.13). Only people in Denmark, Norway, the Netherlands and Switzerland seem to be more satisfied with their lives. A similar picture emerges from a different survey (EU-SILC), in which 79% of respondents stated being satisfied or very satisfied with their lives. This share has been relatively constant since 2005 except for a small drop to 76% during the crisis in 2008. Turning to a measure of affect balance, 75% of people reported having more positive experiences in an average day (feelings of rest, pride in accomplishment, enjoyment, etc.) than negative ones (pain, worry, sadness, boredom, etc.). This figure is slightly higher than the OECD average of 72% (OECD, 2011). Finally, Huppert and So (2011) construct a measure of flourishing for 23 European countries and find that almost 28% of Austrians meet their criteria for flourishing. This share is only higher in Denmark and Switzerland.

Figure 1.13. **Life satisfaction**
Cantril ladder, mean value, 2011



Note: The Cantril ladder is measured on a scale from 0 to 10. Data refer to 2008 for Iceland and Norway; 2009 for Switzerland; and 2010 for Chile, Israel and Brazil.
Source: Gallup World Poll.

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Women appear to be more satisfied with their lives in Austria than men while their affect balance appears slightly lower, a pattern consistent with the majority of OECD countries. People with higher education also tend to be happier. This difference is also visible in Austria, where the gap between life satisfaction of tertiary and primary graduates is slightly above the OECD average (OECD, 2011). This is likely to reflect mainly the better income and employment outcomes of the better educated (see Box 1.3).

Differences in subjective well-being between native born and people with migration background appear to be relatively limited, despite the fact that the latter are faring less well in a range of well-being dimensions. Boarini et al. (2012) do not find a significantly negative effect on life satisfaction from being born abroad in Austria, contrary to the findings for the average OECD country (see also Box 1.3). Moreover, 87% of immigrants reported feeling completely or mostly at home in 2012, against less than 5% not feeling home at all. Some differences between groups exist: 92% of the people from former Yugoslavia felt completely or mostly at home, against slightly below 80% from Turkey. However, 44% of immigrants from Turkey stated that their personal circumstances have deteriorated in recent years, against 16% for those from former Yugoslavia (Statistik Austria, 2012). The proportion of those feeling discriminated varies across groups: 26% from former Yugoslavia and 58% from Turkey felt discriminated. This feeling declines for younger generations (from 42% for those aged 40-59 to 28.6% for those aged 15-19) (Statistik Austria, 2012).

Box 1.3. **Determinants of subjective well-being**

Analysing the determinants of subjective well-being can give hints about social preferences and can hence provide valuable information for policy makers. Much of the literature has focused on the relationship between income and subjective well-being. In several papers Richard Easterlin (e.g. 1974, 1995, 2001, 2005) investigated the relationship between income and happiness both across countries and within countries over time, without finding significant evidence of a relationship. In contrast, robust evidence appears to exist that within countries at a point in time, richer individuals are happier (e.g. Layard, 1980). This so-called Easterlin Paradox can be reconciled if relative and not absolute income matters for individual subjective well-being. A related idea is that subjective well-being adapts to circumstances and hence increases in income only have a temporary positive effect on happiness (e.g. Di Tella and MacCulloch, 2010). Alternatively, absolute income may only matter at low income levels but happiness and income are independent beyond a certain satiation point.[1] However, the Easterlin Paradox is still debated with studies finding evidence that absolute income plays a major role in determining happiness both across countries and over time (e.g. Sacks et al., 2010 and Stevenson and Wolfers, 2008). Other factors commonly found to have a strong impact on subjective well-being include health (both physical and mental), social contact and employment status. While being employed as opposed to for example being retired or looking after children does not appear to influence life satisfaction, unemployment has a large negative impact beyond the effect associated with the loss of income (Flèche et al., 2012).

Two recent OECD studies (Flèche et al., 2012; Boarini et al., 2012) investigate drivers of subjective well-being in OECD countries.

Box 1.3. **Determinants of subjective well-being** *(cont.)*

Flèche et al. (2012) use data from the World Values Survey (WVS) and European Values Survey (EVS) over the time period 1994-2008 to investigate determinants of life satisfaction. The Austria specific regressions suggest significantly positive effects from good health, freedom of choice and control, and trust in people, while the impact of being unemployed or divorced is significantly negative. In contrast to the sample including all OECD countries, no significant effects are found for income (+), income inequality (-), being female (+) and having children (+).

Boarini et al. (2012) use data from the Gallup World Poll for 2009-10. They use proxy variables for all 11 *How's Life* well-being dimensions. In the OECD sample, they find for all variables significant coefficients with the expected signs on both life satisfaction and affect balance. For life satisfaction they find particularly strong effects from not having enough money for food, unemployment, health problems, having friends to count on and freedom to choose what to do with one's life. While they find significant effects from education the magnitude of this effect decreases as other areas of well-being are controlled for, lending support to the notion that education primarily affects life satisfaction through other well-being areas. Comparing the results between the drivers of life satisfaction and affect balance they find very similar results, however the effect of economic variables (e.g. income, unemployment) have a somewhat weaker effect while social variables (health, freedom to choose, personal security) have a larger impact. For Austria they find similar effects to the OECD average.[2] However, the results for Austria do not suggest a significantly negative impact from being born abroad on life satisfaction in contrast to the results for all OECD countries.

Another way of gauging information about the social preferences of a country is to ask individuals directly about the importance they ascribe to certain well-being dimensions for their individual well-being (stated preferences). This is the approach taken by the Austrian research institute WIFO in a recent study (WIFO, 2012). In 800 personal interviews, individuals were asked to rate each of the 11 *OECD How's Life* well-being dimensions on a scale from 1 to 6. The study finds that Austrians ascribe the highest importance to health, subjective well-being and safety. However, the differences in importance between all areas are small, as are the differences between the sub-indicators in each well-being dimension. Differences in assigned ratings between socio-economic (men/women; age groups; educational levels) groups are also small. All groups rate health the highest and political engagement lowest. Using these ratings as weights, the 11 dimension were aggregated into a composite indicator. Based on the OECD Better Life Index Indicator set, Austria ranks 10th among the 18 countries with sufficient data. The Nordic countries Norway, Denmark and Sweden rank highest, whereas the eastern European countries Poland, Hungary and Estonia rank lowest. When using an extended dataset with additional indicators found important for well-being in the interviews (e.g. income inequality, voluntary work and health insurance coverage) Austria ranks 4th among 11 countries, behind Sweden, Denmark and Finland.

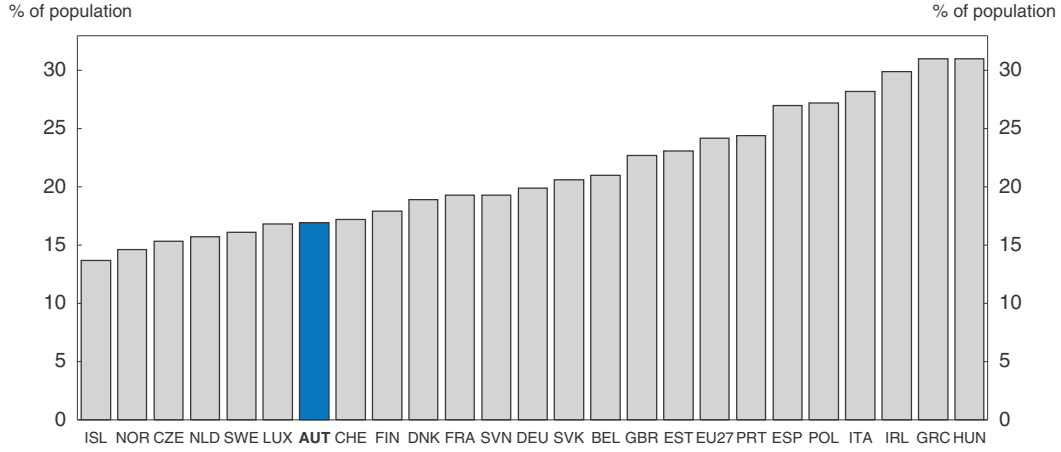
1. Layard (2003) suggests an income threshold of USD 15 000 per head.
2. Country specific results are not reported in Boarini et al. (2012) but have been made available for this Survey.

Groups with multiple well-being disadvantages

The previous sections have looked at average well-being outcomes and have shed some light on inequalities in each well-being dimension separately. However, outcomes in different well-being dimensions are correlated and certain groups in the population tend to cumulate multiple disadvantages (or advantages) at the same time. This section tries to shed some light on this issue in Austria.

Austria has committed itself under the EU's ten year growth strategy Europe 2020 to reduce the number of people at risk of poverty or social exclusion by 235 000 within the 10 years between 2008 and 2018. People at risk are people for which at least one of the following criteria holds: *i)* a disposable household income adjusted for household size below 60% of the median income; *ii)* severe material deprivation which covers indicators relating to economic strain, durables, housing and environment of the dwelling;[7] or *iii)* live in households with very low work intensity.[8] In 2011 about 1.4 million people (17% of the population) were at risk in Austria according to this definition, which is significantly below the OECD and European Union average (Figure 1.14). For about 7% of this group (99 000 people) all criteria are relevant at the same time. 12% (166 000) are both at risk of poverty and live in households with low work intensity, while 7% (97 000) are both at risk of poverty and materially deprived. Finally only about 1% are materially deprived and live in households with low work intensity (14 000) (see Till et al., 2012). Austria managed to reduce the number of people at risk even during the crisis. Despite a small increase in 2011 the number of people at risk has fallen by 125 000 compared to the reference year 2008 and Austria appears to be on track to meet its Europe 2020 commitments.

Figure 1.14. **People at risk of poverty or social exclusion, 2011**



Note: People at risk of poverty or social exclusion refers to those who meet at least one of the following three conditions: at-risk-of-poverty, severely materially deprived or living in households with very low work intensity. Risk-of-poverty is defined as the share of individuals with disposable income adjusted for household size after transfers and taxes less than 60% of the median for the entire population. Severely materially deprived is measured as the share of individuals experiencing at least 4 out of the 9 following deprivation items: cannot afford *i)* to pay rent or utility bills, *ii)* keep home adequately warm, *iii)* face unexpected expenses, *iv)* eat meat, fish or a protein equivalent every second day, *v)* a week holiday away from home, *vi)* a car, *vii)* a washing machine, *viii)* a colour TV, or *ix)* a telephone. Living in households with very low work intensity is defined as the share of individuals living in households where the adults have worked less than 20% of their total work potential during the past year. Data refer to 2010 for Ireland.

Source: EU-SILC Survey.

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Till et al. (2012), also show that people at risk of poverty and social exclusion face disadvantages in several other well-being dimensions. For example they are 3 to 5 times more likely to live in poor housing conditions (overcrowded dwellings, overburdened by costs, insufficient basic housing conditions such as sanitary facilities, or strains in the neighbourhood (noise, pollution and crime). They are also less likely to have taken part in educational activities over the last year and they are twice as likely to have long-standing illnesses and or face health related limitations in their daily lives compared to people not at risk of poverty and social exclusion.

Analysing this group in greater detail, Till et al. (2012) show that women and children and young people under the age of 18 face a higher risk of poverty and social exclusion. The higher risk of women mainly reflects their lower labour market attachment. Across different household sizes, the risk of a household belonging to the poverty and social exclusion group is 3-4 times higher if no woman in the household works. In addition, people with a migrant background are also particularly likely to be at risk. About 35% of the people at risk are either immigrants from non-EU/EFTA countries or naturalised citizens.

Drivers of Austrian well-being

Special economic and social features have played a distinct role in Austrian well-being achievements. Three key factors appear to have reinforced each other and bolstered well-being: *i)* steady productivity growth within broadly stable enterprise and production structures; *ii)* families providing intense services to their members with the support of local social connections; and *iii)* the important role of social partnership for policy formation and implementation. Certain factors within these drivers influence individual dimensions of well-being (for example the contribution of productivity growth to material foundations of well-being), while others bear on wider outcomes (medium-sized family firms providing not only incomes but employment stability, satisfaction in workplaces, and stability of living places). Certain factors raise trade-offs between dimensions of well-being. For example, families' providing care for their young and old members increases household services and social connections, but limits market incomes, the employability of the caring family member and increases gender wage gaps. Table 1.3 summarises these links between specific economic and social drivers and different dimensions of well-being (with examples of these links relevant in the context of this *Survey*) (Table 1.3).

Productivity growth within stable enterprise and production structures

Steady productivity growth and competitiveness gains…

Austria's economic performance has been backed by successful international economic integration through post-war decades, first with the German economy, then more generally with Western Europe and the formally centrally planned economies of Central and Eastern Europe. Economic performance has permitted steady gains in the purchasing power and material well-being of citizens, has made their work and living conditions more satisfactory, facilitated life-long learning and has helped generate "wealth in time" by lowering working hours and lengthening retirement periods. Growth has also produced fiscal resources for large public services and social transfers (Figure 1.21). Nonetheless, it has also created tensions with the quality of the environment through emissions, the growth of road traffic, and urban sprawl.

Table 1.3. **Drivers of Austria's well-being**

Drivers \ Outcomes	Income and wealth	Education and skills	Work-life balances	Health status	Jobs and earnings	Housing	Social connections	Environmental quality
Productivity and competitiveness	1	2			3			4
Medium-sized firms and stable employment			5		6	7	8	
Vocational education and training	9	10			11			
Stability of living places			12			13	14	15
Service intensive families	16	17	18	19	20		21	
Public services		22		23		24		25
Social partnership	26	27	28		29			

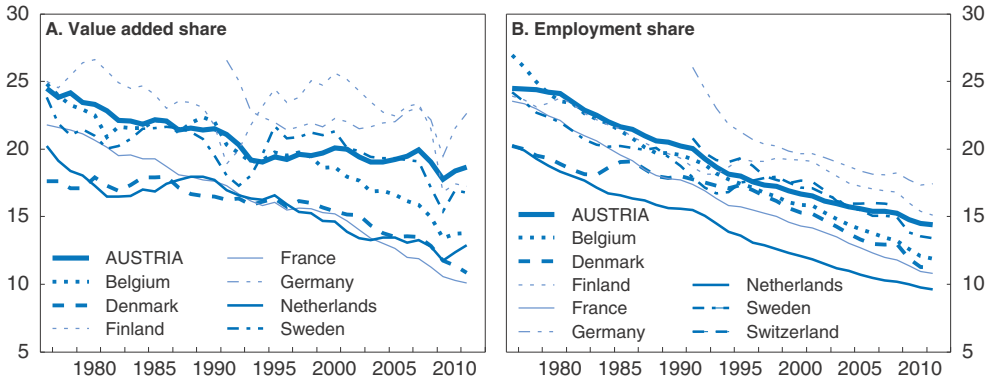
1. Productivity and competitiveness growth fosters material sources of well-being.
2. Highly productive and competitive firms provide labour market relevant on-the-job training.
3. Highly productive and competitive firms offer high-quality, well-paying jobs.
4. Economic growth puts pressure on environmental resources, e.g. by increasing freight transport or land-use. Aiming at increasing competitiveness can lead to an underpricing of environmental externalities. On the other hand, productivity increases achieved by a more economical use of resources can improve environmental quality.
5. Long-tenure employment with stable medium-sized firms may contribute to work-life balances by increasing stability.
6. Successful medium-sized firms offer jobs in "organic" teams.
7. Long-tenure employment with medium-sized firms facilitates the stability of living places.
8. Long-tenure employment promote stable living places which in turn fosters social connections and local social capital.
9. High quality vocational education is a key driver of income growth and income equality.
10. High quality vocational education produces labour market-relevant skills.
11. High quality vocational education helps secure high quality jobs and earnings.
12. The stability of living places may contribute to work-life balances.
13. The stability of living places may help improve housing conditions. In turn, housing policies (social housing, rent control) contribute to stable living conditions.
14. The stability of living places facilitates social connections and hence fosters local social capital. Larger families living in geographically close places also strengthen social connections.
15. The stability of living places may increase commuting pressures.
16. Service intensive families may lead to lower labour market participation thereby lowering material income and wealth.
17. Service-intensive families contribute to the education of pre-school and school age children.
18. Family services contribute to the well-being of family members but create tensions between work and family responsibilities of women (especially when labour within families is divided according to gender).
19. Families provide care for children and elderly. Families with strong human capital promote good health practices (the opposite may be true for disadvantaged families).
20. Care responsibilities taken over predominantly by women may have contributed to the persistent gender earnings gap.
21. Intensive services within small and broader families contribute to closer connections and hence social capital.
22. Public education plays a central role in education and skill formation.
23. The public health service network is dense and highly appreciated by the population.
24. Subsidised social and co-operative housing plays a major role in the rental housing market, notably in Vienna.
25. Public regulations and services shape production costs of environmentally-harmful activities (e.g. fuel taxes), may subsidise environmentally friendly behaviour (e.g. organic farming), and influence settlement structures.
26. Social partnership shapes wage bargaining and strongly influences the distribution of the fruits of growth.
27. Social partners co-manage vocational training and the apprenticeship system.
28. Social partners shape work-life balances (working hours, vacation time, etc.).
29. Social partners negotiate employment and pay practices.

The manufacturing sector has played a special role in strong economic performance. It has expanded and diversified through the post-war decades, benefitting also from Austria's favourable geographical position. It has attained a high degree of sectoral and technological diversification (Hausmann et al., 2011). It has kept a larger share in the economy than in most other small European economies (Figure 1.15).

High productivity and high income jobs in manufacturing stimulated demand for domestic services. Wage growth in the overall economy tracked these productivity gains, albeit with a gap, as international competitiveness was preserved and a sustainable

Figure 1.15. **The share of the manufacturing sector in the economy**

Percentages



Source: OECD STAN Database.

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balance between domestic and external demand was achieved (Figure 1.16). "Social partnership" (discussed below) stimulated technical progress, productivity gains and helped distribute benefits in the form of profits, wages and taxes.

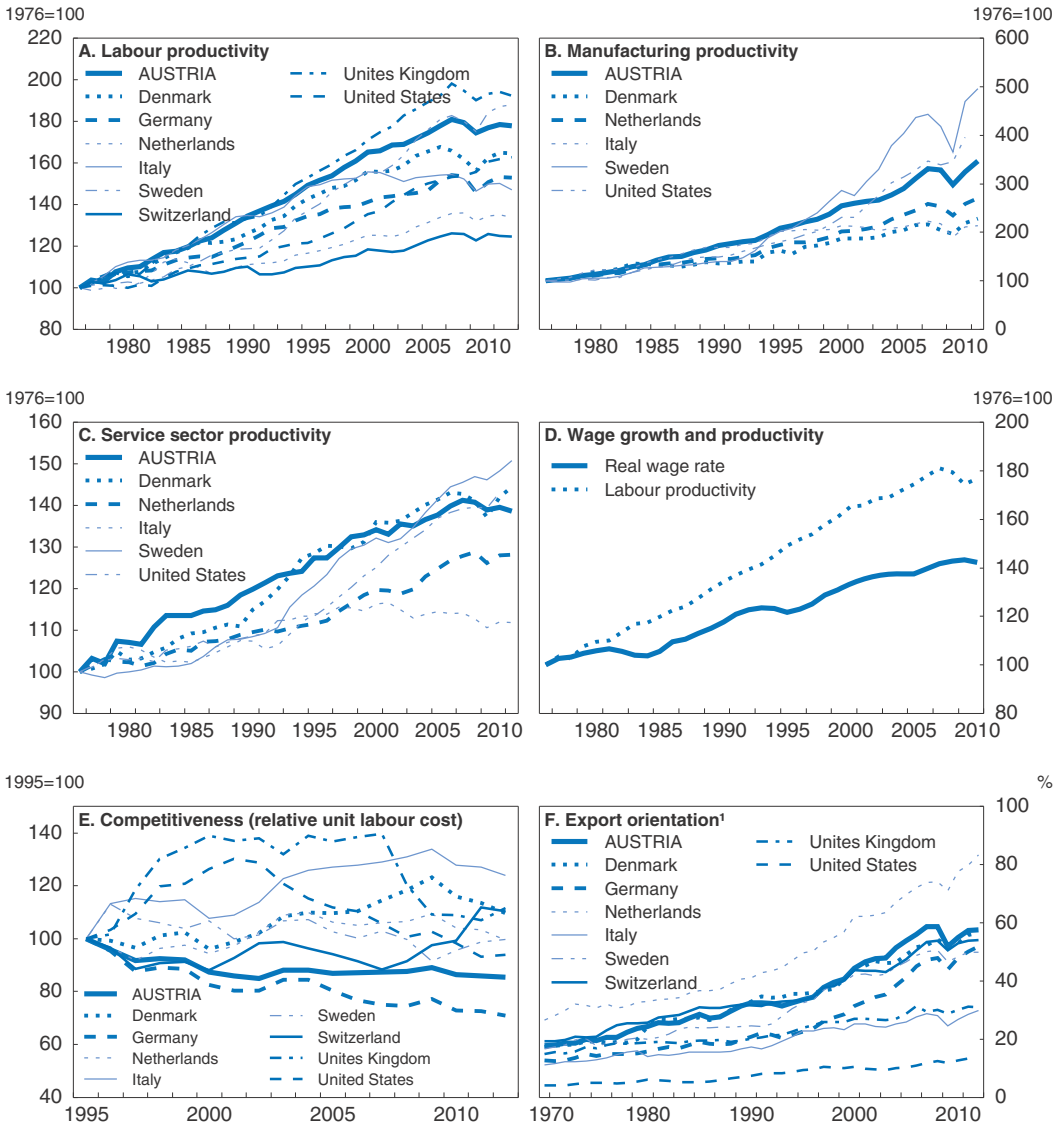
The performance of the economy along this path was strengthened with its further globalisation after opening to Central and Eastern Europe after the fall of the Berlin wall, accession to the European Union in 1995 and the launch of the Economic and Monetary Union in 1999. Austria is now one of the most deeply integrated economies with global production chains – its upstream vertical integration indicator (share of foreign value added in gross exports) reached 33%, one of the highest levels among comparable countries (OECD *Trade in Value Added Indicators*, 2012). The share of exports is also at a high level (Figure 1.16). Export orientation, import competition and inward and outward FDI flows have fostered efficiency gains, technology transfers and scale economies (Stöllinger et al., 2010). It is estimated that this successful pattern of international integration added 0.5 to 1 percentage point to annual GDP growth since the mid-1990s (Breuss, 2010). Strong economic fundamentals, despite structural shortcomings in sheltered service sectors discussed in previous *Economic Surveys* (OECD, 2007; OECD, 2009) have persisted to date and have been rewarded with high resilience of output and employment during the global financial crisis.

… driven by flexible medium-sized enterprises…

Flexible, well-performing medium-sized firms – employing more than 25 but less than 500 employees – have played a special role in the growth and international integration of the business sector. Their performance has contributed not only to the material sources of well-being but, also, to the work-life balances and the geographical settlement patterns of the population and to the formation and resilience of local communities.

The economy boasts many large size enterprises, which had been directly or indirectly state-owned but were privatised in the 1990s, mostly to foreign investors. Inward FDI generated also large greenfield production units, notably in the automotive sector. These large firms played a major role in the introduction of new technologies and organisation techniques in Austria. However, locally-owned manufacturing remained dominated by

Figure 1.16. **Superior productivity growth and competitiveness have driven performance**



1. Real exports in percentage of real GDP.

Source: OECD Economic Outlook Database; OECD STAN Database.

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medium-sized firms, which have diffused these techniques and productivity gains. Despite the importance of large enterprises in the overall economy, the enterprises employing between 10-49 workers represent 24% of total employment (2011 figures), against a EU27 average of 21%, and they continued to grow after the global crisis (de Kok et al., 2011). Those employing between 50-249 workers account for 19% of total employment, against the EU27 average of 17% (EC, 2013). Similar data is not available for enterprises employing between 250-499 workers.

Research suggests that gradual growth of existing firms, rather than new entrants, had the strongest impact on the expansion of the business sector (Hölzl, 2011). The recent surge

in R&D expenditures has taken place mostly within existing medium-technology firms (EC, 2013). The share of SMEs participating in international research projects is significantly higher than in other EU countries. Productivity improving technological progress appears to take place to a large extent within existing medium-sized firms.

Medium-sized enterprises are mostly family-owned (and the majority of family firms belong to this size category) (KMU, 2008). Fully or largely family-controlled enterprises employ about 75% of all employees, and account for about 70% of business entities in chemicals and plastics, and 80% and more in metalworking and electronics. The majority of family firms own all equity in their company, and in 40% of the cases management consists entirely of family members. Typically, such firms nurture special team relations with employees in the so-called "organic" ways of functioning with "routine social competencies cultivating team spirit" (KMU, 2008; WIFO, 2012). Enterprises accumulate experience-related know-how, and workers enterprise-specific human capital. Family firms are reported to be particularly focused on customer relations, adapting products and services to special customer needs, possibly as a consequence of a high degree of continuity in their management (Frank and Keßler, 2009).

Regarding dismissals in times of economic strains, recent research suggests that two types of company behaviour were observed in Austria in the global crisis (EFIGE, 2012): *i)* firms employing mostly mid-age and skilled workers tried to limit dismissals; and *ii)* firms employing younger and/or low-skilled workers tended to reduce their workforce in larger numbers. Hölzl (2012) found that Austrian SMEs could maintain a strong performance during the global crisis without firing employees thanks in part to flexible employment arrangements negotiated with workers. If employment adjustments became unavoidable, workers were supported and their outplacement promoted by employer firms, with the help of social partner organisations. The so-called Re-training Foundations (*Arbeitsstiftungen*) contributed to industrial adjustments. They offer re-training and out-placement support to employees and in-placement services to companies. They are jointly managed by social partners and are co-funded from public sources. Foundations and similar adjustment mechanisms already helped avoid social tensions in the past. Textile sector employment was reduced by 50% within a decade and steel and ceramic sectors experienced similar downsizing (Wagner and Lassnigg, 2005). In 2010, 9 300 employees were being re-trained by foundations.

There is room for improving corporate governance of family firms. About half of Austrian family enterprises operate without formal governance rules (*PriceWaterhouseCoopers*, 2008). Modern corporate governance would facilitate adjustments to structural changes in the global economy. For example, joint ventures and mergers with foreign firms may become necessary, and in several enterprises this needs to take place in the context of generational ownership transmissions. More formal governance arrangements facilitate these adjustments. According to recent research, family ownership has not hindered organisational innovations in Austrian firms so far (Altomonte et al., 2012), but the high degree of informality in corporate governance may become a handicap in future strategic restructurings (KMU, 2008).

Medium-sized firms' employment and human resource management practices appear to have far-reaching implications on the functioning of the economy and society. Empirical evidence is sparse, but available information suggests that these enterprises hire a significant part of their workforce from the graduates of apprenticeship schools and

vocational colleges, train them further, and keep them within the enterprise for long-periods (KMU, 2008; Hoeckel, 2010; Bock-Schappelwein et al., 2012). Mahlberg et al. (2011) find a positive link between employee age and productivity, reflecting learning-by-doing, and suggest that previously assumed productivity declines in subsequent years may be less severe due to these experience effects.

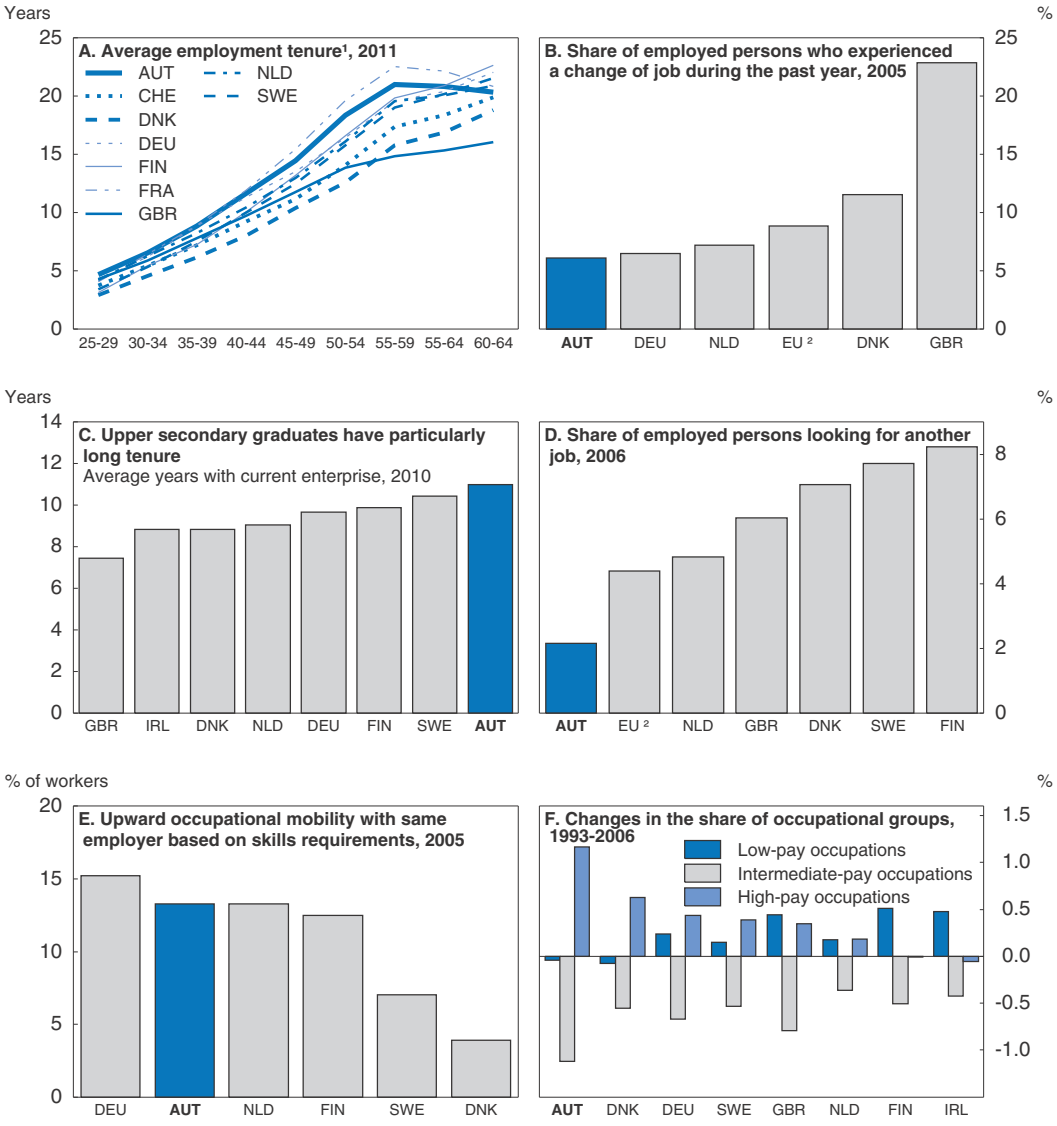
A large part of employment relations are, as a result, of very long duration (Figure 1.16). The average tenure of workers aged 25-54 is longer even than in Germany and Sweden which have similarly stable employment practices (Figure 1.17). The number of times Austrian workers change employers is the lowest in Europe. The rate of job destruction in existing firms is also the lowest, while the proportion of workers looking for another job is very low. This distinct environment may account for Austrian workers reporting the highest degree of satisfaction with their employment conditions and professional development in Europe (Eurofound, 2012).

The stability of employment relations persists despite extensive recourse to seasonal employment, both in manufacturing and services (Schuh et al., 2000). Many seasonal workers are recurrently re-employed by the same enterprises and job turnover is even lower than actually measured (Stiglbauer, 2006; Huber and Smeral, 2006). This stability of employment is not imposed by regulations, and does not hinder occupational flexibility. Austria has indeed one of the most flexible employment protection legislations in Europe. On the other hand, the occupational flexibility of the workforce is very high. The European Labour Force Survey distinguishes three forms of flexibility (change of contract type, change of job profile, and change of employer), confirming that in Austria: *i)* employer mobility is very low, *ii)* the proportion of those looking for a new job is also very low, but *iii)* there is a high degree of occupational flexibility, as shown on Figure 1.16 (Andersen et al., 2008). OECD Employment Outlook 2012 confirms this particularly high degree of occupational flexibility in Austria. Structural adjustments are supported by internal re-training, also with the help of the social partner organisations. Occupational flexibility encompasses both "upward" and "downward" mobility: when necessary, employees in many firms accept to fulfil less qualified tasks, although pay levels usually cannot be reduced.

These relations are not universal in Austria. Many firms follow less committal, arms' length labour relations. A study found that 30% of enterprises realised 70% of total job turnover, with 10% of enterprises generating 50% of total turnover.[9] Long tenure and mutual commitment between employees and employers has nonetheless typified the core labour force so far. This especially concerns the vocational education graduates employed in the manufacturing sector.

This business model underpins Austria's technological and trade specialisation (Figure 1.18). Enterprises have built robust market shares in the sectors based on cumulative knowledge (Kegels et al., 2008). They excelled in particular in medium-technology, engineering-centred activities, and in sub-sectors based on medium-level vocational training (Peneder, 2009). In several sectors companies gain hold in the higher quality segments of the international markets (Bock-Schappelwein et al., 2012). Industry's diversification towards more sophisticated, information technology-centred activities has been slower than in comparable countries, but, despite this apparent gap, Austrian economy remains highly diversified across a large spectrum of sectors (Hausmann et al., 2011). This appears to have increased its resilience in export markets (Ragacs et al., 2011).

Figure 1.17. **Employment stability and occupational flexibility**



1. Job tenure is measured by the length of time workers have been in their current or main job or with their current employer.
2. Weighted average for the EU member states for which data is available in 2005.

Source: OECD *Economic Outlook Database*; OECD, *Labour Force Statistics Database*; Danish Technological Institute (2008), *Job Mobility in the European Union: Optimising its Social and Economic Benefits*, Final Report; OECD, *OECD Employment Outlook 2012*.

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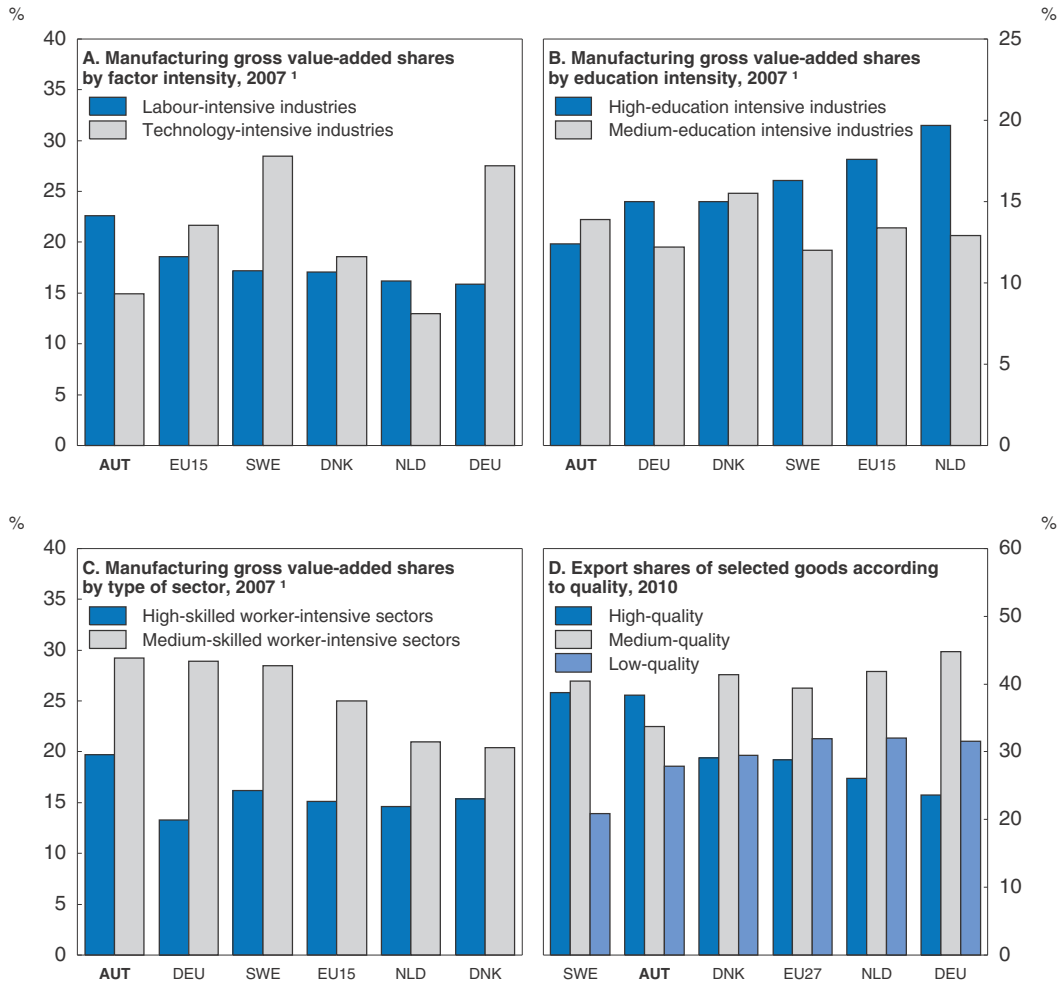
... backed by a distinct vocational education and training system

The development of the business sector has been supported by the vocational education and training (VET) system. This structure, which is specific to Austria, differs even from its closest peers in Germany and Scandinavia. It has a particularly large weight in the education sector (the majority of the labour force is vocationally trained), has a

Figure 1.18. **Manufacturing is specialised in cumulative knowledge-based sectors**



1. The percentage shares of sectors shown on figures do not add up to 100% due to the presence of other sectoral categories in the underlying data.

Source: WIFO (2012), *Bildung 2025: Die Rolle von Bildung in der österreichischen Wirtschaft*.

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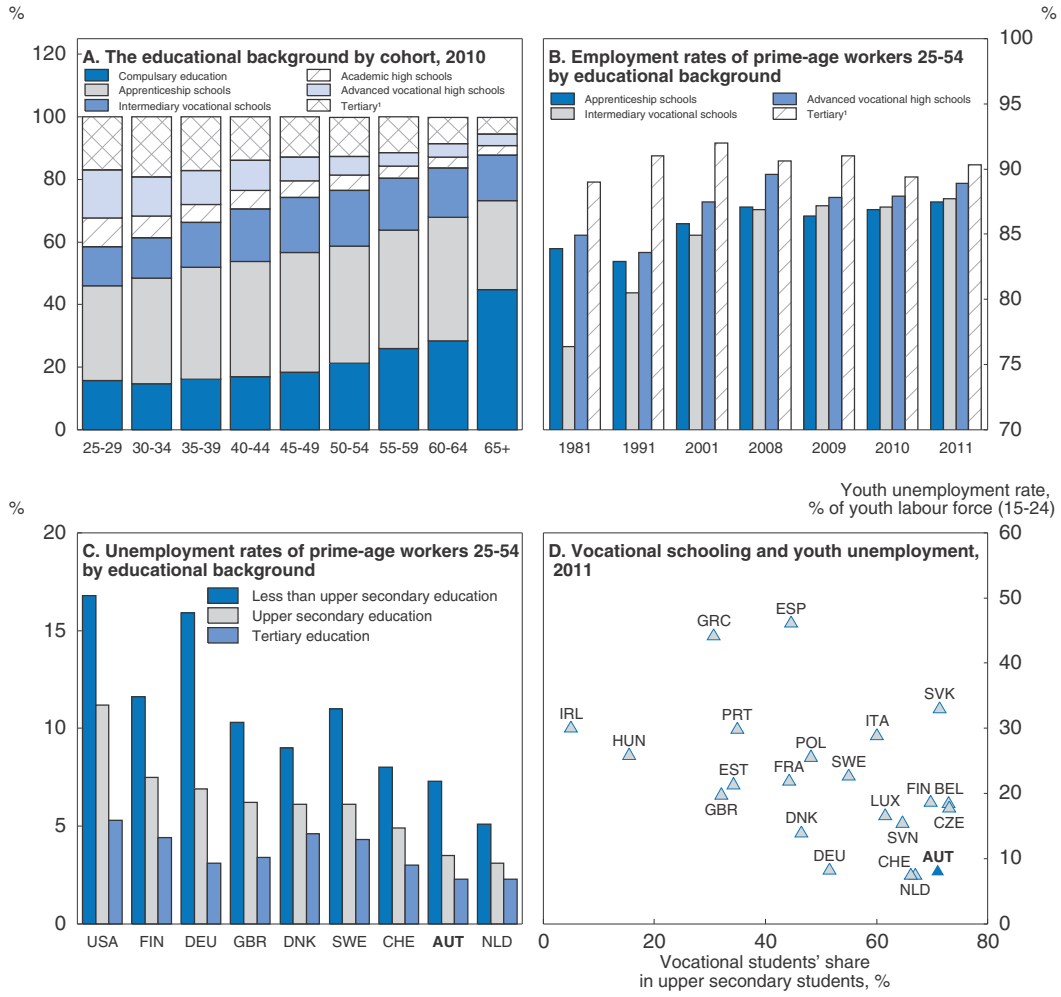
complex bottom-up structure with many sectoral and regional layers, and is closely steered by the social partners. It directly supports material sources of well-being, skills, jobs and earnings.

The VET system has three components which differ in sophistication and respond to three broad types of labour market demands (Figure 1.19):

- Apprenticeship-based education (*Lehre*) which lasts 3 to 4 years after 9 years of compulsory education. Presently there are about 250 apprenticeship programmes in Austria. Students aged 15 to 18/19 spend 20% of their time in school and the remaining 80%with their employer. This stream accounts currently for 30% of new entrants to the labour force but had an even larger weight in the past.
- Intermediary (*berufsbildende mittlere Schule*) and advanced (*berufsbildende höhere Schule*) vocational colleges. These provide full-time vocational education, with some academic content, which lasts respectively 3 to 4, and 5 years after lower secondary education.

Figure 1.19. **The adaptive vocational education and training (VET) system**



1. Universities of advanced sciences and general universities.

Source: Statistics Austria; *OECD Employment Outlook 2012*; OECD, *Education at a Glance 2012*; OECD, *Employment and Labour Market Statistics Database*.

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Advanced colleges provide access to tertiary education. Students are aged 14-17/18 and 14-19. These schools train about 25% of all new entrants to the labour force.

- Universities of Applied Sciences (UAS) offer three to five years of applied professional education after high school. They admit graduates from both academic and vocational colleges, after individual selection (a possibility not granted to universities). They were created in the mid-1990s (110 graduates in 1996), and have expanded remarkably, from 3 000 students in 2003 to 12 000 in 2010. A further extension by 4 000 additional student places is planned.

Graduates from VET streams are highly demanded in the labour market. In 2011, the unemployment rate of apprenticeship school, vocational college, and tertiary education graduates aged 25-54 remained as low as 3.2%, 2.6% and 2.8% respectively. Employment rates of VET graduates were around 90% in 2011 (Figure 1.19) – an exceptionally high level in international comparison.

The composition of vocational education evolves according to student demands and market needs. The share of apprenticeship students has been contracting, whereas that of intermediate and advanced vocational colleges increased. Graduates of apprenticeship schools from older generations face signs of obsolescence in their skills (as reflected in their weakening labour market performance), but the qualifications of younger cohorts appear to be more versatile – as suggested by their significantly stronger employment rate which reached 88% (for the 25-54 cohort) in 2011. The globalisation of the Austrian economy creates robust demand for qualified production workers, and the employment prospects of well-trained apprentices are good. Likewise, market demand for the graduates of 3-4 and 5 year vocational colleges remains very strong (the employment rate of the 25-54 cohorts reached respectively 88% and 89% in 2011).

What makes Austria's VET system so responsive to market needs is a high degree of participation of economic actors in its governance. Contrary to other key public services dominated by suppliers, the VET system has been traditionally open to the "voice" and influence of employers. It is a *de facto* part of the social partnership system: Economic and Labour Chambers actively steer its evolution. In particular, they are involved in the development of curricula of apprenticeship trades. Mismatches between the skills of graduates and labour market demands are in a number of instances reduced by comprehensive on-the-job training. And, equally importantly, employers decide about the accession of candidates to the apprenticeship system.

However, the VET system faces also adjustment challenges. Skill demands on the market may be diverging from the existing "path dependent" vocational streams, and more sophisticated and portable skills may be required by the market. Student preferences for training in managerial white-collar jobs, rather than in production-related scientific, technical and vocational skills may also be becoming a source of mismatch. Recent OECD assessments of Austria's VET system highlight the traditional strengths and these new challenges (Box 1.4).

Box 1.4. **Strengths and challenges of the Austrian VET system**

An OECD review of Austria's VET system in 2010 documented the following strengths: the quality of apprenticeship, the high level of social partner involvement, capacity to cater to a broad range of labour market needs, and the links between VET and general tertiary education. The teacher workforce was found to be well-prepared, with industry experience. The review had recommended strengthening academic standards in apprenticeship training, and literacy and numeracy skills in VET curricula (OECD, 2010a).

A subsequent review in 2013 updated this analysis and emphasised the following points (OECD, 2013):

Strengths

- The system is highly diverse with many different programmes and institutions offering access to different social groups through different modes of provision. A range of pathways allow students to access higher education. These are substantial achievements in international comparison.
- Student numbers continue to grow in VET colleges and graduates gain high earnings in the labour market.

Box 1.4. **Strengths and challenges of the Austrian VET system** *(cont.)*

- Universities of Applied Sciences have built a high reputation amongst students, employers and the general public.
- Highly structured professional examinations offer a route to higher earnings and more senior positions to those acquiring skills on the job. They also offer a way to independence as owners of small businesses.
- Social partners have high levels of engagement in the VET system, through the Economic Chamber and the Chamber of Labour. They are active members of many commissions and co-ordination councils.

Challenges

- The VET system remains composed of many different institutions, subject to different and unco-ordinated governance systems. This allows innovation and entrepreneurial responses to the needs of different groups of students. The challenge is to ensure that this diversity is adequately managed and co-ordinated.
- The mix of training provision between different fields is "mainly driven by student preferences and may not fully reflect the needs of the economy". The Review highlights this as a challenge as the VET system is publicly funded.
- Given increased demand for higher level skills, access to further learning opportunities is critical. There are two key challenges. Secondary vocational graduates often fail to receive adequate recognition for their qualifications when proceeding to tertiary education. New pathways created for apprentices and others without a formal qualification to enter tertiary education are little used.

Recommendations of the 2013 *Skills Beyond School* Review of Austria

- Building on recent initiatives by the government and social partners, establish a national advisory body on VET involving all key stakeholders. The objective should be to ensure more strategic coherence in the VET system without damaging its vibrant diversity.
- To improve access to UASs and universities, establish a commission to facilitate the transition from vocational colleges to UASs. Take steps to improve the access of apprentices into tertiary education.
- Workplace training should remain a substantial and mandatory part of VET programmes. Learning objectives for workplace training should be built into curricula and into quality assurance schemes.
- New institutional mechanisms should be developed to ensure that the mix of provision in UASs and VET colleges takes account of employers' needs alongside student demand.

Source: OECD, 2010a; OECD, 2013.

Families provide intensive services backed by local social connections

Families' role in care for members

Families have long been central pillars of social life in Austria. They complete market and public services in particularly important ways (Frèche et al., 2012). They secure for example the lion's share of care for low-age children and dependant elderly. They also provide essential complements to school services in the later education of children (OECD, 2009). These roles go beyond what is found in most other OECD countries and influence

significantly the education and health outcomes of the new cohorts and the work-life balances and social connections of all generations.

Early child care until 2 years has been largely a family responsibility to date. Austria has the lowest proportion of children aged 0-2 in institutional facilities among high income European countries, at 12%, against an EU average of 28% and 65% in Denmark, 55% in Netherlands and 48% in Sweden (Hofmarcher-Holzhacker, 2012). Family policies facilitate this option by offering generous child cash benefits and letting families decide between external and internal care. Policies give incentives to parents staying with children below three years old (by providing allowances but withdrawing them if the market income of the recipient exceeds a threshold). At the same time they support external care by strongly subsidising child care institutions when these services are available, which is not the case across all regions for children of very young age (Chapter 2). From the viewpoint of children's development, an open policy stance permitting families to combine internal and external care may be appropriate (OECD 2011a, OECD 2004, US Committee on Integrating the Science of Early Childhood Development, 2000). In families with strong human capital, very young children seem to benefit from close parental presence. For the development of children born into less advantaged environments, external care tends to be more effective even at very young age and such children benefit from participation in early childhood education and care (ECAC) from a very early stage. Needs and best adapted solutions differ according to circumstances – with limited empirical research so far in Austria on alternative care solutions, children's development and parents' well-being.

The special role of families is also reflected on health care practices for children. Families have larger responsibilities in this area than in other OECD countries. Even if a range of medical tests are a prerequisite for child care subsidies (the *Mutter-Kind-Pass* scheme), a number of preventive measures are decided within families rather than being mandated by law. This is the case for example for a number of vaccines for immunisation. Many families (notably families with an immigration background) have difficulty fulfilling these responsibilities and, as a result, Austria has started to fall behind in international child health indicators. Austria's position in the standard *Bradshaw Child Health Index* is the EU 27's lowest, except for Romania and Greece, due to low immunisation (Hofmarcher-Holzhacker, 2012). Gaps seem to reflect shortcomings in families' awareness and shortfalls in supporting public services.

Families' support to the dependant elderly follows a similar pattern. About 75% of all dependants in Austria are taken care of in families, with the lion's share of responsibilities falling on women and on helpers under their governance. The increase in female labour force participation in the 2000s was accompanied by an increase in the share of institutional care, but its role remains limited. Mühlberger et al. (2008) found that women's labour force participation increasing by 5 percentage points between 1995 and 2006 was accompanied by a shift in the share of formal care for elderly from 20 to 25%. Family responsibilities in this area may be increasing as a result of ageing and the prevalence of new forms of dependence, including mental dependence (OECD, 2011e).

Public policies support a variety of options in old-age care. Austria has developed a particularly elaborate system for long-term care based on lump-sum subsidies corresponding to seven different levels of dependency, which gives the choice to dependents and their families between internal and external care. To help family caregivers new services are becoming available as discussed in Chapter 2.

Tensions between work and family responsibilities put a large burden on working age women. This tension is discussed in Chapter 2 as a key challenge to the future sustainability of the Austrian well-being model.

The geographical stability of living places and social capital

The population is more geographically stable than in other high income OECD countries. This stability appears to contribute to important dimensions of Austrian well-being such as high appreciation of local social relations, strong feeling of safety in neighbourhoods, comfortable housing conditions and vibrant local voluntary activities. It also facilitates co-operation and exchanges of services within broader families.

Internationally comparable data on geographical mobility are sparse. Data from the "European Year of Workers' Mobility 2006" confirm that the proportion of Austrian people changing NUTS 2 level regions is very low, at 0.6% per year, whereas it fluctuates around 2% in peer countries. Two thirds of young adults move at least once more after leaving their parents' house, and 40% of them twice, much less than in comparable countries, where rates are respectively between 80-85% and 60-80%. The young and higher educated are more mobile, but less than their counterparts in other countries.[10] Austrians also declare to be the least willing to change living places in case of economic necessity (Figure 1.20).

Preference for residential stability reveals a special appreciation for local community connections. David et al. (2008) found that Austrians have more frequent daily contacts with neighbours than in peer countries. Local connections account for their sense of solidarity and feeling of security. While employment suffers in other countries with largely local social capital and low mobility, Austria is an exception: social capital is mainly local but employment has not been hampered. This reflects the stability of employment and long tenure in successful medium-sized enterprises spread across the territory.

As discussed above, intensive voluntary work, including for the production of local public goods such as fire brigade services are a local characteristic. Austria is the European country with the highest degree of participation in unpaid voluntary activities (Eurofound, 2012).

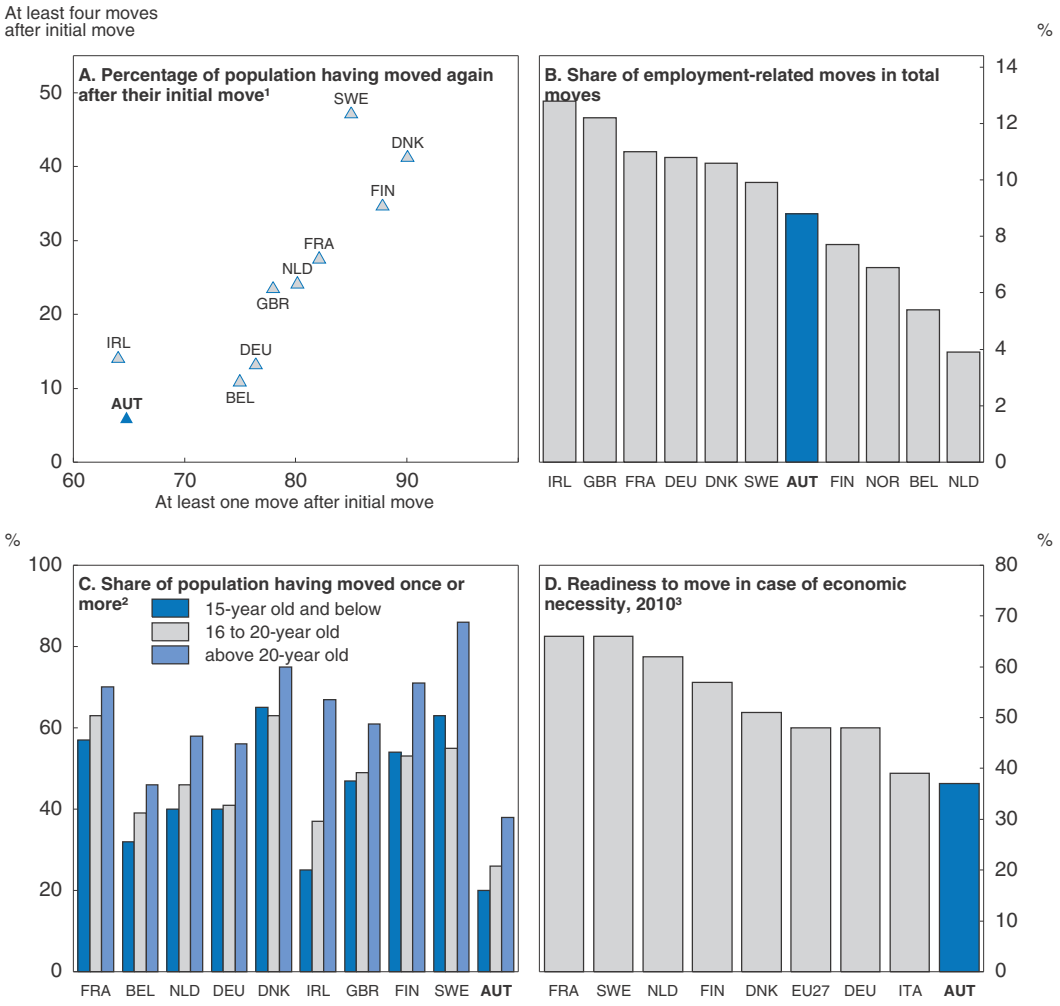
Public policies support this pattern through two channels, as discussed in Chapter 2. First, transaction costs make moving more costly. Second, transportation policies facilitate long-distance commuting, both by car and public transportation. Eligibility rules for unemployment benefits also do not actively promote mobility.[11]

The role of social partnership in policy formation and implementation

A strong but costly public sector…

The public sector offers a dense service network, large social transfers and a comprehensive range of regulatory functions. Its activities influence directly the education, health, housing and environmental outcomes of the population. Its funding requires a high public revenue ratio at 47% of GDP (Figure 1.21). This is one of the highest shares among OECD countries, but seems to have been endorsed by the society to date. According to a survey in 2006, only 33% of Austrians thought that their social welfare system is too expensive, compared to 51% on average in the European Union (EC, 2007). Austria's strong trend growth may have helped by permitting to expand public revenues without directly denting household incomes. The government has also tried to reduce the

Figure 1.20. **Stability of living places**



Note: Internationally comparable mobility data is usually presented in terms of number of moves after initial move out of the parents' house.

1. With at least one of the four moves to another city. The initial move out of parents' house is not counted.
2. With at least one move to another city after moving out of parents' house.
3. Percentage of responses to the question, "If you were unemployed and had difficulties finding a job here, would you be ready to move to another region or country to find one?".

Source: EC, Eurobarometer 64.1, "Mobility, Food Risk, Smoking, AIDS Prevention, and Medical Errors", September-October 2005; EU-SILC 2007, ad-hoc module on housing conditions; EC, Special Eurobarometer 337, *Geographical and labour market mobility*, June 2010.

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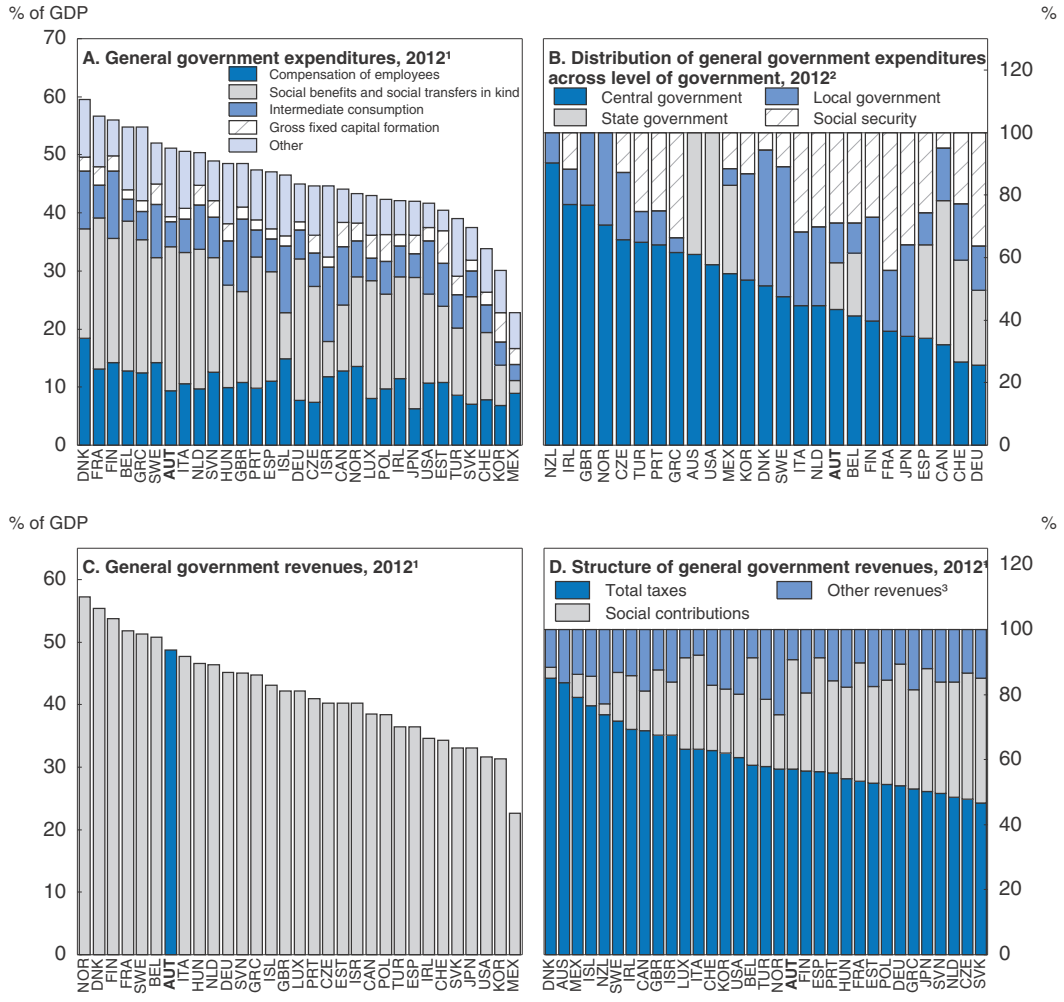
tax burden over the past decade: Austria is one of the few high-tax OECD countries that reduced the share of taxes in GDP between 2000 and 2011.

The composition of taxes is characterised by a particularly high share of social security contributions and income taxes, and a low share of real estate and green taxes. As a result, the labour tax wedge is very high in international comparison, at 48%, which hinders the employment of low-skilled and old workers (see the chapter on the rationalisation of fiscal policy in the 2007 *OECD Economic Survey of Austria*).

Figure 1.21. **Size and structure of the public sector in international comparison**



1. 2010 for Canada, Korea and Turkey; 2011 for Israel, Japan, Mexico, Switzerland and the United States.
2. 2010 for Canada, Korea, New Zealand and Turkey; 2011 for Australia, Japan, Switzerland, Mexico and the United States.
3. Capital taxes and other revenues.

Source: OECD, *National Accounts at a Glance Database*; OECD, *National Accounts Database*.

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A dense network of federally and Länder funded and managed public services operate in the areas of education, health care, kindergarten, collective housing and public transportation. They enjoy high public approval. In the latest available *European Quality of Life Survey*, Austrians reported a distinct degree of satisfaction with the quality of their public services (Eurofound, 2012a). They reported Europe's highest degree of satisfaction with health care and social housing, and were among the five most satisfied nations in four other public service areas. The only area where this was not the case was the public pension system, despite its high volume of public spending.

Social transfers include indeed particularly large pension transfers, as discussed in Chapter 2. These benefits are topped up with a sophisticated financial support for long-term dependents. Child care and family benefits are granted at relatively generous rates,

and are not means tested. Transfers have therefore a large "horizontal" component, i.e. are collected and redistributed during the life-cycle of households.

The public sector suffers a number of important inefficiencies (Fischer et al., 2011). Largest services are controlled by suppliers and are financed through a complex web of federal fiscal relations, with limited influence from users. Production costs, quality and ultimate user benefits are not always transparent. Reforms to strengthen accountability, improve cost efficiency, and enhance quality are on the policy agenda (OECD, 2011).

… backed by a unique social partnership system

Social partnership is an institution which has emerged in small open European economies, but has reached its most elaborate form in Austria (Katzenstein, 1985). Corporatism is another term for social partnership in the Austrian context. The Routledge Encyclopedia of Political Economy describes it as a "governance mechanism which includes strong centralised industrial unions, strong centralised employer unions and a government which depends on social partners for the successful mobilisation of its institutional capacities". A detailed study of corporatism in 24 OECD countries singled out Austria as the country where the system is the most developed (Siaroff, 1999). The present governor of Austria's Central Bank had suggested earlier that "Austria's transformation from a poor country before the war to one of the richest countries of the world in GDP per capita basis is closely connected with and largely caused by its' system of social partnership" (Nowotny, 1993). The system's influence encompasses material sources of well-being, working conditions, work-life balances, education and skill formation, and social connections.

Social partnership provides formal institutional representation for workers, employers and farmers. Their representative "chambers" (the Federal Economic Chamber, the Federal Chamber of Labour, and the Chamber of Agriculture) are non-governmental associations with compulsory membership, and all their positions are filled through elections. The Trade Union Federation, which constitutes the 4th leg of social partnership, is an association with voluntary membership. The Law requires that the government consults with social partners on all economic and financial matters before presenting legislation to Parliament.

Social partnership from the start went beyond wage co-ordination. Wage bargaining is not based on tri-partite centralisation but on "pattern bargaining". Annual wage negotiations in the metalworking industry have traditionally served as benchmark for a cascade of negotiations in different sectors, regions and enterprises. "Delegation clauses" permit the negotiation of various issues (including base pay, working hours, variable pay, etc.) at the enterprise level. The system operates flexibly, as reflected in large wage differences between sectors, enterprises and employment states. The degree of flexibility is however more upwards than downwards, as departures from national benchmarks can only increase benefits and may not reduce them. National benchmarks nonetheless fully take into account, realistically, competition conditions in international markets (Austria Industrial Relations Profile, 2013). The system reaches nearly 100% collective bargaining coverage – the corresponding rate being 90% in Sweden, 80% in Denmark and Netherlands, 60% in Germany and 50% on average in the OECD. A large body of empirical research confirms that annual "wage norms" continue to play an effective "wage leadership" role in Austria despite the growing sectoral diversification of the economy (Knell and Stiglbauer 2012, Ramskogler, 2011).

The system helps keep wage growth in line with productivity and helps maintain unit labour costs on an internationally competitive path. Value-added is distributed on a negotiated basis between employers and workers. Working time lost in strikes is minimised and employment is kept at a high level through the business cycle with limited wage volatility (this is termed as "the flattening of the Philips curve" in Austria). The management board of the central bank systematically includes a representative of the trade unions. Thanks to these co-ordination levers, Austria has operated as one of the OECD's most stable economies in recent decades, despite its small size and openness which exposes it to international fluctuations (Figure 1.21). An analysis of output volatility in the OECD area between 1970-2006 has recently confirmed this distinct macroeconomic performance of Austria (Lonkeng Ngouana, 2013).

Social partnership operates also as a "productive coalition" between employers and employees (Crouch and Traxler, 1995). Employer and employee representatives co-operate to facilitate technical innovation, organisational change and workers' human capital building. An example was an agreement on a new Working Time Law in 2007 (*Arbeitszeitgesetz*) which increased options for working-time arrangements and permitted enterprises to operate more flexibly. It is recognised that these "productive coalitions" may turn into sectoral rent-seeking devices in the absence of competition. Banking may have been such a case (Mayer et al., 2001). Nonetheless, as obstacles to competition harm productivity and competitiveness in downstream sectors, and dent the purchasing power of households, social partners take, generally, competition-friendly positions (Council for Economic and Social Questions, 2010; Federal Chamber of Labour, 2013).

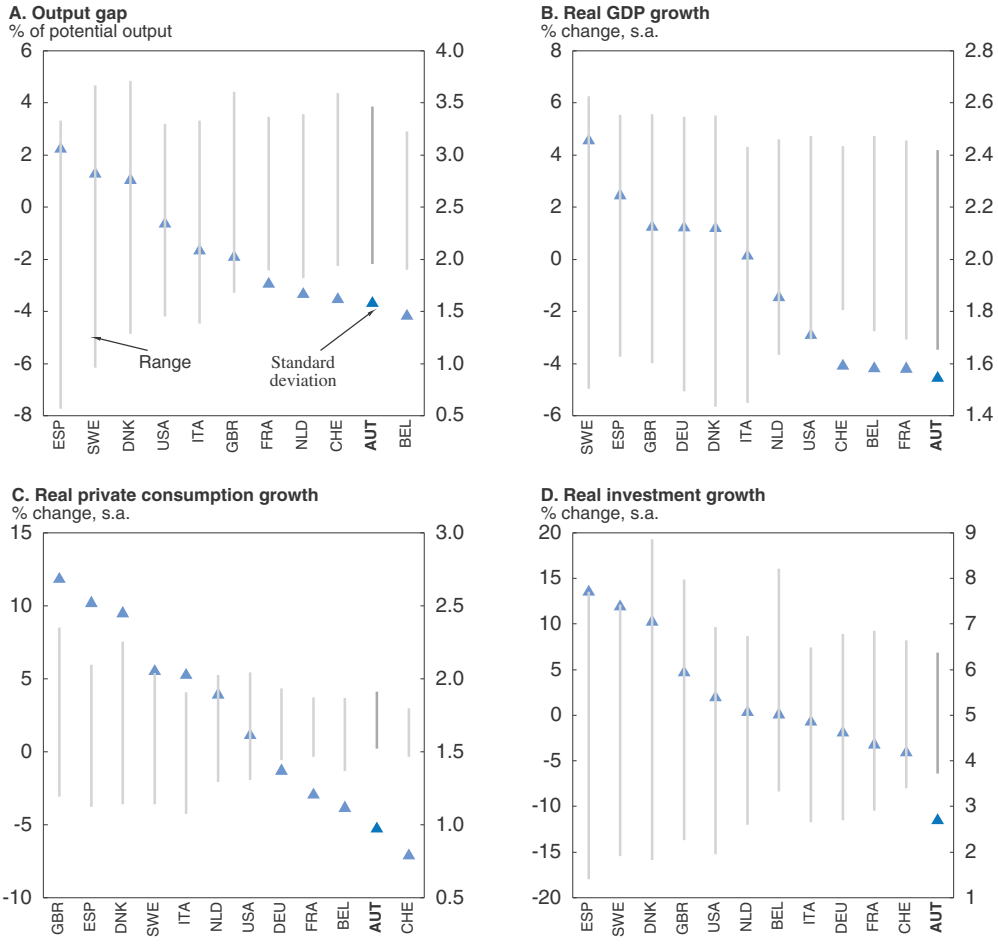
The system helps manage the trade-offs between material sources of well-being and quality of life by intervening in the distribution of the benefits of growth between household income, leisure time, retirement time, improvements in working condition and public services and transfers. The area where this role has been most visible is the management of "wealth-in-time". This concerns working time conditions for workers, and retirement terms for retirees. Working time reductions were achieved mainly in the 1980s and 1990s, in exchange for flexible working arrangements. The recent and lengthy negotiations on shop opening hours, that were eventually liberalised, were also part of this agenda.

Seeking social consensuses on difficult structural and redistributive matters has been another function of social partnership. The social partners have mechanisms to address economic and social issues on basis of shared evidence, and to issue joint policy recommendations. This function was for a long time carried out by the Council for Economic and Social Questions, which became less active more recently (Box 1.5). Social partners participated in the elaboration of recent reforms in the areas of pensions, old-age work and family policies. One aspect of their consultations is their informality. A high dose of confidentiality (and at times secrecy) underpins them. Negotiating parties can demonstrate a high degree of flexibility during discussions as they are vested with exclusive representative mandates.

Finally, social partners participate in certain governmental functions. In addition to steering the vocational education system, they co-manage the public employment service. They participate in the administration of the social security system. They also contribute to the enforcement of workplace safety and consumer protection rules.

Figure 1.22. **A high degree of macroeconomic stabilisation**

Range (left scale) and standard deviation (right scale), 1986-2012



Source: OECD Economic Outlook Database.

StatLink http://dx.doi.org/10.1787/888932856684

Social partnership backs Austrian well-being but also comes along with certain risks and potential costs. First, as mentioned above, in areas with restricted competition, partnership between employers and employees may turn into a collusion to extract rents, at the expense of consumers and labour market outsiders. This can only be offset by full exposure to trade competition and pro-competitive domestic policies. Secondly, there is an inherent risk for social partnership to lead to fiscally costly consensuses at the expense of long-term fiscal sustainability. This has been observed for example in the area of public pensions, where social partners have been less vigilant concerning the long-term financial sustainability of the system than would have been otherwise expected. Also, when not fully inclusive, partnership generates ad hoc arrangements serving vested interests. For example, after an invitation by the government, social partners have not been able to make proposals for streamlining the highly complex social benefit system (which contains hundreds of categorical benefits). Finally, as a "productive coalition", social partners have only recently developed a stance on environmental sustainability issues.

Box 1.5. **The Council for Economic and Social Questions**

Common bodies of evidence and analysis on economic and social questions are produced by an Advisory Council for Economic and Social Questions (Beirat für Wirtschafts- und Sozialfragen). This Council has 21 members; four from each federal association of social partnership (Federal Economic Chamber, Chamber of Labour, Chamber of Agriculture, and the Trade Union Federation) and five independent experts. The Beirat prepares reports on economic and policy issues on the basis of joint requests from social partners.

This Council has had two main functions to date: *i)* producing a common factual background to topical economic and social issues, and *ii)* issuing a joint opinion on desirable policy options for Austria. In several instances Beirat reports served as blueprints for government legislation. The Council operates on a consensual approach without majority voting. Its presidency alternates between the Chamber of Labour and the Economic Chamber.

Social partnership appeared to lose some influence in the early 2000s, for both political and historical reasons. Politically, the dissolution of the "grand coalition" between the center-right and center-left parties after the 1999 election weakened the influence of this negotiation mechanism. Historically, several key policy issues shifted to the European level after Austria's accession to the EU and to the euro area, limiting the remit of domestic consultations. However, this period of relative weakness appears to have ended with the restoration of the "grand coalition" government after the 2006 elections, and the social partners' focus on topical policy issues such as education reform, youth unemployment, immigration policy and climate change.

One challenge to social partnership is that certain groups in society have remained outside it (Box 1.6). They could pursue their particular interests without the checks and

Box 1.6. **When certain groups do not participate in social partnership**

The status of the groups not participating in social partnership has been analysed in the following terms:

"Groups that do not take part in the consensus-finding system of social partnership may free-ride by increasing their nominal income above average while, at the same time, profiting from the low inflation rate secured by the system. As long as these groups are small enough, the system will avoid inflationary reactions by other economic groups and such a free-rider strategy will be successful. This applies, for instance, to professionals like medical doctors and attorneys, who by law must organize in chambers but do not take part in the system of social partnership. These self-governing chambers issue binding fee schedules that have the economic effect of cartelized price lists. The incomes of these non-co-operating groups have increased much more rapidly than the incomes of the groups co-operating within the system of social partnership… Certain wage earning groups may also seek a similar position… On the part of the employees, the central authority (of social partnership) may be weakened by minority groups occupying key positions related to technological change and who, due to educational and social background, may be less willing to show solidarity on a supra-professional or supra-occupational level than are traditional trade union members."

Source: Nowotny, 1993.

balances of a consensus over the full spectrum of societal interests. Such groups included liberal professions and Federal and Länder civil servants. Today, as many policy issues affecting Austrian well-being involve public sector workers, liberal professions and social benefit recipients (most prominently in the areas of health and pensions), to have these categories involved in social partnership may help. Social partners may also actively engage those with a migrant background as a number of key policy issues involve them as discussed in Chapter 2.

Conclusions

Austria has achieved strong material well-being and high quality of life. Steady growth in GDP per capita has been combined with low income inequality, rising life expectancy, good social connections and high environmental standards. In achieving these outcomes, Austria has drawn on a dynamic business sector of globally active small-and-medium sized firms, families providing extensive in-house services, and a wide supply of public services backed by a well-functioning social partnership system. Still, there are inequalities across social groups in various dimensions of well-being.

Ongoing efforts in Austria to document well-being outcomes in detail are welcome. Synergies and trade-offs between different well-being dimensions should be systematically analysed. Public policies should take advantage of synergies, and enable citizens to choose according to their preferences in areas with trade-offs. The impact of public policies on these decisions should be analysed for well-informed policy dialogue and design (see also Box 1.2). The second chapter of this Survey will discuss two areas, demographic change and environmental sustainability, where synergies and trade-offs between well-being dimensions are prominent.

Box 1.7. **Policy recommendations on strengthening the evidence basis of well-being policies**

- Continue to monitor and publish detailed well-being indicators.
- Investigate the synergies and trade-offs between well-being dimensions.
- Broaden the empirical evidence basis on the impact of public policies on citizens' well-being choices for well-informed policy dialogue and design.

Notes

1. Due to a lack of a long series of official data on hours this declining trend in Austria can only be documented since 1995.
2. According to the national definition a person is financially deprived if at least 2 of the following 7 items applies: can't afford to *i)* keep home adequately warm, *ii)* pay regular bills; *iii)* to see a doctor or dentist; *iv)* face unexpected expenses, *v)* buy new cloths; *vi)* eat meat, fish or a protein equivalent every second day, *vii)* invite friends for a meal.
3. The minimum number of rooms under which a dwelling is considered overcrowded is the following: two rooms for a maximum of two adults (including a couple); one additional room per additional adult (household member aged 18 years or over); one additional room for a maximum of two children. Deprivation refers to households living in a dwelling that is too dark; or without a bath, shower or indoor flushing toilet for sole use of the household; or with a leaking roof.
4. This is likely to be a longer-term trend as in many other continental European countries (see e.g. Blanchard, 2004) but data is not available for Austria over a long time-span.

5. Voluntary work includes: *i)* education, cultural, sports or professional, *ii)* community and social services, *iii)* social movements or charities, *iv)* political parties, trade unions, and *v)* other voluntary organisations.
6. Data on the level of crimes are difficult to compare internationally as the exact definition, legal system and how they are counted may differ. This is a greater problem for robberies and burglaries and less of a problem for homicide data.
7. A person is considered severely materially deprived according to the EU definition, if they experience at least 4 out of 9 following deprivations items: cannot afford *i)* to pay rent or utility bills, *ii)* keep home adequately warm, *iii)* face unexpected expenses, *iv)* eat meat, fish or a protein equivalent every second day, *v)* a week holiday away from home, *vi)* a car, *vii)* a washing machine, *viii)* a colour TV, or *ix)* a telephone.
8. People aged 0-59 living in households where the adults worked less than 20% of their total work potential during the past year.
9. This may also be related to the size of the companies: the small number of companies that are responsible for the largest part of turnovers may have high levels of employment and low turnover *rates* (Pichelmann and Hofer, 1999).
10. The 15-24 cohort is more mobile than the 25-64 group. But 15-24 year old Austrians (with 0.8% NUTS 2 mobility in 2003) are much less mobile than the 15-24 year old Dutch (nearly 3.5%), Germans (more than 2%) and British (4%). The same pattern recurs across education groups.
11. Beneficiaries of public unemployment insurance are not required to change living places to find employment. A job proposed by the public employment service has to be in "reasonable distance" from the job-seeker's living place (maximum 2 hours per day for a fulltime job). A job proposal farther away is regarded as reasonable if it includes an accommodation offer. Nonetheless, moving subsidies are available from the public employment service for job-seekers accepting to move to take a job offer.

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Chapter 2

Responding to key well-being challenges

Important challenges for the future of Austrian well-being arise from demographic and environmental trends, which make both synergies and trade-offs between well-being dimensions more prominent. The ageing of the population calls for a fair balance between life-time pension contributions and entitlements, drawing on the recent pension reform. Such progress will allowAustrians to make more informed choices between the length of their work and contribution periods and retirement length and income according to their preferences, without threatening fiscal sustainability. With female labour force participation rising, family policies should help reconcile equality of opportunity within families by promoting the availability, affordability and quality of support services. A growing share of immigrant groups with low human capital calls for remedial policies to preserve social cohesion, which requires stepping up efforts to promote human capital formation, fostering synergies between material and non-material sources of well-being for all. Environmental pressures arise from urban sprawl and the strong expansion of road transport. Urban sprawl increases the risk of floods and endangers biodiversity, while road traffic's contribution to air pollution is significant with adverse health effects. Turning around these environmental trends will require more appropriate pricing of the externalities and better regional development policies to foster denser settlements that are well connected to public transport. This entails a need to strengthen co-ordination between different government layers and better integration of regional development with transport and housing policies to foster policy consistency.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Austria's well-being is exposed today to a number of sustainability challenges. This chapter discusses those arising from demographic developments and environmental trends.

Demographic changes: Achieving sustainable work-life balances for all

Demographic changes raise challenges for Austrian well-being in three main areas: *i)* the ageing of the population challenges the sustainability of the public pension system, *ii)* rising female labour force participation strengthens demand for policies supporting the reconciliation of work and care responsibilities, and *iii)* a considerable share of the population with migration background and with relatively low human capital calls for adjustments in the channels of human capital formation and transmission of social capital.

Retirement and "wealth in time": Reconciling free choices and fiscal sustainability

Long and healthy retirement periods for the majority of pensioners[1] funded by the public system have been a major ingredient of Austrian well-being to date. The retirement benefits enjoyed by cohorts retiring up till the 2000s were favourable relative to their life-time contributions. These benefits are becoming more costly to sustain with the rapid ageing of the population. Severe fiscal tensions, together with worrying medium-term demographic projections have led to a series of pension reforms and further reforms are to follow.

The average retirement age is presently 59, and life expectancy above 60 has attained 86 for women and 83 for men. The average monthly public pension for private sector workers was EUR 1 180 in 2010. For public sector workers, it was EUR 2 270. Men on old age pension received 69% of the average wage, and women 44%. Disability pensions for men amounted to 59% of the average wage, and the disability pensions for women to 33%. Persons retiring have an average life expectancy of 25 years, and average life expectancy increases by between one-two months per year. As of today, the persons retiring in compliance with the legal retirement age (65 for men and 62 for women) are entitled respectively to approximately 18/24 years in retirement.

A radical pension reform in 2005 unified the previously fragmented retirement schemes, and re-set contribution and benefit parameters. Higher minimum retirement ages (formally for women and *de facto* for men), and longer contribution periods were adopted. The public pension scheme was maintained as the main revenue source for future retirees, with high contribution rates when in activity, and high replacement rates in retirement (Box 2.1).

The reform is being implemented gradually. It was fully implemented for the cohorts born in 1987 and younger, while the pre-reform entitlements of the cohorts born between 1955 and 1986 will be credited to the new pension accounts (see below) by 2014. The calculation of the credit takes into account the pension regulations that were effective at

Box 2.1. **A well-designed but gradual pension reform**

Austria tackled its pension reform needs somewhat later than many OECD countries. It has nonetheless put in place a strong legal and technical infrastructure to promote an actuarially fair and fiscally sustainable system. The implementation of the reform is gradual and is at times found to lack transparency and predictability, but has delivered important improvements and remains open to additional adjustments.

The new Pension Law (*Allgemeines Pensionsgesetz*) was adopted in 2004 and unified the rules for different occupational regimes. Before the reform different occupational groups (civil servants, workers, self-employed, farmers, liberal professions, etc.) had different pension schemes, with different contribution and benefit parameters. The reform harmonised the scheme for federal employees with the general regime, but not those of the Länder and municipalities.

The contribution rate of the unified regime is set at a high at 22.8% of gross incomes, shared between employers and employees. Farmers' and self employed contributions are set at 17% and 18.5% respectively, with the difference from the full rate being paid out of the federal budget. Pension premia for the unemployed and persons raising children are paid from general government funds (respectively from the Unemployment Insurance Fund and the Family Burden Equalisation Fund).

Future pension entitlements will be proportional to earnings over the best 40 years of work income and will reach 80% of this reference income after 45 years of contributions. The statutory retirement age is set at 65 years for men, and 60 for women, and the retirement age for women will converge to men by 2033. Persons having contributed at least 37.5 years are allowed to retire from age 62 (this period will be raised to 40 years by 2017), with a lower pension. Initially, pensions were to be adjusted by 4.2% for each year rights are claimed early, and increased by the same amount for each year of additional work. This rate was increased to 5.1% in 2012. A special retirement scheme was introduced for "heavy workers", where the statutory retirement age declines by three months per year of "heavy work".

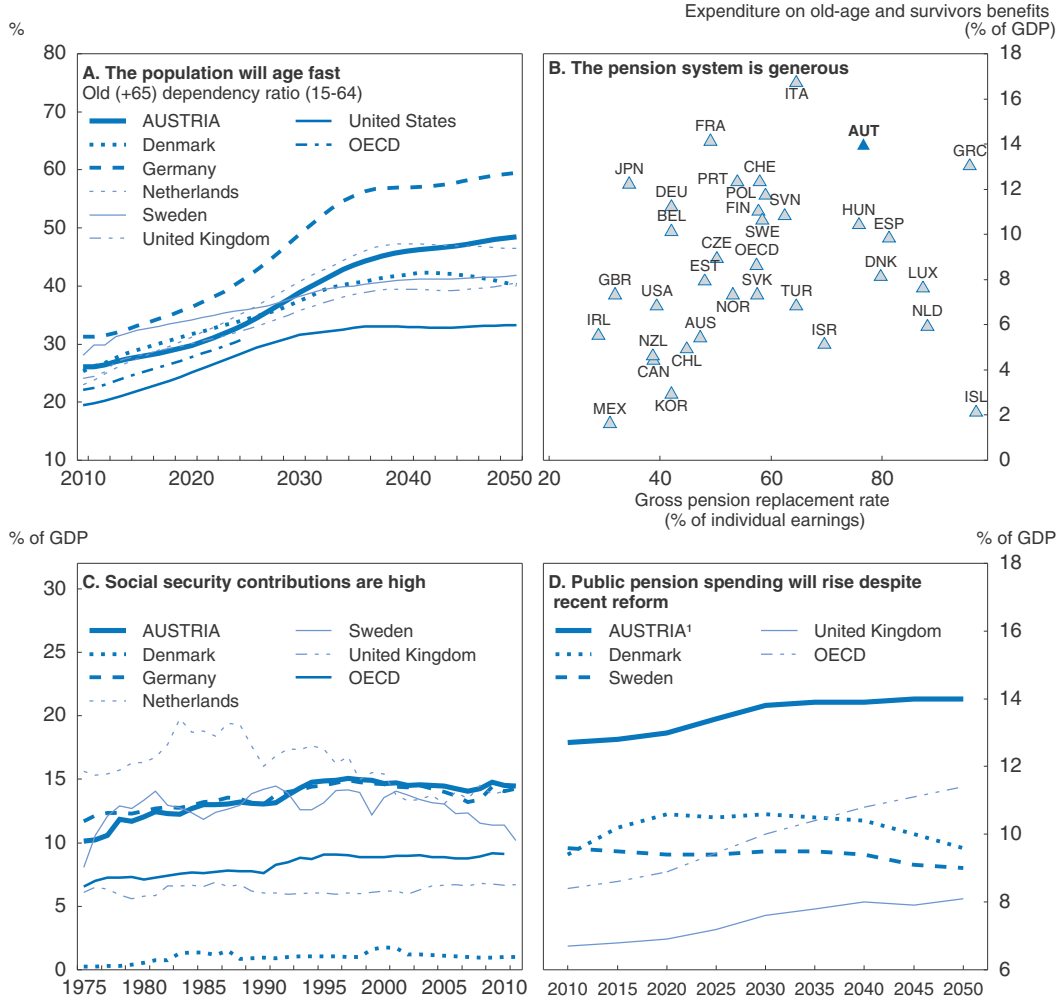
As a result of these rules, the contribution and benefit parameters of the pension system are expected to converge with international standards for sustainability. The accrual rate in the system (a notional coefficient linking yearly pension contributions and subsequent pension benefits) was reduced to 1.78% in 2009, from 2% before. The so-called benefit ratio (this is, according to one among several definitions, the ratio of the average pension to average output per worker) is projected to decline from 22% in 2004 to 15% in 2050 (Knell et al., 2006).

A noticeable property of the new regime is its openness to regular parametric adjustments. A Pension Commission was created, which includes the representatives of the social partners and political parties, and other experts. The Commission is mandated to propose regulatory adjustments (e.g. to retirement age, to contributions or to budget transfers) if life expectancy increases more than expected, or in the event projections for other key variables (such as productivity growth or labour force participation) change.*

* The 2004 Law prescribes that "if certain economic variables evolve less favourably than projected, first, the fiscal burden 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 official demographic projection, the commission will make proposals on the precise implementation of adjustments, at three-year intervals. The commission will also make adjustment proposals if projections for other key variables, such as productivity growth or labour force participation, imply higher fiscal burdens. While parametric adjustments are legally required in case of changes in life expectancy, they are not legally required in case of changes in fiscal burdens (*OECD Economic Survey of Austria*, 2005).

the time entitlements were earned, but future entitlements will be calculated according to a single legal framework on the basis of individual pension accounts. This step increases transparency and aims at making penalties for early-retirement better discernable. Under the new parameters, the public pension spending (which is currently above 12% of GDP) is projected to reach 14% of GDP from 2030, then stabilise at that level until 2060 – however, these adjustments do not take into account the latest introduced in 2012). This would be one of the highest spending intensities among OECD countries (Figure 2.1).

Figure 2.1. **There are strong demographic pressures on the pension system**



1. Pension spending projections for Austria do not take into account the adjustments in pension parameters introduced in 2012.

Source: OECD, *Historical population data and projections (1950-2050) Database*; *OECD Pensions Outlook 2012*; *OECD Social Expenditure (SOCX) Database*; OECD, *Revenues Statistics Database*; OECD, *Pensions At A Glance 2011: Retirement-income systems in OECD and G20 countries*.

StatLink *Note:* To download the data corresponding to this graph, refer to *Figure 7*.

According to recent OECD analysis in *Pensions at a Glance* (OECD, 2011), the Austrian pension reform is now broadly in line with international standards, does not unduly penalise working at old age, and – notwithstanding persisting loopholes to early

retirement- does not excessively encourage early retirement. The Austrian system now appears to deliver "benefit equivalence" (preserving the net pension wealth of older workers entitled to a pension but working additional years, see Queisser and Whitehouse, 2006).[2] Nonetheless, further adjustments would be useful, such as raising the discount for each year of early retirement from the present 5.1% to above 6%, in order to achieve full actuarial neutrality.[3] A more rapid increase of the statutory retirement age for women was also recommended (OECD, 2011; OECD, 2004), but is currently not envisaged. The OECD has welcomed the creation of individual pension accounts, which should allow benefits to be managed in line with contributions (OECD, 2005; OECD, 2011b). The new system has the potential to mimic a notional contribution-based accounting system and permits to adjust parameters in order to remain actuarially fair and fiscally sustainable. The entrants to the labour force since 2005 (who are subject to the new pension regime) can request yearly notifications of their accumulated contributions and future entitlements. Those who were already in the labour force in 2005 (and are therefore subject to a mix of regimes) will have the same possibility from 2014, with their pre-reform entitlements credited to their new pension accounts.

While the pension system is on this sound institutional foundation, it continues to display certain important uncertainties and shortcomings. Additional action is required in the following:

Making redistributive and contribution-related elements more transparent

Part of existing redistributions in the pension system are deliberate, such as benefits for survivors, and for people with involuntary interruptions in their work histories. Other redistributive elements are more "accidental" (in the sense of not serving any deliberate social policy objective) such as those arising from cohort effects (entailing different rules for different cohorts) and life expectancy differences between social groups. Increasing transparency in these areas would allow better calibration of the former and corrections for the latter and help improve the evidence base for future pension measures. The need for clarifying the redistribution principles of the pension system is recognised and some comprehensive analyses start to become available (Marin, 2013). Transparency can be improved in particular in the following areas:

- The reform is being phased in gradually. Cohorts born before 1955 are not affected at all, but will continue to draw pensions until about 2040. This introduces potentially large wedges between the contribution and benefit balances of different cohorts.
- Certain professional categories, such as the farmers and the self-employed, are subsidised. Civil servants also obtain high returns – their returns on contributions are expected to converge with the actuarial averages of the general regime from the 2020s. Contribution/benefit balances also differ because of differences in the life expectancies of those in different professions (OECD, 2005).
- The beneficiaries of the socially guaranteed minimum pension receive, provided that they were insured for at least 15 years, about 980 EUR per month, with 220 000 recipients in 2011. In 2012, 70% on average of these minimum benefits were based on acquired entitlements, and were funded from the pension system; 30% were paid from the government budget. Premium contributions on behalf of the unemployed, the persons on maternity leave, and other eligible caretakers in families are also funded from

government funds. The financing modalities of these transfers (between the public budget and the pension system) should be kept transparent.

- Persons having interrupted their work and contribution histories, and those having contributed mostly part-time, find themselves with uneven pension rights according to the cohort to which they belong. This arises from differences in their pension regimes before the unification of the system. On the other hand, differences in individual preferences for working and contributing shorter or longer periods, in exchange for higher or lower pension benefits, should be respected. To disentangle deliberate (purposeful) and non-deliberate (accidental) gaps between contributions and benefits, their balance should be made as transparent as possible across cohorts.
- Survivors' pensions can be seen either as an insurance mechanism or as a reward for survivors' earlier family and care contributions. They are funded currently from the pension system, according to benefit rules which were revised in 2009. Questions remain open on requisites for a fair survivor pension regime (Box 2.2). This is an important issue as more than 25% of all pensioners drew survivor benefits in mid-2000s, and this proportion will remain above 20% through till 2050.

Box 2.2. **The difficult issue of survivors' pensions**

Survivors' pensions are intended to secure the living standard of widowers, widows and orphans when a pensioner passes away. They may reach up to 60% of the income of the deceased person, depending on his/her income and the income level of the survivor. There are some preconditions but no minimum age to receive a survivor's benefit.

Survivors' pensions amount in average to 28% of the average wage. As they are not based on own contributions of married couples, but are financed from the pension system, they result in cross-subsidies. It is difficult to determine a fair level for these transfers, as many issues need to be taken into account, including the notion of family (going beyond legal marriage) and the desirable degree of social protection for persons who have provided mainly family services during their lifetimes.

Survivor benefits, as of today, are ultimately subsidies from unmarried to married couples. To receive them, marriage has to be valid at the time of death, even though there are special clauses for the divorced. In case of remarriage, survivor's pensions are lost (excluding a lump sum payment). The design of survivor benefits appears to be in need of adjustment to new family forms and histories.

There is therefore a large persisting potential for cross-subsidisation between various groups in the Austrian pension system. The high level of contributions and benefits blurs redistributive and contribution-related elements. However, these have not been systematically analysed to date. To improve public confidence in the integrity of the pension system, and build an evidence basis to guide policy decisions on possible future adjustments, these "redistributive" and "deferred saving" elements should be made more transparent. The Pension Commission should be mandated and resourced to foster such transparency.

Tightening the preconditions for early retirement

The low effective retirement age is a distinct feature of the Austrian labour market. It reflects the availability of relatively easy exit avenues until recently. In 2010, only 28% of new pensioners took the regular route to old-age pension, whereas 31% were granted a disability pension and 41% benefitted from other early retirement schemes. At the time of early retirement, two thirds of the disability pensioners were beneficiaries of a sickness benefit or of an unemployment benefit.

Measures were taken to raise the labour force participation of older workers at the time of the pension reform, including amendments in the disability, heavy work and part-time work rules. The proportion of those employed in age groups 55-64, traditionally well below OECD averages, increased as a result, but important gaps remain as OECD averages have also increased. The challenge is to keep exit windows open only for persons with severely reduced working capacities. Additional restrictions will apply in this area from 2014. Those partially disabled should be further helped to better use their remaining work capacity in alternative occupations, for example via partial in-work benefits. The new policies should be fully implemented and the development of the effective retirement age should be closely monitored so as to take appropriate additional measures if necessary.

Table 2.1. **Senior workers' employment has improved but the average age of withdrawal remains low**

Employment rate (%)	Austria			OECD		
	2001	2005	2011	2001	2005	2011
Age group 50-64	44.8	47.2	57.1	55.6	58.4	61.2
Of which: 50-54	74.5	76.1	81.9	71.8	73.7	76.1
55-59	43.5	50.0	60.9	55.9	59.9	64.8
60-64	12.7	13.6	20.9	32.5	35.6	40.0
Effective labour force exit age[1] (years)						
Men	59.5	58.9	60.4	63.1	63.3	63.9
Women	58.3	58.1	58.4	61.1	62.0	62.8

1. Effective exit age over the five-year periods 1996-2001, 2000-05 and 2006-11. The effective exit age (also called the effective age of retirement) is calculated as weighted average of the exit ages of each five-year age cohort, starting with the cohort aged 40-44 at the first date, using absolute changes in the labour force participation rate of each cohort as weights.

Source: OECD estimations from national labour force surveys and *OECD Education database*.

In official projections, the employment rate in the age cohorts 55-59, 60-64 and above 65 are projected to increase in the coming decades (Schiman and Orischnig, 2012). Unofficial projections also conjecture on future paths of labour force participation. Drawing on a detailed gender and cohort based model, Wöss and Türk (2012) suggest that the employment rate – in particular of women and of the 50-64 age group – could grow considerably stronger in the long-term. The economic dependency ratio (the proportion of pensioners, disabled and unemployed relative to the employed) to the horizon 2050 is projected to vary in a bracket between 75-90%. Alternative calculations, notably in the EC Ageing Report (EC, 2012a) suggest a variation between 71-86%. The width of these brackets illustrates the considerable potential available for reducing the financial burden of ageing by boosting employment.

Improving employment opportunities for older workers

The large majority of Austrian workers (about 80%) retire as soon as they are eligible for a pension (Pension Commission, 2012). The tendency to retire as early as feasible may reflect workers' preferences, but also, according to certain signs, a lack of attractive and health preserving work conditions at old age (Chamber of Labour, 2009). Policy initiatives to make work more attractive have been taken during recent years at different government levels (Federal government, Länder governments, Social Security Institutions) and ministries (Health, Labour, Economy). These measures have been relatively unrelated to each other, and greater co-ordination holds the promise of making the policy more effective (Box 2.3). High employment costs of older workers have been identified as a key obstacle to the employment of older workers (WKO, 2012; OECD, 2011b). Indeed, Austria has traditionally been one of the OECD countries with the steepest age-wage curves, even if updated comparative data is not available (OECD, 2005). Recent policy measures to close exit loopholes to early retirement, and social partners' awareness of the issue hold the promise of making wage provisions in collective agreements more old age employment friendly.

Box 2.3. **Employment of older workers**

After a large multi-country review of ageing and employment policies in 2003-05, summarised in the OECD report *Live Longer, Work Longer* in 2006, in 2012 OECD updated related policy actions in 21 member countries. This update covers policy actions in three areas: *i)* strengthening financial incentives to carry on working, *ii)* tackling employment barriers on the side of employers, and *iii)* improving the employability of older workers. This investigation implies that there is no "silver bullet" for improving the employment rate of older workers, and that action is needed in a wide range of areas. Concerning Austria the main observations were:

OECD recommendations in 2005	Assessment
A. Strengthening financial incentives to carry on working	
Monitor early retirement incentives	In 2012, pension entitlements under the corridor pension (early retirement from 62) was restricted to persons with at least 37.5 years of pensionable service. This period will be stepwise increased to 40 years.
Adjust the retirement age in line with demographic developments	There is no automatic adjustment rule yet in Austria. A process based on shared analytical evaluations between stakeholders is in place.
Reconsider the introduction of special rules for strenuous work.	At least 10 of the 20 years preceding retirement must be spent in jobs defined as heavy labour for early retirement. The definition of heavy labour remains somewhat open-ended.
Consider raising the minimum and the statutory retirement age of women earlier	The statutory retirement age is at present 65 for men and 60 for women. Women's retirement age will increase from 2024 and converge with the men's in 2033.
Monitor the impact of the old-age part-time employment scheme	A part-time allowance is paid (for men aged 58 and above and women aged 53 and above), permitting older employees to reduce working hours with partial wage compensation. After 2013 this will be conditional upon recruitment of a formerly unemployed person or a new apprenticeship in the same enterprise.
Review the possibility of introducing partial in-work disability benefits	No particular actions have been taken yet. Measures have been taken to reduce inflow to invalidity and disability (i.e. Health Road and Fit2Work initiatives).
Eliminate own-occupation assessment in determining a person's disability status	For workers above 57, eligibility for disability requires loss of 50% or more of work capacity in the existing specific occupation. Mirroring recent reform in unemployment insurance, work requirements should be broadened.
Improve access of older workers to medical as well as vocational rehabilitation	The Rehabilitation-Preceding-Pension programme was reinforced with new measures for medical rehabilitation and vocational qualification in 2009. These are co-ordinated between public employment and pension insurance agencies. Incentives are granted to enterprises hiring disability pensioners.

Box 2.3. **Employment of older workers** *(cont.)*

OECD recommendations in 2005	Assessment
B. Tackling employment barriers on the side of employers	
Improve the targeting of payroll tax cuts	Age-related cuts in social security contributions are abolished from 2013 (as part of fiscal consolidation). Existing cases (waivers on unemployment insurance contributions of workers above 57) are left untouched.
Evaluate the bonus-malus scheme for hiring and firing older workers	A Bonus-Malus System was introduced, with financial incentives to enterprises recruiting people above 50 (bonus) and disadvantages for dismissing older workers (malus). This was abolished in 2009 as large administrative costs were not found to justify the limited employment impact.
Take a balanced approach to employment protection	The authorities estimate that the existing employment protection rules achieve a fair balance between employee and employer interests.
Reconsider the rule that unemployed workers who fulfil the criteria for early retirement have to apply for a pension	In general, this rule still applies. Entitlement to unemployment benefits ends when eligibility for an old-age pension is attained.
Accelerate reform of seniority-based wage regimes	Wage policy is the responsibility of social partners. In recent years, partners in some sectors have tried to flatten out the wage curve, by attenuating automatic wage increases and other differentiations on basis of seniority. Though as yet unsuccessful, these attempts will continue over the next years.
Monitor the effects of anti-discrimination legislation	To improve protection against discrimination, the Equal Treatment Act of 1993 was reinforced both in material law (increasing the minimum levels of compensation for damages) and in procedures.
Promote and monitor age diversity programmes	Social partners have launched a number of initiatives to stimulate age-compliant and ageing-friendly workplace design and organisation.
C. Improving the employability of older workers	
Explore the potential of make-work-pay policies	In an in-work benefit scheme (Kombilohn), eligible workers in full-time jobs gain a monthly wage top-up of EUR 300 if their contribution base is less than EUR 1 500. Jobseekers aged 50 and above unemployed for more than 182 days are targeted.
Spread new activation approaches to older workers	A Fit2Work programme was launched in 2011, as a counselling and support service to prevent early retirement for health reasons. The Public Employment Service, the Labour Inspectorate, Social Insurance Institutions, Social Partners, and Ministries of Health, Finance, Economy, and Labour are all involved.
Improve the coherence of the continuing education and training system	The coherence of the various training areas can be further improved through closer co-operation between different layers of training provision.
Promote lifelong learning	Since 2009, only six months of employment is needed to take-up a subsidised training leave (training allowance), and modular training was made available. Participation has increased significantly, to 10 000 persons per year.
Validate on-the-job competences	Several measures were introduced to recognise competences acquired through non-formal on-the-job learning. A pilot project begun in 2008 (Du kannst was!) documenting competences as a common initiative of Social Partners and the Land of Upper Austria.

Source: OECD (2012), *www.oecd.org/els/emp/Older%20Workers%20Austria.pdf*.

Adjustment of pension parameters to changes in life expectancy

The mandate of the Pension Commission should be strengthened to better take into account rising life expectancy. Contribution and benefit parameters are supposed to be adjusted to reflect these changes, but this adjustment has not been systematically implemented to date. The sustainability mechanism should be reformed on the basis of a clearly defined set of indicators and fully take into account changes in life expectancy.

Ageing and health care costs

The ageing of the population puts also pressure on the health system. The chapter on health in the *2011 Economic Survey* (OECD, 2011) provided a thorough review of this sector,

pointing to both its appreciation by the population and its high cost. This raises a tension for the future of Austrian well-being, as in the retirement system. The OECD Survey recommended a better alignment of the fragmented financing, spending and provision responsibilities between the federal government, the Länder and the health insurance institutions. Better integration of preventive, curative and post-hospitalisation services would yield cost savings and quality gains. Co-ordination with "non-health service" areas, such as life-styles and diets was also found to be crucial. These co-ordination needs are relevant in the ageing society, notably in areas of mental health and new forms of dependence (for example Alzheimer diseases). Austria has taken steps in the recommended directions recently, but major changes have proven difficult to implement. The policy framework needs to stimulate more innovative, less segmented and lower cost health services.

Box 2.4. **Policy recommendations: ageing and retirement**

- Identify and reduce all remaining obstacles to the employment of older workers and close the remaining loopholes into early retirement. The new policies tightening pre-conditions for early retirement should be fully implemented and the development of the effective retirement age should be closely monitored so as to take appropriate additional measures if necessary.
- The Pension Commission should be mandated to better reflect changes in life expectancy in the sustainability mechanisms of the pension system. It should also calculate "deferred saving" and "redistributive" elements between cohorts in order to improve the evidence basis for future measures.
- Pension transfers serving social goals should be funded from transparent sources, minimising opaque cross-subsidies within the system. The future fiscal cost of the pension system should be assessed and controlled in the light of this analysis.
- Implement the recommendations of the health chapter of the 2011 *OECD Economic Survey of Austria*.

Care within families and equality of opportunity between genders

Finding satisfactory balances between work and family responsibilities will continue to shape material sources of well-being, equality of opportunity between genders and family life patterns. The evolution of fertility will also depend on the way work and family responsibilities can be better reconciled.

Austria has a relatively high female labour force participation rate at 67%, against the OECD average of 57%, but this is below countries such as Sweden, Switzerland, Denmark and the Netherlands. In couple families, the standard employment pattern is one full-time and one part-time worker, as the majority of women combine family responsibilities with part-time work. This pattern faces sustainability challenges, however, for two reasons: *i)* strains between work and family responsibilities remain high, even for women working part-time; and *ii)* as women become better educated, their willingness to work full-time increases, as does the opportunity cost of not doing so. Families need to find new ways of reconciling work and care responsibilities, including by rearranging gender roles.

As discussed in Chapter 1, women's wages remain below men's, in part as a consequence of these prevailing family patterns. Despite rapid catch-up in their education

background, gender differences in market earnings persist due to part-time work, maternity leaves, career interruptions because of child-bearing and other care responsibilities. One recent study of wage differences added further insights: it found that women still do most of the work at home, also when they and their partners are employed full-time. Men may then have more leisure time, and more rest to recover from work, and may make more productive employees (Böheim et al. 2007). Rational employers may anticipate this and behave accordingly. After controlling for individual characteristics, the study found that married women earned indeed less than unmarried women, while men received a marriage premium. This confirms that unbalanced distribution of care responsibilities may affect equality of opportunity through various channels.

Gender discrimination has been a prominent well-being issue in Austria in the past two decades. The main policy initiative was the adoption of an equal treatment law (*Gleichbehandlungsgesetz*) in 1993. The law stipulated equal pay for equal jobs, and created an Equal Pay Commission. The Commission rules on broad subjects including job advertisements, discriminations concerning on-the-job training, promotion, mobbing, unfair dismissals and sexual harassment. Certain measures were also taken to support more equal distribution of care responsibilities within families, such as extending the allocation of child care allowances by up to 6 months if two parents take parental leave in alternance, instead of only one.

More recently, a National Action Plan for Gender Equality in the Labour Market has been introduced, and a Charter for a Better Reconciliation of Family and Work was adopted. The Plan covers the period 2010-2013, with four strategic goals: *i)* providing gender-sensitive career guidance and diversifying education paths and career choices; *ii)* reducing gender-specific differences in employment, and supporting transitions to full-time employment; *iii)* promoting more women in leadership positions; and *iv)* reducing the gender pay gap. This plan contains a package of 55 measures, of which 32 have already been implemented. The Charter is a statement of public commitment to family-friendly measures in companies and organisations. It was co-signed in 2012 by the Federal Ministry of Economy, Family and Youth, the Social Partners and the Federation of Austrian Industries. Austrian enterprises have also the possibility of taking part in "Work and Family Audits" which help companies develop a family friendly corporate culture. These audits have been successful and are being extended to small-and-medium sized enterprises and to hospitals and nursing homes, which employ large proportions of female workers.

The legal framework leaves however intact the issue of voluntary trade-offs by women between work and family responsibilities. Such trade-offs are found not only in Austria, but also in similar countries such as Denmark, the Netherlands and Sweden (Eurofound, 2009). Part-time work take-ups by women do not decline in Austria, but are on the increase. Although the divergence of employment and wage patterns between genders may undermine equality of opportunity, they may also be part of individual preferences. As discussed in Chapter 1, the majority of Austrian female part-time workers declare working part-time voluntarily (even if these surveys are difficult to interpret when choices are bound by the institutional and service environment). The National Action Plan for Gender Equality in the Labour Market aims in all instances to promote the full-time labour force participation and employment of women. Opting for part-time work is also not uniquely a gender issue: many men opt also for this type of work and shorter work hours.

These choices have however social consequences. According to a recent OECD analysis, GDP per capita in Austria is projected to grow at a lower rate than in other countries if current patterns of labour force participation do not change. It may vary between 1.5 and 2.1% per annum until 2030, according to alternative degrees and intensities of female labour force participation - concerning in particular their choice between part-time and full-time work. This is the largest uncertainty bracket among comparable countries (Table 2.2).

Table 2.2. **Labour force and growth under different scenarios of female participation (2011-2030)**

	Projected increase/decreases in total labour force size in 2030 as percentage of the levels observed in 2011			Projected average annual growth rate in GDP per capita (USD 2005 PPP, percentage, 2011-30			
	No-change scenario[1]	Convergence in participation rates[2]	Convergence in intensity of labour force participation[3]	No change in labour force participation rate (LFPR)[4]	Male and female LFPR gap reduced by 50%, by 2030[5]	Male and female LFPR gap reduced by 75%, by 2030[6]	Male and female LFPR gap reduced by 100%, by 2030[7]
Austria	**-3.6**	3.5	17.4	**1.5**	**1.8**	**1.9**	**2.1**
Denmark	-2.7	1.2	8.6	1.2	1.4	1.5	1.5
Finland	-4.2	-1.7	3.8	1.9	2.0	2.1	2.2
Germany	-11.9	-5.7	8.2	1.6	1.8	2.0	2.1
Netherlands	-6.0	0.3	22.2	1.6	1.9	2.0	2.1
Sweden	0.5	3.8	9.9	1.9	2.1	2.1	2.2
Switzerland	0.2	7.2	27.6	1.9	2.2	2.3	2.4
United Kingdom				1.4	1.7	1.8	1.9
United States				1.7	1.9	2.0	2.2
OECD				**1.8**	**2.1**	**2.3**	**2.4**

1. No-change scenario: the projected size of the total labour force aged 15-64 years if the labour force participation rates for men and women remain constant from 2011 to 2030 at the rates observed in 2010.
2. Convergence in participation rates: the projected size of the total labour force aged 15-64 years if the labour force participation rate for men remains constant from 2011 to 2030 at the rate observed in 2010, and the rate for women shows a gradual increase (steady growth rate) from 2011 to 2030 reaching the 2010 rate for men by 2030.
3. Convergence in intensity of labour market participation: the projected size of the total labour force aged in 15-64 years if the full-time equivalent rate for men remains constant from 2011 to 2030 at the rate observed in 2010, and the full-time equivalent rate for women show a gradual increase (steady growth rate) from 2011 to 2030 reaching the 2010 full-time equivalent rate for men by 2030. The full-time equivalent rate is calculated as the labour force participation rate, multiplied by the average usual hours worked per week by all employed men and women respectively, and divided by 40.
4. No change: the gap between male and female labour force participation rate remains at the levels observed in 2010 (this scenario is identical to the baseline growth scenario presented in the *OECD Economic Outlook*, No. 91, *long-term database*).
5. Gender gaps narrow by 50%: the gap between male and female labour force participation levels observed in 2010 is reduced by 50% by 2030, based on a steady growth rate in female labour force participation.
6. Gender gaps narrow by 75%: the gap between male and female labour force participation levels observed in 2010 is reduced by 75% by 2030, based on a steady growth rate in female labour force participation.
7. Convergence in participation rates: the gap between male and female labour force participation levels observed in 2010 disappears by 2030, based on a steady growth rate in female labour force participation. Thus, in this scenario it is assumed that the female labour force participation rate will reach the levels observed for men by 2030 and the gender gap no longer exists.

Source: OECD Secretariat estimates in *Closing the gender gap* (2012).

Austria provides generous support to families with child and elderly care responsibilities. Family benefits accounted for 3.1% of GDP in 2009. This is high by international comparison, although below France and Sweden. The share dedicated to young children and institutional care remains however lower than in similar countries, while benefits last longer (Hofmarcher-Holzhacker, 2012). Support to old-age care is also one of the most generous in the OECD, with 1.5% of GDP, and is expected to claim more

fiscal resources in the future (Eurocentre, 2013). The federal organisation of these policies is complex: cash transfers (via a variety of means-tested and non-means-tested schemes) are granted by federal authorities, subsidised in-kind care facilities for old-age dependants mostly by the Länder, and child care facilities mostly by municipalities. The net effect of policies on citizens' work-life balances deserves to be analysed more systematically (Box 2.5).

The accessibility, affordability and quality of care services for dependant elderly also influences second earners' labour force participation. External services are growing in this area. Recent projections by the Ministry of Finance assume that 13% of dependant elderly

Box 2.5. **The complex design of family policies**

Changes in family policies in the 2000s have placed Austria among the most generous countries in this area (Figure 2.2) Family benefits accounted for 3.1% of GDP in 2009, compared to the EU average of 2.3%. Policies' stated goal is "to allow parents to use their preferred mode of providing care for their children, to support the re-entry of parents into the labour market, to create family-friendly workplaces, to promote and fund good quality childcare facilities, and to help fathers who want to be more involved in family life" (EU, 2013). Family policies use a wide range of instruments at various government levels. They are highly complex, families themselves finding at times difficult to evaluate all their options:

- Parental leave. Maternity leave starts eight weeks before birth, and lasts for a further eight weeks afterwards (12 weeks in the case of a caesarean or multiple births). Additional unpaid "employment protected" parental leave can be claimed until the day the child turns two. This period of two years is at present not consistent with the period over which child care allowances are paid (2.5 to 3 years, see below), reportedly creating some confusion on the length of parental entitlements. Additional leave provisions were made recently available, until a child starts school. Parents have also a legal right to work part-time since 2004, as a measure to facilitate their staying in the labour force. This may have played a role in the expansion of part-time work. During the first four years of child raising, pension contributions for the period spent in child care are paid from a Family Fund, More extensive part-time leave entitlements are for example available in Norway, permitting mothers to work part-time until their youngest child turns 12. This measure is reported to have had an important role in the upturn of fertility in Norway (Johnsen, 2012).
- The family allowance (Familienbeihilfe) is not means-tested, and depends on the age of the child, rising from € 105.40 per month and per child during the first three years of life to € 152.70 per month for eligible youths until they reach 24 (in some exceptions until the age of 25), provided that they – after having reached the age of 18 – are in further education and have no income superior to € 10 000 per year. An additional sum is paid to families with two (additional € 12.80), three (€ 47.80), four (€ 97.80) or more (extra € 50 per child) children. Every September an additional amount of € 100 is granted for children between 6 and 15. Handicapped children entitle families to increased family allowances (plus € 138.30 per month). There is a further increase (multiple child bonus) of € 20 per month for the third and each further child if household taxable income is below the annual limit of € 55 000 per year. Families receive also € 58.40 per month and child as a negative tax, paid out with the family allowance. Furthermore, tax reductions are available to recipients of family allowances.

Box 2.5. **The complex design of family policies** *(cont.)*

- Child care allowance provides financial support to those on parental leave. There is a flat-rate scheme (offering a total of four options) that parents can claim whether they were employed prior to the birth of the child or not. Depending on the chosen option it may be claimed up to 36 months (the child's third birthday). There is a cap on the income earned by the parent while on leave (a parent may additionally earn up to 60% of the income earned prior to the child's birth, in which no childcare allowance was claimed, restricted to the third year prior to the child's birth, or at least up to € 16 200 a year). If the exemption limit is exceeded, the child care allowance will be claimed back up to the amount exceeding the exemption limit. Since 2010 parents have had a further option, in form of an income-related child care allowance, aiming to give parents with a high income potential the opportunity to withdraw from the labour market for a limited period of time to look after their child. Extended duration in case of shared care between parents (up to 6 additional months) gives an incentive to better balance care responsibilities.
- Subsidised child care places. Public support to childcare places amount to as much as 90% of their operating costs. Both fixed and operating costs are subsidised in public kindergarten, but only operating costs in the private ones (OECD, 2006). This is a significant incentive to outside care, but is effective only when childcare places are available. Municipalities manage about 60% of childcare places, the rest being provided by religious institutions and companies. 80% of children aged 3 are enrolled in kindergarten, as well as 94% of the 4 year olds and 96% of 5 year olds, mostly on a part-time basis. The enrolment rate of children under three is 16% in the country (with an objective to raise it to 28% by 2014), but higher in Vienna. New stimulus is being given to the creation of childcare places at all ages (see Annex A1).

All in all, thanks to high average wage levels and public subsidies to kindergarten, full-time child care, when available, costs about 20% of the average family's second earning – whereas this ratio is above 50% in several other countries. However, this estimation is based on standard services and does not take into account any specific quality requirements of parents. The *implicit rate of taxation* remains also high for low-income women, due to the level of care costs against wages, income taxes paid and losses of social benefits. In 2009, this rate for mothers taking up employment at 67% of the average wage was estimated to reach one of the highest rates in OECD (OECD, 2009). On the other hand, Austria's tax system encourages higher work hours by women by permitting individual tax filing. Depending on the relative income level of couples, individual tax filing affects positively female labor market participation. Mothers work longer hours than in Germany, which has been related to lower marginal tax rates for second earners.

may shift from family to institutional care between 2009-50. This would amount to an annual shift of 0.3% of all dependants. An accelerated scenario projects that 0.6% of dependants may shift to institutional care each year until 2030, and 0.9% between 2030-50. These projections imply an increase in women's full-time labour force participation (illustrated in Table 2.2).

From the perspective of maximising well-being, government policies should not focus solely on maximising labour force participation and GDP growth, but they should help family members combine work and family responsibilities according to their preferences. Low female labour force participation has costs in terms of lower family income, foregone

GDP growth and gender equality. On the other hand, if reflecting a fully deliberate choice on how to balance work and family obligations, both men and women spending more time with the family could also have well-being advantages. The availability of high quality external care is essential in this regard. Despite efforts at Federal, Länder and municipal levels, these services are not yet available at the required degree of accessibility and affordability (OECD, 2012a). Concerning child care, even if subsidies to kindergarten help keep fees relatively low as discussed in Box 2.4, they are still scarce for very young children and constraints on opening hours and accessibility in holiday periods are difficult to reconcile with full-time employment for both parents. Additional capacity and service innovations would facilitate families' work-life balances. Encouraging examples of how child care facilities might develop are provided in the area of elderly care: dependent care subsidies freely used by recipients, associated with enabling market entry conditions, have stimulated a vibrant service market (Eurocentre, 2013) (Box 2.6).

Box 2.6. **Innovations in elderly care**

Diversification of care channels for the elderly are helping families to better manage work and care responsibilities. Complementary services are provided through traditional (nursing homes, post-hospital care) and new channels. They are offered by public and private providers, and on a non-profit or commercial basis. They are publicly subsidised at differing degrees. The broadly enabling regulatory environment permitted the emergence of various forms of care.

One example is the home-based services provided by personal helpers under the responsibility of families. These have initially developed outside the legal framework and rely on the availability of skilled, but nevertheless affordable helpers from Slovakia. The number of families using these services reached several tens of thousands (estimates range between 20 000-60 000). These arrangements were subsequently legalized and helpers became registered self-employed or wage earners.

Ambulant support services are provided through co-operation between municipalities and civil society organisations. They involve regular visits to dependants, at varying frequency according to requirements. They help keep dependants in their own or their families' living places. They have preventive and medical components that families cannot provide and significantly reduce the need for more costly and less preferred institutional placements.

A neutral policy stance, permitting families to organise their care responsibilities according to their preferences and circumstances is appropriate from the perspective of maximising well-being. It is also reducing the fiscal costs for a given level of services. However, this policy framework has not been sufficient to date to improve gender balances in care responsibilities within families (OECD, 2013a).

Family choices between internal and external care may be altered by public policies for good reasons. For example, there is a legitimate case in favour of institutional care for children above 2 years old, given the benefits for their development from socialisation – notably for the children of vulnerable families. As a result of recent policy emphasis in Austria, the enrolment rate of children above 2 in kindergarten has now reached international averages. The participation of children above 5 in pre-school education was also recently made compulsory. In contrast, the case for additional subsidies (on top of

standard child subsidies) to external care for children under two years old is more open to discussion and should continue to be evaluated (OECD, 2011; OECD, 2004; US Committee on Integrating the Science of Early Childhood Development, 2000). In all instances, the market environment for such services should be made fully open for the development of capacity, under adequate quality norms.

A systematic analysis of the fiscal costs and well-being outcomes of the existing set of measures which aim to reconcile work and family responsibilities would be helpful. Surveys and longitudinal studies may provide pertinent information on well-being outcomes for families, as well as children and dependant elderly. These analyses may help direct public policies to the areas where they would have the strongest impact. They would also help manage long-term fiscal costs.

The remaining tensions between work and family responsibilities may have played a role in the decline of fertility in Austria (Box 2.7 and Figure 2.2). Better educated women have experienced the strongest retrenchment. Between 2000 and 2009, fertility continued to slightly decrease, remaining in the vicinity of 1.4 per women, while it increased from an average of 1.7 to 1.8 for OECD countries as a whole. In Austria, it varies greatly across social groups (Table 2.3).

Box 2.7. **Some empirical insights on the determinants of childbearing**

According to a review conducted by the OECD (D'Addio and Mira d'Ercole, 2005), empirical studies suggest that childcare support policies have a noticeable influence on fertility. Blau and Robins (1998, 1989) found that public childcare availability increases fertility rates, while higher childcare costs have the opposite effect. Similar results for Italian women were reported by Del Boca et al. (2003). Ermisch (1989) found that the availability of market-provided childcare in a range of OECD countries slowed down the decline of fertility rates.

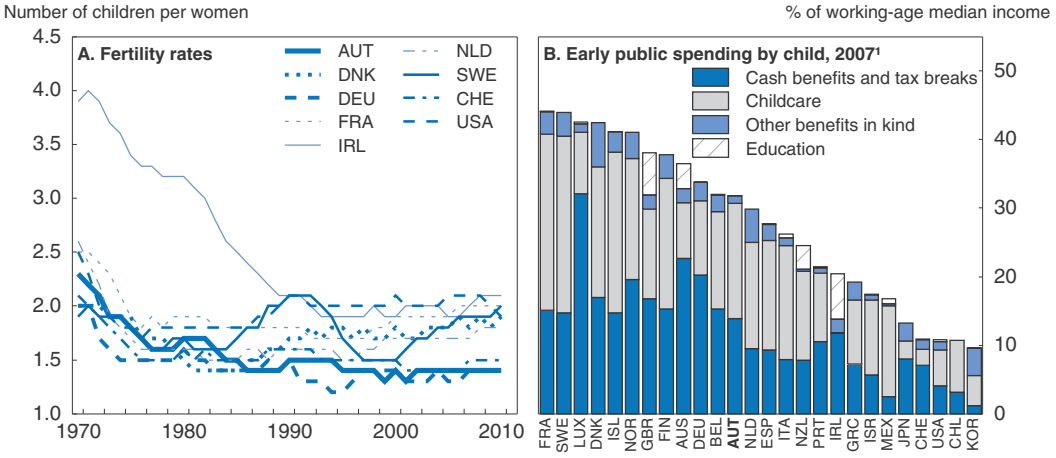
Concerning family policies (i.e. financial incentives), Barnby and Cigno (1988) found that public benefits speeded up the onset of motherhood in the United Kingdom. Whittington et al. (1990) and Whittington (1992) found that a tax relief in the United States had positive effects on family size. Similar results were reported for Canada by Zhang et al. (1994). Laroque and Salanié (2004) found that an ambitious reform of family benefits in France may have increased births by close to 5%.

Maternity and parental leave provisions seem also to play a role. Rønsen (2004) found that the extension of maternity leave had a positive impact on fertility in Norway and Finland. Andersson (2001) suggested that the introduction of a "speed premium" in the parental-leave system of Sweden accelerated childbearing decisions, reducing the spacing between the first and second births.

Certain studies investigated the effect of family policies on a cross-country basis. Blanchet and Ekert-Jaffé (1994) investigated the effects of benefits available in 11 countries. Gauthier and Hatzius (1997) modeled the relation between fertility rates and policies in 22 OECD countries over the period 1970-90. Adsera (2004) studied the relation between fertility rates and institutions in 21 OECD countries. All these studies have reported a positive relation between public incentives and fertility rates.

Source: D'Addio and Mira d'Ercole (2005) (references are listed in this source).

Figure 2.2. **Fertility rates and family policies**



1. Social expenditure on children in early childhood (0-5 years) per capita.

Source: OECD, *Health Database*; OECD (2012), *OECD Family Database*, OECD, Paris (*www.oecd.org/social/family/database*).

StatLink http://dx.doi.org/10.1787/888932856703

Table 2.3. **Fertility varies across social groups**

(Fertility of women born 1955-1960 according to place of residence, country of birth and education)

Place of residence	Share in population (%)				Mean number of children		Share in the total population %
	Childless	One child	2 children	3+ children	Per woman	Per mother	
All resident women	16.1	23.4	37.9	22.6	1.77	2.11	100
Vienna	25.3	28.3	31.4	15.0	1.43	1.92	19.4
Country of birth							
Austria	16.4	23.8	38.0	21.8	1.74	2.08	86.3
EU15	21.9	22.8	34.3	21.0	1.64	2.09	2.4
Former Yugoslavia	9.0	18.2	45.6	27.2	2.05	2.25	4.9
Turkey	4.8	6.9	22.7	65.6	3.07	3.22	1.6
Level of education							
Tertiary: university	29.8	24.0	32.1	14.1	1.35	1.93	7.0
Tertiary: academy (teachers and social workers)	18.1	21.2	40.1	20.6	1.69	2.07	5.2
Upper secondary	22.3	25.3	35.3	17.1	1.54	1.98	9.4
Lower secondary	14.3	25.0	40.0	20.7	1.74	2.03	48.7
Compulsory education	13.5	20.2	36.5	29.8	1.99	2.30	29.7

Source: Statistics Austria (2005c), *Population census 2001*.

Box 2.8 outlines recommendations in this area – drawing also on a comprehensive recent OECD project on "Closing the Gender Gap" (OECD, 2012a; OECD, 2012b; OECD, 2011).

Box 2.8. **Policy recommendations: reconciling equality of opportunity and freedom of choice within families**

- To make parents' choice between in-house and external care feasible, make high quality external, formal child care available for children at all ages, including in rural areas. Improve the compatibility of child care services with parents' work hours and conditions.

Box 2.8. **Policy recommendations: reconciling equality of opportunity and freedom of choice within families** *(cont.)*

- For very young children, combine existing cash benefits with affordable and accessible external child care. For older children at pre-school age, continue to give policy preference to high quality institutional care.
- Keep the regulatory framework open for new entries and capacity growth in child care and elderly care, under proper quality and security regulations. Subsidies to these services should be granted on a level-playing field between public, non-profit and commercial providers to stimulate competition and innovation.
- Analyse the full range of policies aiming at reconciling work and family responsibilities. Evaluate outcomes against fiscal costs. Surveys and longitudinal studies should be used to provide pertinent information on well-being outcomes for families, children and dependant elderly. Focus policies on the most effective instruments.

Improving the quality of education for immigrants: making high quality employment accessible for all

People with a migrant background now represent 19% of the population and the share is steadily growing. Nearly one third of them are second generation, i.e. were born in Austria of immigrant parents. The largest group of first generation immigrants are from Germany (23%), followed by people from former Yugoslavia (22%) and Turkey (19%), with the latter having a higher share among second-generation migrants. The proportion of the population with migrant background is projected to increase in the coming decades assuming that immigration and birth rates stay at current levels.

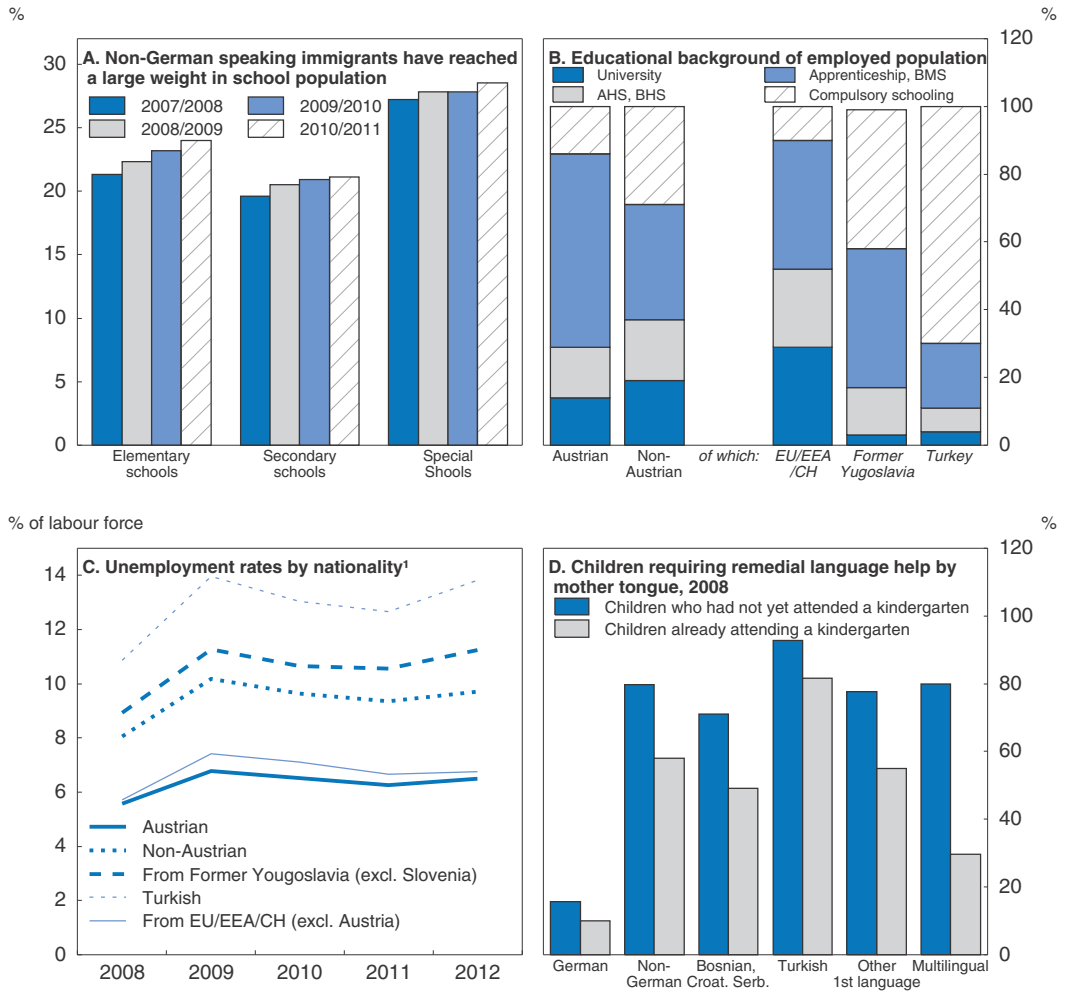
A recent OECD project (OECD, 2012) has analysed the labour market integration of immigrants in Austria in its various dimensions, and concluded that "All things considered, there has been significant progress in Austria's integration framework over the past few years and recent initiatives go in the right direction, but integration policies still lag behind those of other OECD countries". The recent creation of a Secretariat of State in charge of integration issues is a welcome step forward. This section addresses only the education challenges of children of these communities as the key determinant of their future well-being.

Immigration in general contributes to Austrian well-being by supporting labour force growth and skill supply. However, certain migrant groups tend to suffer from important shortcomings in their human capital, which tends to be passed on to their children, especially given the important role of the family in Austrian education.

Statistik Austria (2012) found that some children who do not use German at home begin their education in a special school (*Sonderschule*, intended for children with intellectual difficulties), rather than in a standard elementary school. Nearly 30% of all pupils in special schools came from non-German speaking families in 2011. Furthermore, children with an immigration background constitute a high proportion (28%) of pupils in "non-academic lower secondary" schools. The quality of these schools in rural areas and small towns is good, but is admittedly lower in large urban areas where migrants are concentrated. The proportion of migrants attending schools providing a university entrance qualification is also below average. High drop-out rates from the education system is another area of divergence. Nearly 15% of pupils who do not speak German at

home and completed their 8th grade in 2010, did not continue their education. Only 4% of German-speaking pupils were in this situation. These educational handicaps are a source of accumulated well-being disadvantages (Figure 2.3).

Figure 2.3. **Migrants' demographics and education policy challenges**



1. Unemployment rates here are computed as the percentage share of unemployed persons in the sum of dependent wage earners and unemployed persons.

Source: Statistics Austria, *Migration and Integration 2012*; Federal Ministry of Labour, Social Affairs and Consumer Protection (ELIS Web).

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Policymakers have taken important initiatives in this area, as reviewed by a recent OECD investigation on the education of children with migrant background (OECD, 2011b):

i) Early child care support to migrant families has focused on improving children's language capabilities from a very early age, both in German and in the mother tongue. International and Austrian research suggests that language capacities are crucial for children's mental and intellectual development. Research also implies that a range of fundamental personal capacities form at very young age, and can be better cultivated with the help of outside support to families (Box 2.9). However, offering such support

Box 2.9. **Remedying to language handicaps at very young age**

While the vast majority of young children in Austria are raised by their families (Chapter 1), the proportion is even higher among migrants. This seems to weaken their language capabilities not only in German, but also in their mother tongue (due to their narrow socialisation environment).

A language survey of children aged 4.5-5.5 showed that 90% of German-speaking children attending a kindergarten had language skills consistent with their age, and only 10% of them required remedial help. In contrast, about 60% of children whose first language was not German required remedial help to achieve (German) language skills consistent with their age. Language deficits were prominent in the case of Turkish speaking children (82%), while 50% of Bosnian, Serbian and Croatian speaking children also required such help.

The proportion of children not attending a kindergarten and requiring language help was significantly higher (50%) than for children attending a kindergarten (23%). Among the former, some 16% with German as first language needed remedial help, the corresponding figure for those with another first language was 80%. There was a catch-up requirement for 93% of pupils of Turkish origin and for 71% of pupils of Bosnian, Croatian and Serbian origin.

Source: Statistics Austria, *Migration and Integration, 2012*; *OECD Review of Migrant Education: Austria*, 2009.

has not proven easy. Adequate professional capacities in the kindergarten, as well as co-operation by families themselves are critical for success and are not always available. More weight is now being put on linguistic abilities in "fit for school" tests before children's entry into primary school, in order to direct pupils with inadequate linguistic abilities to an additional pre-school preparation year.[4] An initiative in the same direction but intervening earlier are language tests administered to all 4 year old pupils in public child care facilities, with special language support offered free of charge when deficits are noted

ii) Another key goal has been to make schools more inclusive in the subsequent stages of education, as discussed in the chapter on education of the *2009 OECD Economic Survey of Austria*. The objective is to eliminate excessively early tracking of students before they have developed their full potential, which is particularly important for the children of immigrant families. One planned instrument is to upgrade non-academic lower-secondary schools into higher quality *Neue Mittelschule*. These will be generalised by 2018 and are intended to provide graduates aged 14 better access to higher education opportunities. Successful upgrading of lower-secondary schools in urban areas might require additional pedagogical and material resources. On the other hand, currently only few academic lower secondary schools adopt the *Neue Mittelschule*. Ways should be explored to broaden this welcome initiative.

iii) Curbing early drop-out rates is also a key target. The proportion of school drop-outs in Austria is lower than the EU average for natives, but higher for migrants. New initiatives included youth and apprentice coaching, free-of-charge programmes to provide qualifications to pupils who have not completed schooling (second-chance education), and training guarantees for students who have not found company based apprenticeships (by training them in dedicated public facilities). Early results from these initiatives are encouraging. Between 2007-2010, Austria succeeded in reducing the average school drop-out rates more than in the other EU countries (despite starting

from a lower average level) and reduced the rates for migrant children – while these rates increased in the EU (EC, 2012).

iv) More actively involving immigrant groups in public policy efforts, for instance through inclusion in social partnership institutions which play an important role in the policy debate, could facilitate a more effective communication with such groups and ease their participation in human capital strengthening programmes through a better understanding of what is expected from families. Best practices from OECD countries suggest that programmes which provide education and integration support to migrant children are more effective when they are administered in close co-operation with beneficiary groups, including in dedicated facilities open to parents (OECD, 2012g).

Nonetheless, the successful participation of children with migrant background to apprenticeship education – a pillar of the Austrian well-being model as discussed in Chapter 1 – continues to raise challenges. Employers who take apprentices have to be sure that new hires have the needed basic training, notably in language, comprehension and basic mathematics, This is a requirement for effective on the job learning, but is not always granted (see, for example, Profil, 2013). As children with migrant background represent now a large proportion of entrants in apprenticeship training (25% of students in "polytechnic schools" have a mother tongue other than German), and as apprenticeship offers a promising avenue for the labour market integration of migrants, apprenticeship system's effective functioning is crucial. This is also essential for the future success of high quality and high productivity economic activities in Austria.

Box 2.10. **Policy recommendations for strengthening migrants' human capital**

- Provide migrant children with high quality German education from a very young age and provide mother tongue support where necessary.
- Avoid early streaming of migrant children to less demanding education streams before they have developed their full potential.
- Transform all non-academic lower-secondary schools into Neue Mittelschule by 2018, as planned. Fully enforce their quality standards, including in disadvantaged urban areas. Encourage academic lower secondary institutions to join this initiative.
- Open social partnership institutions for migrant groups to enhance migrant families' awareness and capacities in supporting their children's health, education and other socialisation needs.

Ensuring environmental sustainability

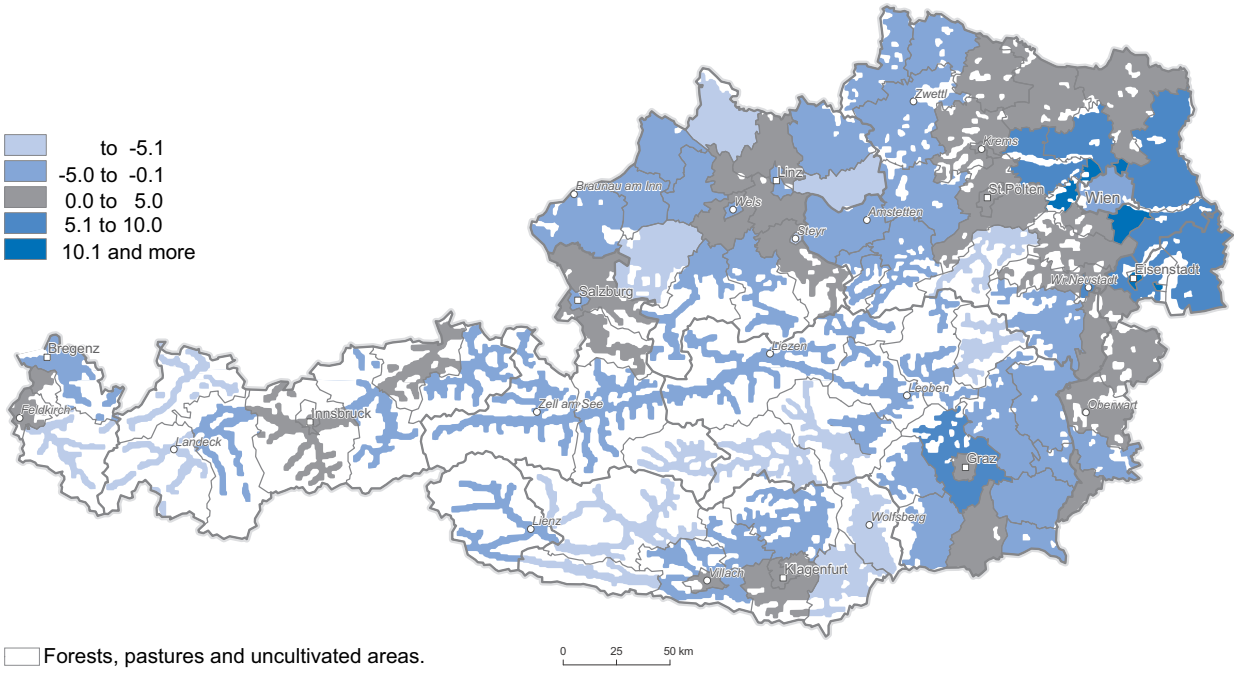
Austria's rich natural asset base, its forests, mountains, biodiversity and natural beauty, as well as the improving air and good water quality, have contributed to the population's high level of well-being. Good environmental quality positively affects life satisfaction (Boarini et al., 2012) and natural assets generate important revenues and employment thanks to a thriving tourism sector. High quality recreation opportunities and satisfactory air and water quality also have positive health effects and thereby increase well-being (e.g. Prüss-Üstün and Corvalán, 2006; Ellaway et al., 2005).

However, environmental pressures are arising from urban sprawl and a strong acceleration of road traffic. The rural population is declining, as new employment is mainly

created in urban areas, but new settlements are mostly established in suburban areas, leading to urban sprawl. Coincidently, higher incomes and the desire of the urban population to live in larger living spaces have reinforced this suburbanisation trend and also increased commuting. Despite a growing population, internal migration from Vienna to other regions of the country has been larger than migration towards Vienna over the past decade. In contrast, the regions adjacent to Vienna have seen the largest net migration inflows in Austria. A similar trend is also observable in other larger urban areas (Figure 2.4). Population density in the three metropolitan areas[5] Vienna, Graz and Linz is low by European comparison, suggesting room for further densification, and living spaces have grown continuously and are high by international comparison (see Figure 1.5 in Chapter 1). According to regional population projections, the regions surrounding major cities, in particular Vienna, will also record the largest increases over the next decades. While the populations of the cities themselves will also rise, these increases will not be as significant as those registered in the surrounding areas (ÖROK, 2011a).

Figure 2.4. **Net internal migration flows**

Average 2002-11, per 1 000 inhabitants

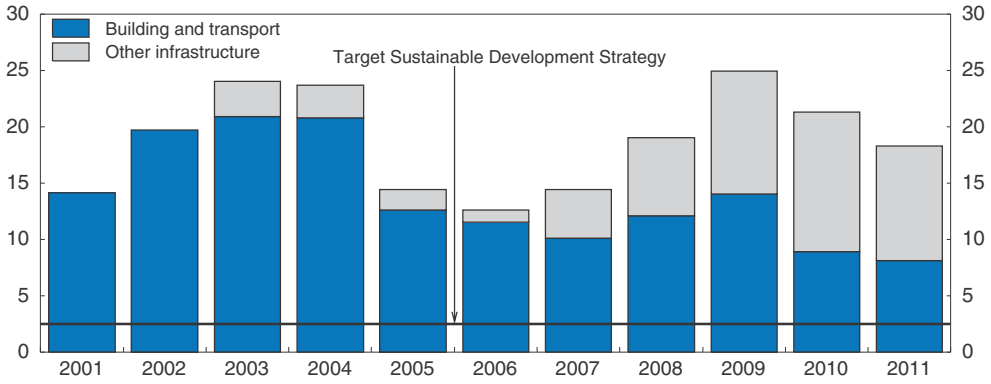


Source: Statistics Austria.

As a consequence of urban sprawl and suburbanisation, land-use changes due to newly built-up areas have far outpaced population growth and are above the national target (Figure 2.5). Over 20 hectares per day of green- or agriculturally used land are being converted, which roughly corresponds to the area of the city of Salzburg per year. The area for buildings and transport infrastructure increased by about 13% (20% buildings, 5% infrastructure) between 2001 and 2011 (Statistik Austria, 2013) compared to a population growth rate of about 5% over the same time period. While the area for buildings and transport infrastructure per capita was 200 m^2 in the 1950s, it increased to 500 m^2 in 2007. Overall, the sealed area (that is, rendering the soil impermeable as a result of paving and

Figure 2.5. **Land-use changes due to new built-up area are above target**

Average annual increase in hectares per day



Source: Austrian Federal Office for Metrology and Surveying (BEV, Bundesamt für Eich- und Vermessungswesen) aggregated by Environment Agency Austria (UBA, Umweltbundesamt).

StatLink *Note:* To download the data corresponding to this graph, refer to *Figure 10.*

other construction work) has more than doubled since 1995, increasing the risk of floods and endangering biodiversity.

The population living in rural areas is still high in international comparison, despite declines. Almost half of the population lives in predominantly rural areas compared to an OECD average of 34%.[6] This may partly reflect strong local ties and low residential mobility as described in Chapter 1, which contribute to local social capital (David et al., 2008). As social capital may entail both private and social benefits, for example through reduced crime rates (OECD, 2011c; Putnam, 2000; Halpern, 2005), this may have increased well-being. Considerable subsidies for the development of rural spaces may have also kept a larger share of the population in rural areas. As a large share of these subsidies are tied to environmental goals, such as organic farming or nature preservation, this may have also improved well-being (see Box 2.11). However, the population living in rural areas may be associated with environmental pressures of their own, as settlements are more fragmented and the car is the main mode of transportation. Moreover, declining employment opportunities in rural areas and limited access to public transportation may have contributed to the rapid increase in car commuting.

The share of commuters among the employed has increased significantly over the past decades. More than half of the employed live and work in different municipalities today, up from about a quarter in the 1970s (Statistik Austria, 2010). According to the latest comprehensive commuting study conducted in 2001, commuting distances also increased from an average of 11 kilometres in 1971 to 20 kilometres in 2001. About three-quarters of commuters used the car in 2001 (excluding commuting within Vienna) and this share is higher in rural areas (BMVIT, 2012a).

Increased car commuting due to urban sprawl and low residential mobility has coincided with a strong acceleration of road freight traffic, in particular cross-border and transit traffic, owing partly to Austria's high trade intensity and its central location after the fall of the Iron Curtain and EU eastern enlargement. Road and especially freight transport accounts for 60% of NO_X emissions, which remain above national and EU targets. Emissions could be reduced since 2005 thanks to the introduction of vehicle emission standards EURO 4 and EURO 5. The transport sector is also an important emitter of

Box 2.11. **The Austrian concept of rural space and rural development policies**

Rural areas are more important in Austria in terms of the share in the total area and population compared to most EU countries. This has historical reasons. Settlers since the *lateNeolithic* have cultivated almost the entire territory from the top of the Alps to the river valleys of the lowlands with little untouched nature. They have thus influenced and shaped a "man-made" landscape in Austria (BMLFUW, 2007), which has laid the foundations for today's tourism.

The importance of the preservation of this cultural heritage of a cultivated landscape can be found in a range of government documents. The national *Sustainable Development Strategy* (BMLFUW, 2002), for instance, states that the diversity of the various living spaces for nature and man should be preserved through strong regional orientation combined with special efforts to consolidate the rural areas. Local supply should be guaranteed throughout Austria. The strategy highlights that the diversity of living spaces and natural and cultivated landscapes must be preserved as they are the heritage for future generations, they offer space for housing, work and leisure, they create identification with the region. The *Austrian Spatial Development Concept* (ÖREK, 2011b) also includes the development of the rural space as one of their goals.

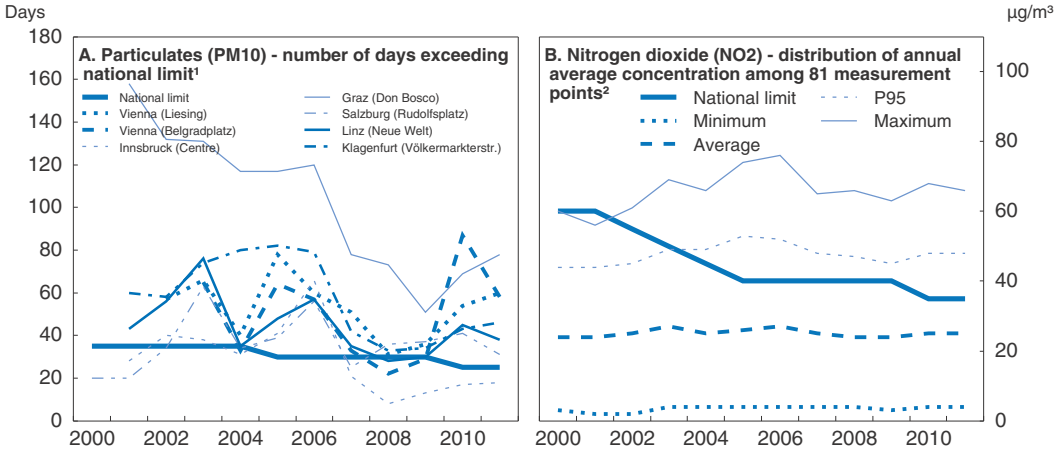
Agricultural policies play a crucial role in the preservation of rural spaces and environmental protection. Agricultural firms mainly operate on a small-scale, partly due to the high share of mountain farmers. This structure hampers international competitiveness but is seen as an advantage to preserve the historical cultivated landscapes (BMLFUW, 2002). About 60% of the national agricultural budget was allocated to the development of the rural space in accordance with the second pillar of the common EU agricultural policy. Over the period 2007-13 close to EUR 8 billion (2.6% of GDP) was spent on the development of rural spaces with a bit over half of this amount coming from EU structural funds and the rest from the Austrian budget. According to the Austrian national *Programme for the Development of Rural Spaces* (BMLFUW, 2007), four main goals are pursued: *i)* strengthening the competitiveness of agriculture and forestry (12.5% of total funds); *ii)* environmental protection and rural/landscape conservation (73.4% of total funds); *iii)* quality of life and diversification of the rural economy (6.2% of total funds); and *iv)* the so-called LEADER programme, which, as a bottom-up concept, supports innovative regional projects that implement the three aforementioned goals.

The programme for the development of rural spaces allocates the largest resources towards environmental protection and preservation of landscapes. Under this goal the Austrian programme to promote environmentally friendly, extensive and natural living space preserving agriculture (ÖPUL) is the most important measure, but compensations for disadvantaged regions (mainly mountain farmers) are also significant. In contrast to many other EU countries, where environmental programmes are confined to particular areas, the ÖPUL aims at a country-wide coverage. In 2011, 74% of all agricultural firms covering 89% of the agricultural area received support through this programme. On average, subsidies amounted to EUR 4 795 per firm. Partly as a result of these support measures areas with organic farming and natural protection more than doubled between 1995 and 2011. Organic farming now accounts for about a fifth of the agricultural area and areas under environmental protection reached 4% of the total territory, higher than EU averages (Statistik Austria, 2012). Organic farming and environmental protection measures include for example the reduced use of fertilisers, abstinence of certain chemical pesticides and temporary fallowing schemes. These measures benefit biodiversity and improve the quality of soil and water resources.

Looking ahead, it is possible that EU funds for rural development in Austria will be slightly reduced for the period 2014-20. The discussion on national co-financing is still ongoing.

particulate matters (PM10), especially from diesel cars. Emissions increased markedly between 1990 and 2005 but could be reduced thereafter thanks to technical improvements and increased use of particle filters. Despite declining trends, concentrations of particulate matters (PM10), ozone and nitrogen dioxides (NO_2) in several urban areas and along transport routes remain above national limits set by the *Ambient Air Quality Act* and the *Ozone Act* to avoid adverse health effects (Figure 2.6).

Figure 2.6. **Air pollution**



1. The national limit requires that the daily maximum should not exceed 50 µg/m³ more than 35 (until 2004), 30 (until 2009) and 25 (since 2010) days a year to limit health effects.
2. National limit includes margin of tolerance. From 2012 onwards the national limit is 30 µg/m^3.

Source: Umweltbundesamt (Environment Agency Austria).

StatLink *Note:* To download the data corresponding to this graph, refer to *Figure 11.*

Road transport is also the largest emitter of GHG emissions outside the EU emissions trading system and emissions have increased strongly between 1990 and 2005 (Box 2.12) partly also due to fuel sales to non-residents owing to lower taxes than in neighbouring countries. Emissions have declined since 2005, but meeting Austria's EU 2020 GHG reduction targets will be difficult without reducing emissions from road transport further. The transport sector is also the main source of noise and the increase in road transport considered the second most pressing environmental concern after climate change in 2007 (Statistik Austria, 2009).

Turning around these environmental trends will require most importantly a more appropriate pricing of the externalities associated with transport and better regional development policies to foster denser settlement that is well connected to public transport. This entails a need to strengthen co-ordination between different government layers and better integration of regional development with transport and housing policies to foster policy consistency.

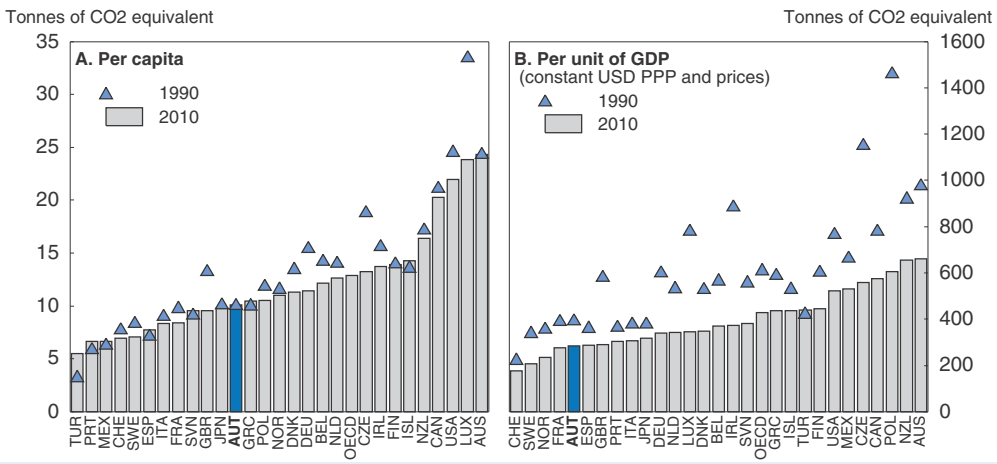
Improving the pricing of road externalities

The government is aware of the environmental pressures arising from the transport sector and has launched a range of initiatives. For instance, *klima:aktiv mobil* is an important part of the cross-sectoral *klima:aktiv* strategy, launched by the Ministry of Environment in 2004, which is embedded in the Austrian federal climate strategy. It

Box 2.12. **Austria's climate change achievements and goals**

Austria's carbon intensity (per GDP) is relatively low but progress in reducing greenhouse gas (GHG) emissions has been slower than in other OECD countries. Austria is one of the few countries where total GHG emissions in 2011 were still above emissions in 1990 (Figure 2.7). An absolute decoupling between GHG emissions and GDP growth is only observable since the mid-2000s.

Figure 2.7. **Greenhouse gas emissions**



Source: OECD Environment Database; OECD Economic Outlook Database.

StatLink http://dx.doi.org/10.1787/888932856741

Under the Kyoto Protocol and the burden sharing agreement of the EU, Austria was committed to reduce emissions by 13% below 1990 levels by 2008-12. However, green house gas emissions over the period 2008-2011 exceeded the target on average by 22%. Through an extension of the programme to purchase of emission reduction credits under the Clean Development Mechanisms (CDM), Joint Implementation (JI) and Green Investment (GI) schemes of the Kyoto Protocol in 2012, Austria was able to meet its Kyoto obligations for the period 2008-2011. However, the necessary purchases from these schemes were significantly higher than planned in the Austrian Climate Strategy of 2007. The largest share of the emission reductions credits were contracted under the GI scheme, under which the selling country has to invest the proceeds from the sale of the credits in climate mitigation projects with a measurable climate impact in terms of reducing greenhouse gases. The Austrian GI projects were conducted in Latvia, the Czech Republic, Estonia and Bulgaria. Under current emission projections, the contracted emission reduction credits will also likely cover the difference between actual and target emissions in 2012.

For the period 2013-20, the EU-wide goal of cutting GHG emissions by 20% from 1990 levels by 2020 translates into a national reduction target of a 16% by 2020 compared to 2005 for sectors not included in the EU Emission Trading System (ETS) (mainly the transport, residential and agricultural sector). Compared to emissions in 2011, this implies a further reduction requirement of about 5% in the non-ETS sectors by 2020. According to simulations by the national environment agency, measures implemented until February 2010 would not suffice to reduce emissions to meet the EU 2020 target. However, with

Box 2.12. **Austria's climate change achievements and goals** *(cont.)*

measures specified in the *Austrian Energy Strategy* and planned policies, which, according to the view of experts, are expected to be implemented and to become effective by 2030, emissions are estimated be reduced by about 18% and hence the EU 2020 could be met (UBA, 2011a).[1] With the increase in fuel taxes in January 2011, one important measure assumed in this second scenario has since been implemented.

Table 2.4 displays Austria's sectoral emissions compared to selected countries. Per capita emissions from the energy industries are relatively low. This is due to Austria's large share of hydro power in electricity generation and a relatively large share of biomass in heat generation. In contrast, emissions from manufacturing and construction industries, industrial processes and in particular the transport sector are higher than in the other countries. A relatively high share of energy intensive industries in total value added is partly responsible for the higher emissions from manufacturing. Especially energy combustion and process related emissions from the iron and steel industries are significant (13.4% of total GHG emissions). But process related emissions from mineral (mainly cement clinker) products (3.5%) and the chemical industry are also important (0.8%). However, emissions from the latter have significantly declined since 1990.[2]

Differences in emissions between Austria and the other countries are particular pronounced for the transport sector. In 2011, the transport sector was the second largest emitter of GHG with 26% of total emission, slightly behind the industrial sector (from both energy combustion and industrial process) with 30%. Emissions from the energy sector amounted to 17% of total emissions. The increase in emissions from the transport sector since 1990 has also been significantly larger than in other sectors in Austria and than in transport sectors in the other countries (Table 2.4). Emissions started to decline since 2005, partly thanks to a range of policy measures such as the promotion of biofuels, the introduction of tax incentives for the purchase of cleaner, low-carbon cars (Normverbrauchsabgabe, NOVA) and the *klima:aktiv mobil initiative* (see main text).

More than 95% of emissions in the transport sector are due to road transport (60% passenger transport and 40% freight transport). While the fuel efficiency of domestic passenger fleet continuously improved since the 1990s and the use of biofuels rose, both effects have been overcompensated by the increase passenger kilometres travelled (Table 2.5). Road freight traffic also increased markedly since 1990 and the share of rail transport in total domestic freight transport declined from 36% to 31% over the period 1990-2010. However some decoupling of emissions from output, measured in terms of tonne-kilometres, could be observed thanks to efficiency gains (higher capacity utilisation, optimising of transport routes, scope effects) and larger use of biofuels. As discussed in the main text, "fuel exports" play an important role in transport sector emissions. They accounted for about one third of all emissions of the transport sector and strongly increased between the early 1990s and mid-2000s. Excluding emissions due to fuel exports, Austria would have met its national emissions target for the road sector as stipulated in the *Climate Change Act of 2011*, which sets ceilings on sectoral emissions not covered by the EU-ETS. Looking forward, the governments aims to reduce emissions from the transport sector by 6% until 2020 compared to 2010, and by 19% until 2025, after the completion of the modernisation of main rail routes.[3]

Box 2.12. **Austria's climate change achievements and goals** *(cont.)*

Table 2.4. **Sectoral GHG emissions**

	Per capita GHG emissions, 2010 (tCO_2.eq/capita)						Percentage change in total emissions 1990-2010					
	AUT	DNK	DEU	NLD	SWE	CHE	**AUT**	DNK	DEU	NLD	SWE	CHE
Total excluding LULUCF[1]	**10.1**	11.3	11.5	12.6	7.1	6.9	**8.2**	-10.5	-24.8	-0.9	-9.0	2.2
Total including LULUCF[1]	**9.7**	10.9	11.7	12.8	3.4	6.8	**18.8**	-18.7	-21.7	-0.9	2.1	8.4
Energy	**7.7**	9.1	9.6	10.7	5.3	5.6	**16.1**	-5.9	-23.4	15.5	-7.9	4.7
Energy industries	**1.7**	4.4	4.3	4.0	1.4	0.5	**3.3**	-8.4	-17.2	26.4	29.0	64.5
Man. industries and construction	**1.9**	0.8	1.4	1.6	1.1	0.8	**22.3**	-18.0	-35.1	-17.4	-15.9	-6.6
Transport	**2.7**	2.4	1.9	2.1	2.2	2.1	**60.0**	22.8	-6.1	32.3	7.5	12.4
Other sectors	**1.4**	1.3	1.8	2.8	0.5	2.2	**-20.9**	-25.3	-29.9	19.7	-61.2	-4.2
Other	**0.0**	0.0	0.0	0.0	0.0	0.0	**31.8**	-10.1	-89.2	-42.2	-78.7	-41.3
Fugitive emissions	**0.1**	0.1	0.1	0.2	0.1	0.0	**66.2**	26.0	-64.4	-4.0	161.2	-47.5
Industrial processes	**1.3**	0.3	0.9	0.6	0.7	0.5	**5.7**	-23.9	-23.2	-53.0	8.1	9.1
Solvents	**0.0**	0.0	0.0	0.0	0.0	0.0	**-36.1**	-18.1	-57.2	-68.5	-6.4	-54.5
Agriculture	**0.9**	1.7	0.8	1.0	0.8	0.7	**-12.9**	-23.5	-18.9	-26.2	-13.2	-7.3
Waste	**0.2**	0.2	0.1	0.3	0.2	0.1	**-49.7**	-41.4	-71.6	-60.8	-46.0	-38.5

1. LULUCF stands for land-use, land-use change and forestry.
Source: OECD calculations based on data obtained from UNFCCC.

Table 2.5. **GHG emissions from road transport**

	Change in emissions 1990-2010 (%)	Share in total emissions 1990	Share in total emissions 2010
Freight transport	113	5.5	10.9
Light trucks	35	1.7	2.1
Heavy trucks	147	3.9	8.8
Passenger transport	37	11.8	15.0
Diesel cars	397	1.8	8.2
Petrol cars	-30	9.6	6.2

Source: Umweltbundesamt (Environment Agency Austria).

1. This scenario assumes average real GDP growth of 2%. With lower GDP growth of 1.5% a non-ETS reduction of 19% is projected.
2. The installation of a catalytic reactor to reduce N_2O emissions in saltpetre production in 2003 is mainly responsible for this drop.
3. These targets exclude emissions from fuel export.

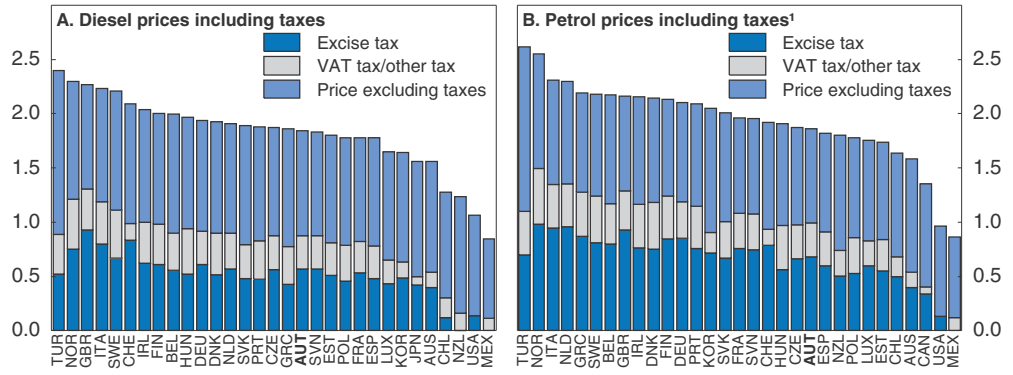
primarily aims to introduce and promote climate friendly technologies and services. The *klima:aktiv mobil* module aims to promote climate friendly mobility. It offers several services: *i)* consulting programmes for firms, cities, municipalities and schools on how to environmentally optimise their mobility management and rationalise transport needs; *ii)* subsidies for climate friendly projects such as a change in the car fleet to alternative energies, biking and public transport; *iii)* information campaigns to raise awareness of the benefits of climate friendly mobility; and *iv)* training and certification for example for fuel efficient driving coaches. In addition, the government has recently rolled out its action plan to promote electric cars and, more generally, electricity based transportation (e-mobility). While these initiatives are welcome, their effects are likely to be visible only in the long-term and better pricing of externalities associated with transport would be a more cost-efficient way to reduce externalities. By increasing the costs of car commuting, it

would also provide incentives to move closer to the workplace and/or places with better access to public transportation.

Fuel prices remain lower than in neighbouring countries, in particular compared to Germany, Italy and Switzerland, owing both to lower pre-tax prices but also lower excise taxes, despite a tax hike in January 2011 (Figure 2.8). This has contributed to sizeable "fuel exports", i.e. the difference between fuel sold and fuel consumed in Austria. Estimates suggest that "fuel exports" have increased sharply in the early 2000s and now account for about a third of total fuel sales (BMFLUW, 2009). Freight transport accounts for about two thirds of the fuel exports and fuel exports in passenger cars are mainly directed towards Germany. As the CO_2 emissions accounting is based on fuel sales, fuel exports have also contributed to the strong increase of CO_2 emissions and the high CO_2 intensity of the transport sector (Box 2.12).

Figure 2.8. **Diesel and petrol prices and taxes**

Total price (USD per litre), 2012Q4



1. Prices of Premium unlead 95 RON.

Source: IEA Energy Prices and Taxes Database.

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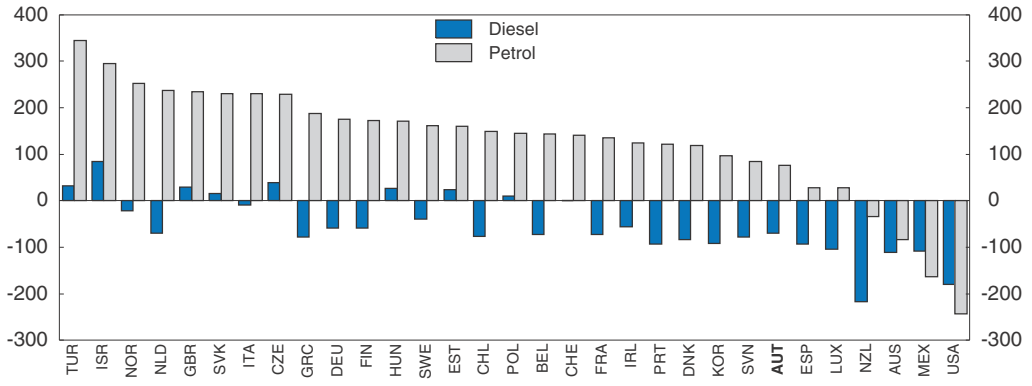
Some emissions are therefore simply diverted from neighbouring countries to Austria; as for example lorry drivers in transit or cross-border traffic use the opportunity to fill-up their tanks. However, there are quite likely additional emissions and congestion as a result of extra trips and detours taken exclusively to exploit fuel price differences. Hausberger and Schwingshackl (2011) estimate that an additional tax increases by 5 ct/l would reduce local CO_2 emissions by 1% by 2020 and would reduce "fuel exports" by 10%. However, the study does not differentiate between diverted emissions and genuine reductions due to fewer extra trips. It may therefore be useful to conduct studies to improve the understanding of the amount of extra trips. Such a study could also shed more light on the fiscal implication of a tax hike. The government estimates that increasing fuel taxes to match neighbours fuel prices would likely generate extra fuel tax revenues, despite lower fuel exports (BMFLUW, 2009). However, uncertainties surrounding elasticities of fuel exports are large and additional fuel tax revenues could be offset by lost VAT income from non-fuel sales purchased at gas stations. As fuel tax differences compared to eastern neighbours are small, a tax increase may induce extra trips from Austrians to its eastern neighbours. For this reason, Austria should participate in efforts to harmonise fuel taxation

at the European level to reduce fuel tourism and assure that each country can price externalities appropriately.

Diesel fuel is taxed at a substantially lower rate than gasoline. Partly as a result, the share of diesel cars in the local fleet has increased sharply. However, local externalities associated with diesel imply higher social costs, mainly owing to more severe pollution, notably through particulate matter (Figure 2.9). Hence, Austria should increase taxation on diesel fuels above gasoline taxes to better reflect externalities. More generally, a recent OECD publication (OECD, 2013) showed that implicit carbon prices varied substantially across different fuels. This means that carbon mitigation is not pursued at least cost in Austria. The recent abolition of several tax exemptions for fossil-fuels, such as the tax refund for diesel used in agriculture, is welcome in this respect.

Figure 2.9. **Implicit diesel and petrol prices after adjusting for externalities**

EUR/tonne of CO_2, 2012Q3



Note: The implicit carbon price for diesel and gasoline is obtained by subtracting the external costs of negative externalities from the carbon price implied by excise tax. The implied carbon price is computed by converting the excise tax per litre to a tax per ton of CO_2 after deducting the estimated cost of a range of externalities associated with burning fuel. The conversion is done based on a CO_2 content of 2.7 kg of CO_2 per litre of diesel (light fuel oil for households and industry), and of 2.24 kg of CO_2 for petrol (premium unleaded for households). The external cost contains air pollution, noise, accidents and congestion. The estimates are taken from Persson and Song (2010, "The Land Transport Sector: Policy and Performance", *OECD Economics Department Working Paper*, No. 817, Table 5.9) for noise pollution, accidents and congestion. The cost estimate for air pollution for Germany published in CE DELFT (2008, handbook on Estimation of External Costs in the Transport Sector) is used for all countries.

Source: OECD calculations based on Égert (2011), "France's Environmental Policies: Internalising Global and Local Externalities", *OECD Economics Department Working Papers* 859.

StatLink http://dx.doi.org/10.1787/888932856779

While fuel taxes can address externalities, including congestion, they are not precise and there are therefore gains to using other instruments. In particular, Austria could extend its system of road and congestion pricing. While congestion is less of a problem in Austrian cities than in comparable European metropolitan areas, traffic does lead temporarily to above limit local emissions and capacity constraints in cities and areas around urban centres. Lorries and heavy vehicles (above 3.5 t) pay a kilometre based road toll on motorways and expressways differentiated by emission classes. Passenger cars pay a fixed yearly fee independent of the distance travelled. In addition, there are special tolls for certain roads and tunnels mainly for Alpine passes. The benefits from congestion and road pricing could be further expanded in Austria by extending distance-based prices to passenger cars and by targeting them in time and more geographically. Geographical pricing would take into account that social costs of pollution are likely to be even higher in

mountainous areas, where air pollution will frequently be trapped and cause extended exposure (EEA, 2013). Higher user charges at peak hours and in congested areas would give incentives to road users to adapt their daily schedule, spreading the peaks in demand over the day and leading to a more efficient use of road capacity and less demand for infrastructure expansion. Extending road prices in this way should be feasible at relatively low additional costs, as an electronic toll system for trucks is already in place in Austria.[7]

Car use and commuting are subsidised through the tax deductibility of commuting trips and the tax treatment of company cars as a low taxed fringe benefit. Commuting allowances are distance dependent, reducing incentives to locate closer to the workplace, and higher if public transport is not available, reducing incentives to locate in areas well connected to public transport. The tax deductible amount can reach up to EUR 3672 per year for distances beyond 60 kilometres if public transport is considered "unreasonable".[8] Some Länder also additionally subsidise commuting and eligibility for commuting allowances was recently eased for part time workers. Commuters who don't pay income tax are granted a negative tax and as of 2013 the subsidy scheme was supplemented by a direct tax reduction of EUR 1 per km, which reduces the regressivity of the system. Overall, about 19% of all wage earners were entitled to commuting allowances in 2011 and commuting allowances were particularly wide spread in Lower Austria and Burgenland, two Länder with a high share of commuters to Vienna.

Company cars used for private purposes increase the taxable income of the employee by 1.5% of the vehicle acquisition costs, capped at EUR 600 per month. Fuel costs paid for by the company are not subject to a benefits tax above this income cap and the tax treatment is independent of car emission standards. This provides incentives for private company employees to over-use company cars and to drive bigger, more expensive and less fuel efficient cars. The number of company cars rose rapidly over the past decade and about 40% of new cars were company cars in 2011 (VCÖ, 2012). More than 80% of new luxury cars and 70% of SUVs are company cars (UWD, 2012). Recent OECD analysis estimates that the total annual subsidy per company car amounts to EUR 1342 (OECD, 2012e). The scheme is also likely to be regressive, as high income earners disproportionately benefit from company cars. Since 2013, employees using a company car for private purposes are not entitled to commuting allowances any more, which is a welcome step. Removing the distorting effects of car usage subsidies, would strengthen the incentives from pricing road externalities to reduce private transportation.

Higher prices for road transport along with fostering competition in rail transport to reap full cost-efficiency gains may also divert more traffic to the train, in line with government goals. In freight transport the share of rail is slightly above 30%, already high in international comparison. This share is even higher in cross-border freight transport (excluding transit) thanks in part to public investments and subsidies to freight terminals, which facilitate a switch in the transport mode and connections to private railways. Austria aims to increase the overall modal split in freight transport to 40% by 2025 (BMVIT, 2012b) mainly through the modernisation of existing major axes to increase their capacities and new and extended freight terminals. Fostering competition in railway could help to lead to a more cost-efficient service provision and lower prices. The railway market in Austria was formally liberalised in 1998 and according to the Rail Liberalisation Index (IBM, 2011) the degree of market openness is among the highest in the EU. However, despite progress in recent years, the market share of the incumbent still remains at above 80% in

freight and above 90% in passenger transport (IRG, 2013). Open tenders for the provision of transport services under a public contract, could help boost competition.

Better integrating regional, transport and housing policies and improving policy coherence

While better pricing of road externalities can help internalise some of the environmental costs of urban sprawl, namely air pollution, noise and congestion associated with car commuting, other costs such as a loss of natural spaces and biodiversity are harder to quantify and price. In this case regulations may be more appropriate, which calls for improving regional development policies to foster denser settlements around urban cores. Denser settlements favour walking or biking, are a prerequisite for the cost-efficient provision of public transport and would reduce the loss of natural space and biodiversity (OECD, 2012g).

These goals are broadly incorporated in the *Austrian Spatial Development Concept* (ÖREK, 2011b). In addition, the Austrian *Sustainable Development Strategy* of 2002 (BMLFUW, 2002) specifies an annual national upper limit for new built-up areas. Since the adoption of the strategy the co-operation between municipalities on issues concerning the settlement of enterprises has been enhanced. Regional goals for land-use changes have been formulated, housing subsidies (Wohnbauförderung) have been raised for denser building structures, and subsidies paid for land-saving area development (UBA, 2010). Nevertheless, the national target stipulated in the *Sustainable Development Strategy* has never been met (Figure 2.5). This may be due to a lack of co-ordination between the federal level and Länder and municipalities, that are mainly responsible for regional planning.

The national regional development strategy should be complemented with instruments to improve co-ordination between different layers of government. Criteria for priority areas for development could be set out at the federal level, while leaving the responsibility for implementation at lower levels of government. To assure compliance with national targets, regional development plans of lower levels of government could be subject to central government approval as is envisaged in the new national territorial development concept of Luxembourg (see OECD, 2012f).

Better integration of regional planning and transport policies would help to assure that settlements are well connected to public transport. The new comprehensive transport plan (*Gesamtverkehrsplan*, BMVIT, 2012) is an important step in this direction. It presents goals and strategies for an integrated transport policy across all means of transport and decision makers (EU, federal, Länder and municipalities). It also suggests that by 2020 50% of all new construction development areas should be within 500 metres of an existing or planned public transport stop. This should be complemented by improved co-ordination of spatial and public transportation planning between regional authorities and especially between central cities and the surrounding municipalities. Provision of (regional) public transportation is mainly the responsibility of municipalities and provision is often not well co-ordinated between municipalities. Public financing of supply is highly complex and fragmented between different levels of the government (Kroissenbrunner, 2012). To improve the co-ordination of public transportation supply, a federal fund could be established similar to the agglomeration fund in Switzerland. Municipalities could compete for the federal funds, the allocation could be based on rigorous cost-benefit analysis criteria related to sustainable transport and spatial planning goals, and preference be given to projects that improve inter-regional co-operation. Moreover, new transport

infrastructure projects should systematically take into account environmental impacts such as the threat to biodiversity through fragmentation of natural habitats. In case such fragmentations are necessary, technical solutions such as green bridges and tunnels for wildlife passing could be considered.

Given strains on public finances, private investment will also be needed to finance public transportation projects. A key priority to scale-up private investment in public transportation projects is to provide financial tools and risk-sharing mechanisms, to facilitate access to private financing and improve the risk-return profile of public transport infrastructure projects (Ang and Marchal, 2013). Instruments include notably public-private partnerships (PPP), which can be effective procurement methods provided they offer sufficient value for money compared to public procurement. Other innovative instruments include land value capture tools, which provide revenues from the positive externalities generated by transport infrastructure, notably the increase in land and real estate value and economic activity near transport stations. Such tools have been used to finance the renovation of Vienna Central station, by combining the construction of a new section of the train station with the development of about 100 new retailers and businesses in and around the train station as part of the urban re-development programme "Bahnhofsoffensive" (PwC, 2013).

With effective regional development policies in place, other policies can help increase land supply, in particular in urban areas and agglomeration centres, and strengthen incentives to settle in these areas. The price responsiveness of housing supply is particularly low in Austria compared to other OECD countries (Caldera Sánchez and Johansson, 2011). Low supply responsiveness drives up prices in particular in places with abundant employment opportunities providing incentives to live further away from workplaces. A large social and co-operative housing market and rent regulations in the private sector may have improved the affordability of housing for lower income households, but may have also put pressure on expected returns and hence lowered private rental supply. To increase the availability of construction land, some Länder introduced additional instruments into their regional development laws. For example, temporary land zoning (e.g. in Lower Austria, Burgenland, Styria) allows land to be re-zoned to its previous status (mainly grassland) without compensating the owner if construction land is not covered with buildings within a given time period. Some Länder also levy special fees for unused construction land (*Infrastrukturabgabe*, e.g. in Upper Austria, Salzburg, Styria). Vienna is the only Land which allows for expropriation under relatively strict conditions.

In addition to these measures, housing supply could be increased and land hoarding reduced by updating outdated land values on which property taxes are levied. Property taxes are low in Austria in international comparison. This is mainly due to the outdated land values. In addition, land values do not reflect relative prices of properties in different locations. Low property taxes may have led to land hoarding in expectation of future price increases and hence a reduction in the supply of construction land. In addition, until recently capital gains were untaxed after a speculation period of ten years contributing to land-hoarding incentives. There is evidence that land hoarding forced some Länder to re-zone new previously unused land further away from the urban cores, which may have contributed to urban sprawl (UBA, 2010). Raising currently low property tax revenues by updating land-values could also be growth enhancing, if the revenues are used to reduce more growth detrimental taxes such as labour taxes, as argued in the previous *Economic*

Survey (OECD, 2011a). To foster demand for housing in urban areas and agglomeration centres, housing subsidies could be adjusted. Existing housing subsidies already take ecological considerations into account, for example, through a preferential treatment of denser settlements structures. These incentives could be strengthened and extended by differentiating subsidies according to the access of the building to public transport.

To strengthen policy coherence and efficiency, the consistency between different subsidies and other polices related to regional development, transport and housing should be reviewed. Trade-offs between different well-being dimensions exist. Housing policies, such as housing subsidies, rent control and social housing, may have increased the affordability of housing. They may have also reinforced low residential mobility which has contributed to stability of living spaces with positive effects on social connections and local social capital (see above). For instance, a high share of social and co-operative housing in the rental market, widespread rent control and strict tenant protection regulations may act as a transaction cost (Badinger and Url, 2002) as tenants are reluctant to give up acquired rights and below-market rents (Andrews et al., 2011). While low residential mobility does not appear to be associated with strong regional differences in unemployment rates in Austria (as described in Chapter 1), it may increase commuting, which is subsidised as described above. Austria also spends a large amount of subsidies on the development of rural spaces. While a large share of these subsidies are tied to environmental goals, such as organic farming or nature preservation (see Box 2.11), they may have kept a larger share of the population in rural areas, where settlements are more fragmented and the car is the main mode of transportation. It may therefore be useful to conduct a comprehensive study on the interaction and combined impact of these and other policies on overall well-being.

Box 2.13. **Environmental recommendations**

- Price externalities stemming from road transport better. Increase diesel taxes to reflect externalities. Consider extending the road pricing system. Abolish the favourable taxation of company cars and phase out the commuting subsidy.
- Develop instruments to improve co-ordination between the regional, Länder and federal levels to promote denser settlements well connected to public transport. To increase land supply in designated areas, raise property taxes by updating land values on which they are levied.
- Review the consistency between different subsidies and other polices related to regional development, transport and housing. Conduct a comprehensive study on the interaction and combined impact of these policies on overall well-being.
- Systematically conduct environmental impact assessments for new transport infrastructure projects.

Conclusions

The challenges raised by demographic and environmental trends for the future of Austrian well-being invite policy responses which should take advantage of the synergies between different well-being areas. In areas with trade-offs between well-being dimensions, citizens should be enabled to make free and well-informed choices between these dimensions according to their preferences.

To make retirement decisions in the ageing society open to individual choice, well-being maximising and fiscally sustainable, a fair balance between life-time pension contributions and entitlements should be promoted by drawing on the recent pension reform. With female labour force participation rising, family policies should help reconcile equality of opportunity within families by promoting the availability, affordability and quality of support services. A growing share of immigrant groups with low human capital calls for remedial policies to preserve social cohesion, which requires stepping up efforts to promote human capital formation.

Responding to environmental pressures arising from the rapid expansion of road transportation and urban sprawl, calls for a more adequate pricing of externalities associated with road transport and improved regional development policies. Regional development policies should be better co-ordinated across government layers, and better integrated with housing and transport policies. Improving the integration of policies on the basis of common evidence and analysis can help promote higher and more balanced well-being.

Notes

1. However, disability pensions count for about one third of the yearly inflow into the pension scheme. The life expectancy of these retirees is substantially lower than the life expectancy of old-age pensioners.
2. According to official calculations, the accrual rate of 1.78% and the discount rate of 5.1% generate in combination a pension gain of 7-8% per year of additional work at old age.
3. Actuarial neutrality requires that the pension wealth of a participant when retiring a year later is the same as his/her pension wealth if he/she retired today, plus the value of any extra pension accrued during the year (Queisser and Whitehouse, 2006).
4. In Vienna, 131 such pre-school classes are already in operation. They hosted 1 658 pupils in the school year 2012/2013 and will teach about 1 800 in the school year 2013/2014. This corresponds to 10% of all children expected to start elementary school in this city.
5. Metropolitan areas are defined according to the functional boundaries approach, which includes Hinterland based on commuter data (see OECD, 2012d).
6. Based on the OECD regional classification. The regional typology comprises three classes: predominantly urban, intermediate and predominantly rural. The share of the population living in rural and intermediate areas is 77%.
7. For successful experiences with congestion charges, such as Singapore's Electronic Road Pricing, see OECD (2013b).
8. Public transportation is considered unreasonable if public transportation is available on less than half of the distance between living and work place, the person suffers from a severe walking impairment or public transportation exceeds a certain commuting time threshold.

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