OECD Economic Surveys

Germany

OECD

OECDPUBLISHING

Volume 2006/8 – May 2006

OECD
Economic Surveys

Germany

2006

OECD

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

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

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

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

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

Also available in French

Table of contents

Boxes

Tables

Figures

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 Germany were reviewed by the Committee on 29 March 2006. 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 17 May 2006.

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

The previous Survey of Germany was issued in September 2004.

BASIC STATISTICS OF GERMANY, 2005

LAND

Area, 2001 (1 000 km^2)	357	Major cities, 31.12.2003 (1 000 inhabitants):	
Agriculture (%)	54	Berlin	3 389
Forest (%)	29	Hamburg	1 734
		Munich	1 248

PEOPLE

Population (1 000)	82 464	Labour force[1] (1 000)	42 676
Inhabitants per km^2	231	Employment[1] (1 000):	38 783
Natural increase in population, 2003 (1 000)	–147	Agriculture (%)	2
Net immigration, 2003 (1 000)	143	Industry (%)	26
		Services (%)	72

PRODUCTION

GDP, current prices (billion euros)	2 246	Origin of value added (%):	
GDP per capita (1 000 USD in current prices)	34	Agriculture	1
Gross fixed investment (% of GDP)	17	Industry	30
		Services	69

GOVERNMENT

Public consumption (% of GDP)	19	Composition of Parliament:	Seats
General government total revenue (% of GDP)	43	Social Democratic Party (SPD)	222
Public debt, Maastricht definition (% of GDP)	68	Christian Democratic Party (CDU)	180
		Christian Social Union (CSU)	46
		Greens	51
		Free Democratic Party (FDP)	61
		The Left	54
		Last general election: September 2005	
		Next general election: 2009	

FOREIGN TRADE

Exports of goods and services (% of GDP)	40	Imports of goods and services (% of GDP)	35
Main exports (% of total merchandise exports):		Main imports (% of total merchandise imports):	
Machinery and transport equipment	50	Machinery and transport equipment	36
Manufactured items	23	Manufactured items	23
Chemicals and related products	14	Chemicals and related products	11

CURRENCY

Irrevocable conversion rate (1 euro)	1.9558	Euros per USD:	
		Year 2005	0.80
		April 2006	0.81

1. Domestic concept.

Executive summary

The German economy appears to be in a position where it could now realise a shift from a regime where demand tended to undershoot supply to one in which more expansionary supply conditions and resulting improved growth prospects feed through into more buoyant demand. The challenge in this context is to make improvements in a variety of areas – long-term growth, employment creation, public finance sustainability – while at the same time preserving what could well be a genuine recovery in short-run activity extending beyond the export sector. A well-integrated strategy is necessary, with policies interacting positively with each other, including further progress in areas with a potential to boost aggregate growth and labour income. Both domestic and international factors can contribute to assuring a dynamic expansion, although only domestic factors are subject to policy measures which the German government can choose. Internationally, continued strong world growth and favourable monetary conditions are important. Domestically, product market reform (the in-depth chapter of this Survey*) is precisely an area that has the potential to boost long-term growth and labour income and reduce public deficits through a strengthening of the tax base.*

Fiscal consolidation on the spending side needs to be linked to public sector reform. *While significant progress has been made in recent years in curbing spending, deficit targets have repeatedly been missed and the debt-to-GDP ratio is high. A credible consolidation policy is needed that links expenditure control with public sector reform covering federal fiscal relations, removing distortions in the tax system and making the key government services more efficient. VAT will be increased in order to rapidly reduce the structural deficit by compensating for revenue losses from past reductions in direct taxation. A considerable part of increased revenues will be used to lower social security contributions. It is important to make clear that further consolidation focus on the expenditure side.*

The efficiency of the education system needs to be increased. *Securing the supply of highly skilled workers is crucial for the generation and absorption of new technologies. Schools should be regularly evaluated against country-wide or state-wide standards, while leaving schools more freedom in determining suitable ways to reach their targets. Allocation of government funding to universities should be more strongly oriented toward output indicators. All universities should be made independent entities and given the opportunity to introduce student fees coupled with a loan scheme and income-contingent repayments.*

Continued labour market reform is necessary to boost employment. *Major steps in labour market reform were implemented over the last three years. Many measures are steps in the right direction. However, reform needs to be deepened and broadened to create the momentum for sustainable improvements in employment. Further institutional reform of the Public Employment Service is required to better activate the unemployed. Hurdles to labour force participation of older employees and females need to be further reduced. Moreover, more flexible employment contracts are necessary, while at the same time avoiding labour market segmentation. Wage rigidities need to be reduced further to fight very high unemployment rates among the low-qualified.*

Regulation of domestic markets for goods and services needs to become more competition-friendly. *While Germany's outward policies are largely open, and the general competition legislation and enforcement framework is, in most respects, effective, measures need to be taken to reduce the administrative burdens on entrepreneurship and reduce the involvement of the government in business sector activities, notably through accelerated privatisation. Policies favouring small enterprises need to be revised, exposing them to competition of larger firms and avoiding disincentives to grow. In network industries, non-discriminatory access of market entrants needs to be improved. Regulation of professions is among the tightest in the OECD, requiring deregulation in order to reduce barriers to entry. Similarly, qualification-related entry requirements in the crafts sector should be abolished.*

ISBN 92-64-02515-4
OECD Economic Surveys: Germany

Assessment and recommendations

A recovery is slowly gaining ground

German economic performance continues to be marked by strong exports, reflecting many years of trend improvement in external competitiveness, but persistently weak domestic demand. To some extent these two trends are linked. Wage moderation, while strengthening competitiveness, has meant weak household income growth, holding back consumption; and lower inflation than in other euro area countries has raised the real interest rate in Germany, while the absence of exchange rate movements due to the single currency is likely to have supported exports. Signs of a pick up of domestic demand have emerged, and soft data on business confidence and incoming orders signal that the recovery may become broader in the near future. However, hard data from quarterly GDP statistics indicate that this process was not yet firmly established until the end of 2005. Overall, the OECD projects that real GDP will grow somewhat above potential in 2006, at around 1¾ per cent, after growth of 1.1% in 2005 (working day adjusted). Continued structural reform can contribute to stronger domestic activity and would improve the capacity of the economy to turn favourable external impulses into higher growth and employment.

Is downward adjustment coming to an end?

The adjustment process of the German economy during a long period of relatively low growth, beginning in 1993, was characterised by a slow, but successful restoration of international competitiveness. Current information on export performance does signal that price competitiveness is by and large restored, lifting the external pressure on wages and prices. The German economy could well be in a position now to realise a shift from a regime where demand tended to undershoot supply which was itself weakening because of inadequate framework conditions, to one in which more expansionary supply conditions and resulting improved growth prospects feed through into more buoyant demand. The challenge confronting Germany in this context is to make improvements in a variety of areas – long-term growth, employment creation, public finance sustainability – while at the same time preserving what could well be a genuine recovery in short-run activity extending beyond the export sector.

Policy makers need to show good teamwork

To meet such a multifaceted challenge a well-integrated strategy is necessary, with policies interacting positively with each other. Labour market reforms can be particularly difficult to implement, especially as there is a risk of impacting negatively on household confidence. This is why they need to be part of a global package, where further progress is achieved in areas with a potential to boost aggregate growth and labour income.

- Over the medium term, fiscal consolidation – in quantitative and qualitative terms – will have to take place in such a way that potential growth prospects are preserved, with the implication that the bulk of adjustment has to fall on the spending side (including the elimination of distorting tax expenditures) and needs to be linked to public sector reform.
- Despite courageous reforms, a lot remains to be done to reduce unemployment and boost employment creation.
- Product market reform is precisely an area that has the potential to boost long-term growth and labour income and reduce public deficits through a strengthening of the tax base.

Fiscal consolidation will proceed by cutting expenditure and increasing VAT

Germany's general government deficit amounted to 3.3% of GDP in 2005, above 3% for the fourth year in a row. While the structural balance improved, considerable spending restraint over the last years was largely offset by weak revenues reflecting both discretionary tax reductions and weak domestic demand. The new government has underlined its commitment to fiscal consolidation and public spending reform. Substantial cuts in spending and tax expenditures are to be phased in over the next four years, generating one half of the overall deficit reduction package. The remaining half of the envisaged consolidation is intended to be brought about by an increase in the standard VAT rate by 3 percentage points in 2007 with one third of additional revenues to be used for reductions in social security contribution rates. At the same time, there are plans to phase in fiscal measures of about ¼ per cent of GDP p.a. to raise medium-term growth and stimulate the economy in the short term. This package foresees *inter alia* higher spending on innovation and infrastructure, a temporary increase in depreciation rates and tax concessions for refurbishing private homes. Overall, the general government deficit is estimated to be around 3% of GDP in 2006 and around 2¼ per cent of GDP 2007.

Further consolidation needs to be expenditure driven

As regards fiscal consolidation, relying to a relatively large extent on revenue increases raises important issues. Consolidation driven by expenditure cuts (including the abolishment of distorting tax expenditures) tends to be more durable and favourable to growth. The increase in VAT, however, should be placed in the specific context of German consolidation which started some years ago with strong emphasis on expenditure control, in association with cuts in direct taxation that increased the structural deficit. Hence, it will be crucial to pursue a credible consolidation strategy via public sector reform, designed to generate positive confidence effects.

Federal fiscal relations urgently need reform

Overlapping responsibilities between the federal government and the states are often associated with inefficient resource allocation and can slow federal legislation. At the

OECD ECONOMIC SURVEYS: GERMANY – ISBN 92-64-02515-4 – © OECD 2006

same time commitment mechanisms at the level of the federation and the states for ensuring strict implementation of consolidation plans can be made more effective. *The new coalition government should use its broad support in both houses of Parliament for fundamental reform of federal fiscal relations.*

- *The decision powers of the inter-governmental Finance Planning Committee should be strengthened. Fiscal targets and monitoring indicators need to be formulated in terms of national accounting conventions. Spending paths should be derived and monitored for each government individually.*
- *Bailing out of states with high deficits by the federal government should be terminated. Solidarity Pact II transfers to the new states should be conditioned on spending adjustment by the new States in favour of investment projects removing bottlenecks for higher growth.*
- Inter-governmental co-funding is widespread, resulting in insufficient spending control. *Co-funding of regional projects by the federal government should terminate in all areas where substantial spill-over effects between governments cannot be established. This implies,* inter alia, *that federal investment aid for the states should be abolished and spending responsibilities together with appropriate financing fully transferred to states and municipalities.*
- Several administrative tasks, such as tax collection or planning of long-distance motorways, are commissioned by the federal government to the states. In important areas this poses severe principal-agent problems leading to cost shifting and a loss in administrative efficiency. *The range of federally commissioned tasks should be reduced by reallocating tasks to either the federation or the states, respectively.*
- Additional tax revenues generated in a state are almost entirely redistributed between states via fiscal equalisation mechanisms. *Inter-governmental transfers in the fiscal equalisation system should be re-designed so as to reduce the disincentive effects for developing the states' own tax base and tax collection efforts. To this end, transfer claims should be computed on the basis of notional rather than actual revenue. Also, more use could be made of lump sum transfers.*
- The states have only very limited legislative power with respect to taxation, even for taxes whose revenues fully accrue to them. *The states and the municipalities should be given more scope in generating own tax revenues, raising accountability of fiscal policies* vis-à-vis *electorates.*

Public-Private Partnerships can be beneficial but need to be handled with care

The government aims at engaging in more public-private partnerships (PPPs) to finance infrastructure investment, based on an evaluation of costs and benefits over the life cycle of the investment project. While PPPs can be associated with efficiency gains there is a considerable risk that this approach is mainly used for accounting purposes and public sector spending obligations are shifted into the future without backing by a proper multi-year budgeting framework. *The federal government, the states and the municipalities should only engage in PPPs if there is convincing evidence that efficiency gains outweigh higher financing costs of the private sector.*

Distortions in the tax system need to be eliminated on a broad front

Notwithstanding significant reductions in corporate and income taxes over recent years, effective tax rates on company profits and on households' wage earnings remain relatively high by international comparison. Progress has been made in reducing tax concessions, but more needs to be done to make the tax system less distortionary in a wide variety of areas.

- *Tax expenditures should be further reduced, widening the scope for reductions in statutory income and profit tax rates.*
- Reducing carbon-dioxide emissions through subsidies to renewable energies costs much more, at the margin, than achieving this via the carbon tax. In addition, coal-based generation plants are exempt from the carbon tax. *Subsidies should be brought in line with what is justified on account of measurable external effects. The planned harmonisation of energy taxation – terminating the exemption for coal – is welcome.*

The education system needs to become more effective

Securing the supply of highly skilled workers is crucial for the generation and absorption of new technologies. Improving the skills of low-skilled workers is one way to reduce benefit dependency and to cope with the effects of increasing internationalisation of trade and investment.

- An evaluation should be carried out to see whether fees in early education discourage attendance of early education facilities. Consideration should be given to provide subsidies to early education and child care through a voucher system, with vouchers to be used in accredited early education facilities.
- While the states have taken measures to move towards national performance standards, there is not yet a coherent reform programme covering all relevant aspects of education policy. *Schooling attainment should be regularly evaluated in all schools against country-wide or state-wide standards, while leaving schools more freedom in determining suitable ways to reach their targets. Consideration should be given to postponing selection of pupils into different types of secondary schools to a later age. Hurdles for the mobility of teachers across states should be abolished.*
- A new programme provides additional funding until 2011 to highly performing universities. While this is a step forward toward more performance-oriented funding, incentives for universities to raise research performance and teaching quality need to be improved on a broader and more sustained basis. *Allocation of government funding should be more strongly oriented toward output indicators, with funding by the federal government playing a significant role. Administrative allocation of students to universities should be terminated and more choice should be given to students and universities. All universities should be made independent entities and given the opportunity to introduce student fees coupled with a loan scheme and income-contingent repayments. This should not be used as a substitute for public funding.*
- Access to university should be widened, ensuring that non-academic tracks of secondary education prepare better for entry to university.

Reforms to strengthen employment performance need to be deepened and broadened

Major steps to strengthen employment performance were implemented over the last three years, focusing on reducing work disincentives associated with unemployment-related benefits, and better activation strategies for the unemployed. However, a range of issues still needs to be addressed to achieve success.

Obstacles to labour force participation need to be further reduced

Government plans to phase increases in the statutory retirement age from 65 to 67 years are welcome. Other distortions that create impediments to higher labour force participation of older people and spouses also need to be addressed:

- Channels into effective early retirement outside the public pension system have gained importance, undermining efforts to activate older employees. New legislation cutting extended eligibility periods for unemployment insurance benefits for the older unemployed marks important progress in reversing this trend. Moreover, *exemptions for older benefit recipients to search for employment should not be prolonged further. Subsidies for the old-age part-time work scheme (Altersteilzeit) should be removed.*
- Policies to improve the compatibility of child rearing and labour force participation of spouses should rank high on the policy agenda. This reinforces the case in favour of strengthening early education and child care in accredited facilities. The Government plans to extend child care support. *Financial support for child-minding costs should be more focused on families where both spouses are working.*
- *Average effective tax rates on labour income of second earners in households should be reduced while free health insurance for non-working spouses should be phased out.*

Work incentives for the long-term unemployed can be improved further

The introduction of the new means-tested income replacement scheme (ALG II) for the long-term unemployed and welfare recipients marks progress toward more effective activation of benefit recipients who are able to work. Job-search requirements have been tightened and progress has been achieved in subjecting active labour market measures to evaluation. But several issues remain to be addressed:

- Financial incentives for welfare recipients to pick up work remain low. *One option of reform is to lower withdrawal rates of income replacement for welfare recipients who are able to work (unemployment benefits II). At the same time, replacement rates should be revisited to preserve incentives to take up employment.*
- *Within such a reform option, preferential taxation of small jobs paying very low earnings, which hardly benefit the unemployed, might be terminated.*
- Different schemes exist supporting self employment out of unemployment. *These should be merged in favour of better targeting.*

- The wide application of new work provision schemes at municipalities or welfare associations (*Arbeitsgelegenheiten*) is likely to fail in its present form to ease the transition into non-subsidised employment or to function as willingness-to-work tests. *To avoid generating new unemployment traps the remuneration associated with these schemes should be revisited so as to preserve incentives to take up work on the primary labour market. Welfare institutions participating in the scheme should bear part of its costs.*

Reorganisation of the Public Employment Service needs to continue

Successful public employment service (PES) institutions are outcome oriented. While major steps have been taken to strengthen the placement function of the PES, further measures seem necessary:

- Counsellor-to-client ratios have improved significantly over the last couple of years, but are still below target. *Further administrative reform is required to free resources for activation and placement.*
- Financing and decision powers with respect to getting the long-term unemployed into jobs remain dispersed between municipalities and the Federal Labour Office and differ across municipalities. *Consideration should be given to concentrating responsibilities for benefit and employment policies at one level of administration. Allocation of responsibilities to the Federal Labour Office might be preferable. If instead responsibilities for ALG II-related policies are assigned to the municipalities, this should be accompanied by a financial mechanism, which provides incentives for municipalities to engage in efficient job placement.*
- The obligation for local employment offices to establish subsidised temporary work agencies proved to be costly without improving placement outcomes in general. *This policy should be terminated. Regional Labour Offices should utilise external placement services on a competitive basis.*

Higher flexibility in wages and work conditions is warranted

Firm-specific agreements between employers and employees have become a main driver for a higher degree of flexibility in work conditions and wages. Yet, wages need to be better aligned with skills, particularly at the low end of the wage distribution, and responsiveness to differential labour market conditions across firms and regions needs to increase further. Increasing the cost of unskilled labour through the introduction of statutory minimum wages risks counteracting policies that aim at reducing high unemployment rates among the low qualified and at improving employment chances for new labour market participants. Suggested policy action includes:

- *Administrative extension of collectively bargained contracts should only be applied if negative consequences for the labour market can be avoided.*
- *Consideration should be given to widening the scope for wage determination at the firm level so as to better align collective wage contracts with labour market conditions.*

Employment protection needs to become more symmetric

Strict EPL tends to increase unemployment duration in particular for the low qualified and marginal groups in the labour market. At the same time, reaping the benefits of deepening international integration in goods and factor markets reinforces the need to allow for more flexible labour allocation. Recent legislation in favour of more flexible employment contracts gave preference to non-regular forms of employment, which may contribute to widening labour market segmentation. Plans by the new government to exempt the initial phase of an employment spell from dismissal protection while dropping the option to offer fixed-term contracts are welcome. *Germany's employment protection procedures should be reviewed further to reduce the legal costs associated with dismissals.*

Further reforms of product market regulation would boost consumer welfare, productivity and employment

A pro-competitive stance of product market regulation can raise consumer welfare through higher real wages, employment and productivity growth, and strengthens resilience to adverse shocks. While external policies are open, there is considerable scope for making regulation of domestic goods and service markets more competition-friendly. Substantial administrative overhead raises barriers to entrepreneurship, and progress with privatisation has been relatively slow. In some industries sector-specific regulation remains highly restrictive.

General competition law should not be used to protect small enterprises

Competition law is generally effective and the Federal Cartel Office is a strong and independent enforcement agency, although fining procedures appear to be lengthy. In the area of abuse of dominance, however, competition law in some cases protects small and medium-sized enterprises (SMEs) against aggressive competition by larger firms even if such competition enhances consumer welfare. *Fining procedures need to be made more efficient. The Cartel Office should strengthen the analysis of economic effects of conduct, and not emphasise the protection of small firms on the grounds of them being small.*

Government sector involvement in business sector activities needs to be scaled down further

Government ownership of enterprises remains considerable and is concentrated in the network industries, giving rise to concerns over conflict of interest. State aid to business has also been generous in international comparison. Many government support programmes target SMEs and are linked to firm-size limits, which may generate unintended incentives for firms not to grow. *Privatisation of public sector enterprises should be accelerated. State aid to enterprises should be phased out, except where there is evidence that the aid offsets efficiency losses resulting from market failure.*

Administrative burdens impede firm entry

New firm creation as well as potential foreign market entrants and innovative firms are still particularly subject to the adverse consequences of high administrative burdens, although efforts to reduce administrative overheads have already been made and the federal government has announced initiatives to this end. Business conduct regulation is input-oriented, favouring insiders, and dispersed responsibilities across different regulatory units add to administrative burdens. Entry barriers remain high in public procurement. Regulatory impact analysis is not yet firmly established, although some states have started to reconsider the appropriateness of existing regulations and have introduced a screening process for new regulations. *Attempts should be made to replace regulation defining inputs by regulation that sets output targets. Related auditing competencies should be bundled within one agency only. Expert groups to asses the regulatory burden for enterprises and households of existing regulation should be established at all layers of government. Regulatory impact analysis should be incorporated in the legislative process at the federal and state level.*

Notwithstanding significant reform regulatory challenges in network industries remain

Germany moved relatively early in opening network industries to competition, notably in the energy sector and the railways industry. However, the regulatory framework conditions introduced were not conducive to sustained competition, notably in the energy sector, where regulation largely relied on voluntary agreements between market participants. The introduction of a single sector regulator (FNA) for telecom, energy and railway industries provides an opportunity to accelerate the pace at which genuine competition develops. A single network regulator may potentially reduce risks of regulatory capture and the FNA is formally independent from the government. In the energy sector *ex ante* regulation as well as legal and operational separation of network from potentially competitive activities have been introduced.

- In the energy sector, the FNA appears to be overly restricted in assessing the costs of network providers. *It should be carefully monitored whether network access prices in the energy sector are determined according to the costs of the most efficient providers.* Countries which have introduced ownership unbundling of key potentially competitive activities from the network activities reap bigger effects from liberalising energy markets. *It should be considered to extend the separation of network from potentially competitive activities to ownership separation between electricity transmissions network operations and electricity generation. Electricity generation companies and wholesale gas suppliers should be prevented from acquiring further stakes in distribution networks.*
- In telecommunications markets, some regulatory decisions favouring competition have been introduced with some delay in comparison to other European countries. *In telephony delays in the implementation of decisions by the network regulator should be monitored and further delays prevented.* Resale of unbundled local loop connections has become a major means of obtaining access to the local loop for competitors. Current regulation excludes the option of introducing compulsory resale of unbundled local loops to competitors until July 2008. *This deadline should be brought forward.*

OECD ECONOMIC SURVEYS: GERMANY – ISBN 92-64-02515-4 – © OECD 2006

- Competition in railway services has developed slowly and incentives for implementing more aggressive cost saving measures are weak. *Railway network access charges should be more effectively regulated. The federal and state railways regulators should oblige the incumbent operator to rent out rolling stock at non-discriminatory conditions. Competitive tendering of regional rail service contracts should be made compulsory. Further reforms should aim at achieving more effective separation of the network from transport services.*

Regulation impedes competition in the liberal professions and the crafts

Regulation of (liberal) professions is among the tightest in the OECD. Some professions have rules with respect to exclusive assignment of tasks and the setting of prices for some services. Moreover, associations are often involved in determining the content of regulation, which is likely to strengthen the power of incumbents at the expense of new entrants. *Legally-set price schedules should be phased out as soon as possible and should not be replaced by recommended fee schedules. Conduct regulation needs to be reconsidered.* In the crafts, most existing businesses remain tied to a qualification requirement or a track record of professional experience, generating considerable entry costs. *Qualification-related entry requirements in the crafts sector should be abolished.*

Restrictions on opening or expanding large retail outlets should be reduced

Large surface retailers have helped lower consumer prices and boost productivity performance in several OECD countries. In Germany permission for new large scale retail centres may be denied if their adverse impact on established retailers in adjacent municipalities exceeds certain thresholds. *Consideration should be given to taking more fully into account consumer benefits that arise from easing restrictions concerning the setting-up of large retail outlets.*

ISBN 92-64-02515-4
OECD Economic Surveys: Germany

Chapter 1

Macroeconomic developments and policy challenges

After years of subdued growth and weak demand, Germany may now be in a position to enjoy a robust recovery. Further progress in economic reforms could turn this cyclical upswing into a sustained expansion, with stronger supply conditions and higher permanent incomes feeding back into more buoyant current demand. The challenge confronting Germany in this context is to improve its performance in a variety of areas – generating higher employment and productivity growth, securing the sustainability of public sector finances – while at the same time preserving what could well be a genuine recovery extending beyond the export sector. For this end, a comprehensive strategy is required. Public sector expenditure control should be linked to public sector reform. Labour market reform needs to be deepened and broadened in order to reduce hurdles to labour supply and demand. Increasing the efficiency of the education system is important to reinforce Germany's growth potential and secure living standards in the future. Furthermore, strengthening product market competition helps to raise productivity growth and implies a redistribution of real incomes in favour of consumers.

Is the long and painful adjustment period of the Germany economy coming to an end? What can policy do in order to strengthen supply side conditions enabling firms to generate higher employment and earnings? These are the questions addressed in this *Survey*. The new government, which came into office in November 2005, has committed itself to follow up on structural reforms in labour and product markets and in fiscal policies that were commenced under the previous administration in order to boost economic performance. While German growth performance was shaped over many years by a dichotomy between relatively strong exports and very weak domestic demand, recently signs are emerging that domestic demand is strengthening. The first part of this chapter reviews recent macroeconomic developments, and examines whether improvements in German competitiveness in recent years reflected underlying progress in supply conditions with positive consequences for economic growth in the future. The remainder of the chapter highlights important issues and policy challenges Germany is facing. These are elaborated in the remaining chapters of the *Survey* together with policy recommendations.

Economic activity is still weak and uneven

In 2004 the economy recovered from the 2003 recession on the back of strong exports, with GDP growing by 1.1% working day adjusted (1.6% without working day adjustment). As the euro appreciation came to a halt, exceptionally strong world trade growth was fully transmitted into German exports, which grew by more than 9%. World trade weakened in the second half of 2004 and into 2005. German exports remained buoyant in 2005, but with domestic demand still weak GDP growth stagnated at 1.1% (working day adjusted). There are signs that domestic demand is strengthening, however. In 2005 equipment investment continued a modest path of recovery and construction growth went into positive territory in the second half of the year. Also, forward looking indicators indicate that the recovery might be broadening (Box 1.1).

Strong exports are supporting growth…

Since the beginning of the decade, Germany's export performance turns out to be considerably stronger than that of the OECD overall (Figure 1.1, Panel A). Mainly, three factors are responsible for the recent strength of German exports. First, Germany has resumed gaining competitiveness, as measured by the depreciation of the real effective exchange rate *vis-à-vis* its main trading partners. Within the euro area Germany has continuously gained competitiveness due to relatively low growth in unit labour cost and inflation (Figure 1.2). Second, the regional distribution of world trade growth has been beneficial for German exporters, as Germany trades more than others with fast growing and importing countries. In particular, this is true for oil exporting countries, which are re-spending part of their revenues stemming from the hikes in oil prices that occurred over the last couple of years. Since 2003 imports of Germany's export destinations (Germany's geographic export market) are growing faster than world trade.[1] Finally, with investment goods accounting for a large share in total German exports, Germany has benefited from

Box 1.1. **Short-term economic developments and prospects**

Strong foreign demand is likely to remain the main force driving growth this year and will also remain a significant factor in 2007. Equipment investment is projected to strengthen, reflecting improved profits, increasing capacity utilisation and favourable financial conditions. Construction investment will only rise slowly, as the temporary boost in residential construction associated with the termination of subsidies fades out. Equipment investment also benefits from the temporary increase in depreciation rates this year and next. Household consumption is likely to gain momentum in 2006, although employment will strengthen only gradually and growth in real disposable incomes will remain subdued. However, consumption is likely to be brought forward this year in anticipation of a scheduled 3 percentage points increase in the standard value added tax rate (VAT) in 2007, and the soccer world championship is likely to provide an additional boost in the middle of 2006.

Financial conditions are supporting higher growth. Returns from corporate cost cutting and solid export growth have strengthened corporate balance sheets and increased profits. Stock prices have continued to rise in 2006. The volume of loans to enterprises has expanded recently, after two years of stagnation, and banks have eased their credit standards. Lower inflation than in other euro area countries exercises some upward pressure on German real interest rates. While real interest rates have risen they remain below average historical levels. With the output gap remaining significantly negative and unit labour costs falling, inflation is set to ease in 2006. In 2007 the VAT increase and a rise in the insurance tax are projected to add 1 percentage point to the inflation rate, assuming a pass-through rate into prices of roughly two thirds.

All in all GDP is projected to grow by 1.8% in 2006 (1.6% without working day adjustment), a quarter of a percentage point above potential. Growth is likely to decelerate somewhat in 2007 as the VAT increase weighs on household consumption, reducing GDP growth by ¼ percentage point Table 1.1).

Table 1.1. **Demand and output**

Per cent change from previous year, chained previous years prices[1]

	2001	2002	2003	2004	2005	2006	2007
						Projections	
Private consumption	1.9	–0.5	0.1	0.2	0.2	0.6	0.6
Government consumption	0.5	1.4	0.1	–1.6	0.1	0.5	0.6
Gross fixed investment	–3.3	–5.9	–0.7	–1.5	0.2	2.9	3.4
Construction	–4.4	–5.6	–1.5	–3.8	–2.9	1.3	1.6
Machinery and equipment	–2.1	–6.3	0.2	1.3	4.0	4.7	5.4
Changes in stocks	–0.9	–0.6	0.6	0.5	0.3	0.4	0.0
Total domestic demand	–0.4	–1.9	0.6	0.1	0.5	1.5	1.0
Foreign balance	1.8	1.9	–0.7	1.0	0.7	0.4	0.6
Exports of goods and services	6.8	4.3	2.3	8.3	6.6	8.5	7.3
Imports of goods and services	1.5	–1.3	5.0	6.1	5.5	8.7	6.5
Gross domestic product	1.4	0.1	–0.2	1.1	1.1	1.8	1.6
Memorandum items:							
GDP without working adjustments	1.2	0.1	–0.2	1.6	0.9	1.6	1.5
Private consumption deflator	1.7	1.2	1.5	1.4	1.3	1.4	2.1
GDP deflator	1.2	1.5	1.0	0.8	0.5	0.5	1.5
Total employment[2]	0.4	–0.6	–1.0	0.4	–0.2	0.2	0.7
Unemployment rate (% of labour force)[2]	6.9	7.6	8.7	9.2	9.1	8.5	8.1
Household saving ratio	9.4	9.9	10.3	10.5	10.7	10.5	10.2
Current account balance, % GDP[2]	0.0	2.0	1.9	3.7	4.2	4.0	4.6

1. Growth for all variables except change in stocks and foreign balance which are contributions to change in GDP and memorandum items beginning with unemployment rate.
2. Employment and unemployment are according to national accounts concepts. Employment includes self-employment.

Source: OECD Economic Outlook 79 database.

Box 1.1. **Short-term economic developments and prospects** *(cont.)*

Both domestic and international factors will impact on the expansion of the economy, although only domestic factors are subject to policy measures which the German government can choose. Continued strong world trade growth and favourable monetary conditions are important external factors that can underpin more robust growth. With resilience of domestic demand to negative shocks still low, the adverse impact of the tax hike could be larger than projected if substantial reductions in social charges cannot be implemented. Further hikes in oil prices would also constitute a downside risk to domestic demand. On the other hand, the confidence of investors and consumers would be reinforced if the new government implemented a broad-based and coherent programme for continued structural reform.

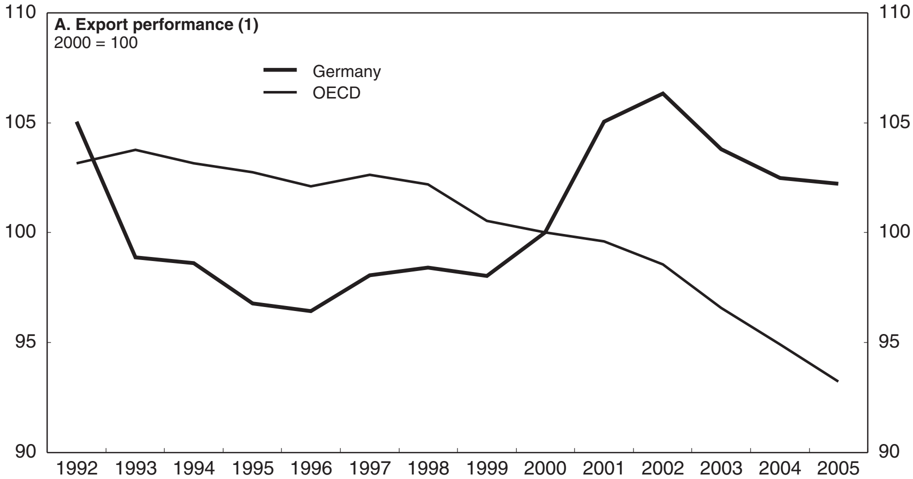
strong demand for investment goods in the present phase of the cycle: Since 2002 world imports of goods for which Germany is a strong exporter (Germany's goods specific export market) is growing faster than total world trade in goods (Figure 1.1, Panel B).[2] Already in the past, periods of strong world trade growth were usually associated with relatively strong demand for investment goods. This pattern is reinforced by buoyant demand for investment goods by fast growing non-OECD countries that was observed over the last couple of years.[3] The fact that the cyclical sensitivity of German exports appears particularly large reinforces the need for structural reform strengthening the resilience to adverse shocks.

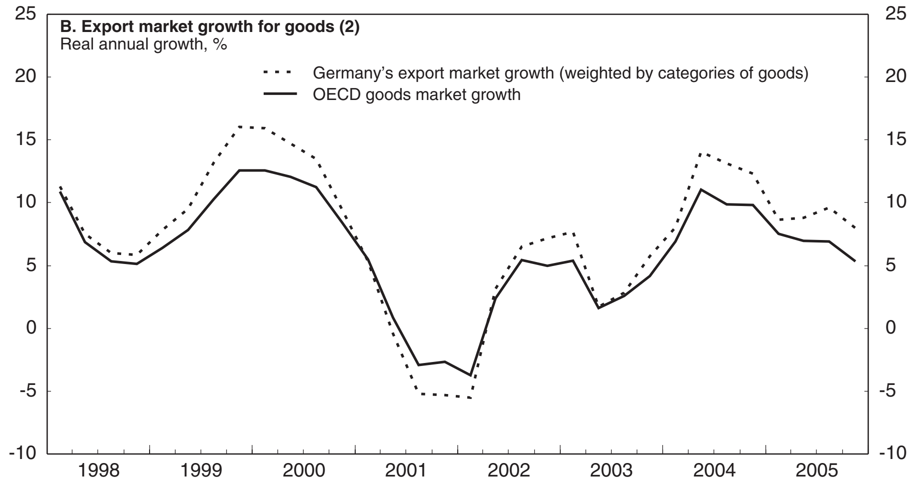
... while domestic demand has only started to recover...

By contrast, in comparison to earlier business cycles domestic demand is particularly sluggish (Figure 1.3). This raises the question whether special factors are at work holding down private consumption and business investment. More generally, is Germany approaching a turning point, where past economic adjustment has reduced impediments to export growth translating into stronger domestic demand?

Since 2000 the savings ratio increased by 1.4 percentage points, indicating that the low growth in real disposable income – rising by only 0.2% annually over the same period – is not the only factor that is holding back consumption. Estimates of an error correction model relating the private savings ratio to factors that are informative for temporary and secular changes in household disposable income suggest however, that there is a certain degree of consumption smoothing over the business cycle (see Annex 1.A2). Deviations of actual consumption from the path predicted by the model are weakly significant[4] in 2001 and 2002, when consumption turned out higher than suggested by the fundamentals. High economic growth at that time might have induced households to over-estimate permanent income perspectives, limiting counter-cyclical savings. Subsequently rising savings realigned the consumption ratio again with the fundamental determinants. Since the end of 2003 consumption undercuts the predictions of the model. While the deviation exceeded the one-standard-deviation-band only in 2005, it might relate to the low levels of consumer confidence that have been observed over the same period. Indeed, in a context of far reaching economic restructuring and sluggish real wage growth households are likely to worry more about possible future job or income losses, which would increase precautionary savings. Subsidised retirement savings schemes that are being phased in might also increase the savings rate. However, the latter effect is not visible for 2003, when the retirement savings scheme was rapidly expanding.[5]

Figure 1.1. **German exports in comparison**



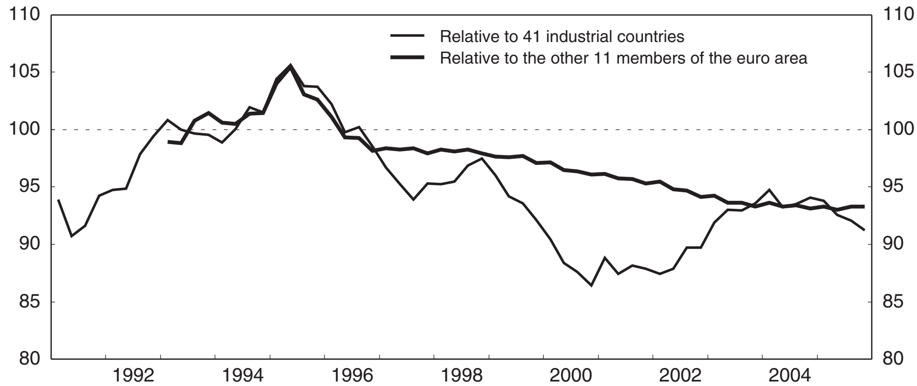


1. Export performance of country X is export volumes of X divided by potential export volumes of X, *i.e.* divided by a weighted sum of imports of the countries to whom X exports. Estimate for 2005.
2. Goods-specific export market growth is computed as a weighted average of imports in the nine major SITC goods categories.

Source: OECD Economic Outlook and *International Trade Statistics*.

Econometric studies yield mixed results whether special factors explain relatively weak business investment. While some research suggests that business uncertainty has weighed on investment in the present cycle others do not find such evidence.[6] According to estimates by the OECD, obtained from an error correction model for business investment, business investment turned out to be higher than predicted by the model in the period 1999 to 2000. The slowing thereafter undercuts the model's prediction only insignificantly (see Annex 1.A3). However, the deterioration in the age distribution of the capital stock that is associated with the weakening of investment that occurred after the

Figure 1.2. **Germany's international competitiveness**
Real effective exchange rate, CPI based, 1993 = 100[1]



1. Calculated using weights which take into account the structure of trade. A rise of the graph indicates a real appreciation (loss in competitiveness).

Source: OECD Economic Outlook database.

reunification boom at the beginning of the 1990s and the relatively long phase of subdued equipment investment after 2001 might trigger a sizeable catch up in investment if structural reform improves growth conditions in a sustainable way.

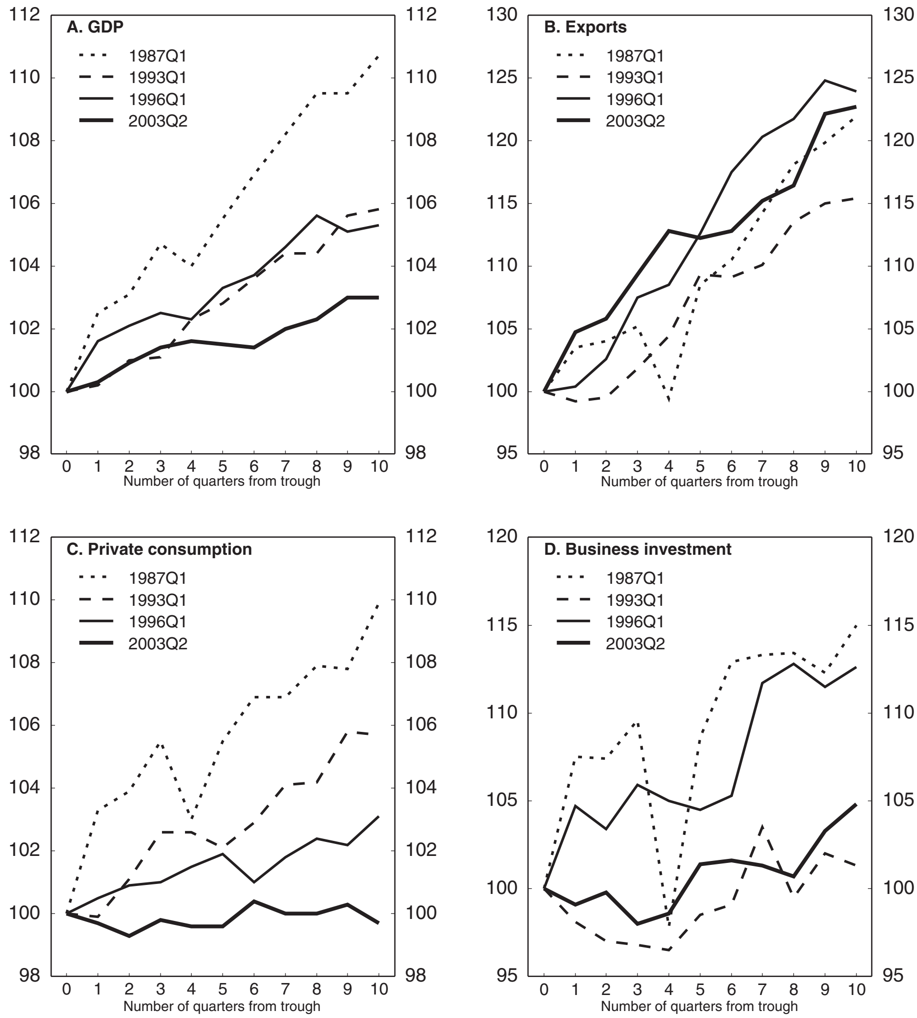
The fact that over the years potential GDP growth in Germany declined to around 1½ per cent suggests that the country's secular improvement in external competitiveness (Figure 1.2 above) – was not based on a secular improvement in domestic supply conditions. To better understand whether the depreciation of the real exchange rate reflects a weakening of German aggregate demand or a stronger supply side, a structural vector autoregressive model is estimated (see Annex 1.A4).

According to the model demand shocks were the main driver of Germany's international competitiveness over the last 1½ decades (Figure 1.5). While a series of expansionary demand shocks pushed up the real effective exchange rate at the beginning of the 1990s a sequence of contractionary demand shocks followed, leading to a substantial real depreciation. Hence, retrenchment on the demand side of the economy has played a dominant role – via downward adjustment in wage and inflation rates – in re-establishing Germany's competitiveness on external markets after the unification-induced loss that occurred in the first half of the 1990s.[7] Several other events impinging on the domestic economy, such as the transition to European Economic and Monetary Union, increased the pressure on wages and prices to adjust.

Long periods of demand retrenchment, reflecting slow downward adjustments in prices and wages and subdued productivity growth, imply that the economy incurs substantial losses in terms of output and employment foregone. The estimates suggest, however, that since the beginning of the present decade the real effective exchange rate is no longer driven by demand contraction, while positive supply side effects on external competitiveness appear to emerge. Supply developments are estimated to influence the exchange rate only with a considerable lag of around six quarters. Overall, the German economy could well be in a position now to realise a shift from a regime where demand tended to undershoot supply – which was itself weakening because of inadequate

Figure 1.3. **Comparison of business cycles**

Index, trough = 100[1]



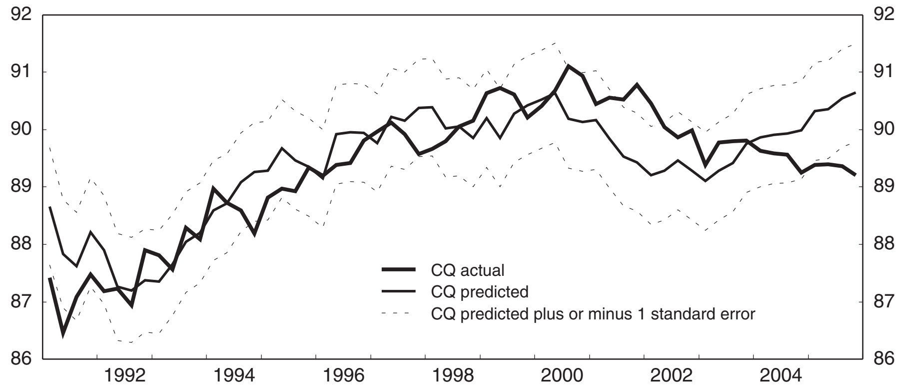
1. In constant prices, chain linked in the 1990s.

Source: OECD Economic Outlook and National Accounts databases.

framework conditions – to one in which more expansionary supply conditions and resulting improved growth prospects feed through into more buoyant demand. The challenge confronting Germany in this context is to improve its structural performance in a variety of areas – generating higher employment and productivity growth, securing the sustainability of public sector finances – while at the same time preserving what could well be a genuine recovery in short-run activity extending beyond the export sector.

Figure 1.4. **Actual and predicted consumption shares**[1]

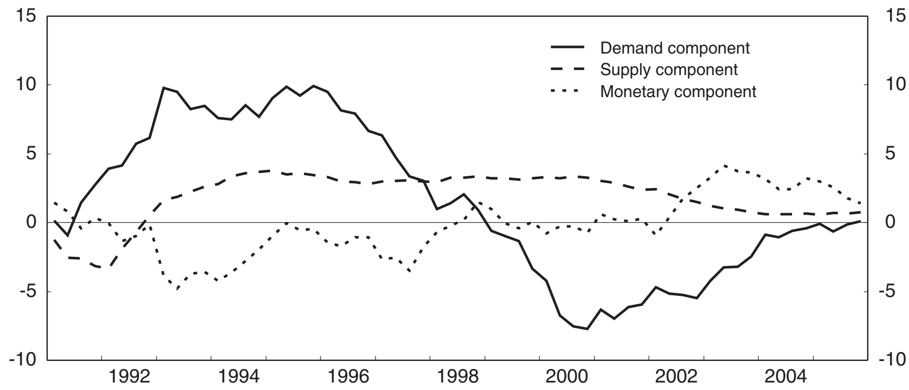
Per cent



1. CQ is defined as household consumption relative to disposable income. The predictions are derived from a regression model relating CQ to a set of explanatory variables. See Annex 1.A2 for details.

Figure 1.5. **Decomposition of the effective real exchange rate**[1]

Per cent



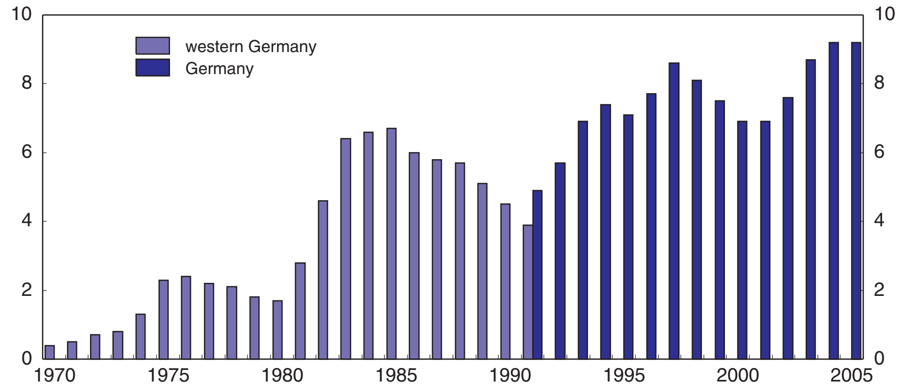
1. For each of the three shocks the graph shows the simulated path of the real effective exchange rate that would have prevailed if only the respective shock had occurred, net of a deterministic component that all series have in common. This is expressed as percentage deviation from the deterministic trend. An increase is a real appreciation (loss of competitiveness).

... and labour market conditions are only slowly improving...

Unemployment has been drifting upward since the first half of the 1970s (Figure 1.6), with unemployment rising when adverse shocks to economic activity occurred and falling only partially as the shocks subsided. The trend increase in unemployment was accompanied by a rising share of long-term unemployment, with more than 40% of the registered unemployed in 2004 having been unemployed for more than a year. The rise in the unemployment rate has been particularly pronounced among unskilled workers, reaching 16% in 2003 (based on the labour force survey), one of the highest in the OECD (Figure 1.7).[8] High unemployment is also prevalent among older workers with vocational training degrees, who have an unemployment rate which is almost as high as the unskilled

Figure 1.6. **The development of unemployment**[1]

Unemployment as per cent of labour force

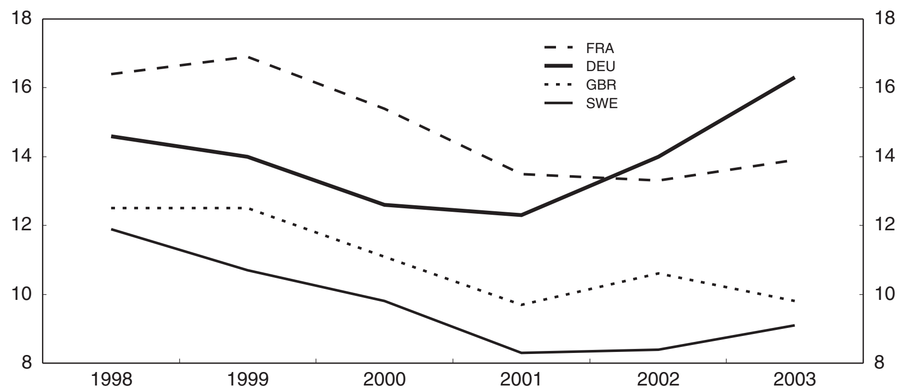


1. National Accounts concept.

Source: German Federal Statistics Office, National Accounts.

Figure 1.7. **Unemployment rates of the unskilled**[1]

Unemployment as per cent of labour force



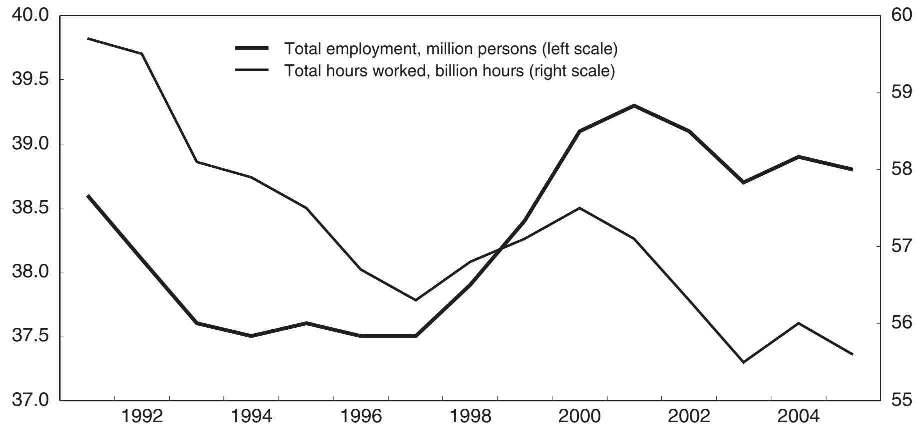
1. Persons aged 15-64 with highest education attainment pre-primary to lower secondary.

Source: OECD Employment, Labour and Social Affairs Database.

unemployment rate. At the same time, labour force participation of older people is low by international comparison, with withdrawal from the labour market being more pronounced among workers with vocational degrees.

Since the middle of the 1990s a sizeable gap has opened up between employment measured in terms of persons and the volume of hours worked, which are trending down over the same time span (Figure 1.8). Full-time employment decreased by 3.2 million since 1993, mainly in manufacturing and construction, while part-time employment of workers rose. The number of individuals on marginal jobs subject to an earnings ceiling – currently € 400 in Germany –, which are subject to preferential taxation and social security contributions, rose particularly strongly, reaching about 12%[9] of total employment in 2005. The incidence of part-time work among working women is particularly high in

Figure 1.8. **Employment: persons and hours**



Source: German Federal Statistics Office, National Accounts.

Germany, and most small-scale job holders are also women, in many cases second earners with a married spouse. The young and the elderly are also relatively likely to take up this form of employment. Marginal jobs are widespread in services, such as wholesaling and retailing trade, and restaurants. While the decline of normal employment, liable to full social security contributions, levelled off in recent months, most exits in 2005 into employment were placements into subsidised employment schemes aimed at the long-term unemployed. The proportion of vacancies attributable to subsidised employment schemes rose sharply, reaching 30% of total vacancies notified to employment agencies in 2005.[10] Likewise, self-employment rose substantially on account of subsidised self-employment schemes for the self-employed. Overall, there is a risk that a dual labour market is arising with deteriorating prospects to find employment in non-subsidised full time jobs.

Globalisation poses new challenges

Global market integration, in particular international outsourcing, comes increasingly into play in the discussion of the appropriateness of domestic framework conditions. Sourcing of factors of production at lower cost abroad improves *ceteris paribus* supply conditions for domestic firms, which might allow them to expand production and employment at home.[11] On the other hand, less favourable business conditions at home provide incentives to substitute domestic activity by activity abroad. German outward FDI has been buoyant over the last one and a half decades, and FDI activities appear to have accelerated since the middle of the 1990s, as indicated by increases in the share of enterprises engaging in FDI and the FDI stock per enterprise and by employment growth in foreign subsidiaries of German firms.[12]

Several indicators suggest that outbound FDI has supported the strengthening of German export performance over the last years. Annual polls among German enterprises conducted since 1994 by the system of German trade chambers abroad indicate that between 60% and 70% of enterprises investing abroad aim mainly at establishing foreign distribution channels and servicing capacity for their products or at producing abroad so as to open foreign markets.[13] The importance of foreign direct investment as a tool to foster German exports or reduce entry barriers German enterprises are facing is also reflected in the fact that export oriented enterprises have the highest FDI propensity. In the same vein, outbound FDI appears to have increasingly targeted foreign trade and services sectors, as witnessed by the fact that employment growth in foreign subsidiaries of German firms was most dynamic in trade and services. One study also suggests that German firms investing abroad are adding to employment at home, whereas the majority of firms in sectors where domestic employment is reduced are either not active or not successful on external markets.[14]

At the same time, there are indications that domestic supply conditions and the responsiveness of factor prices influence outsourcing decisions and their effect on domestic activity. Cutting production costs is the main driver of FDI for roughly a third of enterprises sampled by the chamber system. Also, surveys among enterprises suggest that in periods with deteriorating domestic business conditions and expectations enterprises reduce planned domestic investment much more than planned investment abroad.[15] This response could indicate that as investment budgets tighten firms exploit more fully differentials in costs and returns between investment at home and abroad. Cost cutting appears to be particularly relevant for FDI destinations in Central and Eastern European countries (CEECs), but also to destinations outside Europe, notably China. In terms of volumes, the CEECs and China are the most important destination countries for German FDI, and in both areas FDI is much more concentrated on wage-cost intensive production than in the US and west European destinations. Indeed, one study suggests that there is a significant positive correlation between employment in Germany and the level of labour costs in the CEECs relative to Germany.[16] Similarly, the capital intensity of production in Germany turns out to be significantly higher in firms that are engaged in FDI than in those that are not,[17] which might indicate that labour-intensive production is being outsourced abroad. Recent research also indicates that skill seeking plays some role for the allocation of outbound FDI.

Overall, these findings, and the increasing speed with which international sourcing is developing, reinforce the case for structural reforms that facilitate the reallocation of labour and capital across firms and sectors, reduce barriers to employment creation and foster human capital formation.

Comprehensive reforms increase potential benefits

Most of the weakness in Germany's per capita GDP growth is attributable to the negative growth contribution of employment. Since the 1993 recession the decline in total hours worked per inhabitant accounted for a weakening in real GDP growth per capita by 0.5 percentage point annually. Moreover, labour productivity growth was not high enough to offset the adverse impact on GDP growth of weak labour input. Difficulties in economic adjustment to a changing environment and the prolonged weakness in domestic demand point to the need to overcome structural rigidities that impair the resilience of the German economy, and in particular to strengthen its capacity to generate higher employment and productivity growth. The previous government started reforms in important areas. These reforms need to be broadened and deepened.

A comprehensive and consistent reform strategy is required to fully exploit the benefits from policy initiatives and raise their acceptability among the electorates. Labour market reform can be particularly difficult to implement, especially as there is a risk of impacting negatively on household confidence. Reform will be more effective in generating new employment if it is combined with regulatory reform that reduces barriers to entry for new firms and impediments to the growth of enterprises. Structural reform in favour of product market competition reduces the rents of incumbents, implying a redistribution of real incomes in favour of consumers. This, in turn, contributes to strengthen domestic demand and can increase the acceptability of reforms in other areas, notably the labour market. Fiscal consolidation will have to take place in such a way that both the current recovery and potential growth prospects are preserved, with the implication that the bulk of adjustment has to fall on the spending side. Policy reforms in the past were not always determined enough to be able to exploit beneficial linkages of this type. The development of the institutional framework in the electricity and gas sectors stands as an example. Private households and industry were granted unrestricted choice of energy suppliers. However, in contrast to all other EU countries, Germany adopted a system of negotiated third party access (NTPA), based on agreements between associations of energy suppliers and consumers, that was not effective in opening networks to competition. Only recently, after several attempts had failed to modify the association agreement in favour of more competitive access conditions, an independent network regulator was installed, in line with the pertinent EU directive. In the process, several years were lost to arrive at a regulatory environment that favours lower energy prices.

Federal relations also play a crucial role in the effectiveness of the reform process. Responsibilities for related tasks are often split between the federal government and the states and communities. Moreover, the high degree of co-financing of spending across government levels allows regional governments in principle to condition their approval to federal fiscal legislation in the second chamber of Parliament (*Bundesrat*) on concessions in federal legislation that does not formally require their approval, as experienced in the past.[18] Policy formation – fiscal and non-fiscal – is therefore often subject to complex and opaque interactions between the federal government and the states and communities. Increasing the consistency of policy initiatives and the speed with which they can be designed and implemented requires reform in the system of federal relations. There is an urgent need to untangle the responsibilities of the different layers of government and reduce the degree of co-financing.

Fiscal consolidation needs to be linked to public sector reform

Germany faces a considerable fiscal challenge, which not only requires balancing the budget within a few years, but also comprises dealing with considerable ageing related spending increases further ahead. While significant progress has been made in recent years in curbing spending, deficit targets have repeatedly been missed, in part because adjustment on the spending side was not thorough enough to validate large income tax reductions. Hence, it is crucial to pursue a credible consolidation policy that proceeds with expenditures cuts (including the abolishment of distorting tax expenditures), and links them to further public sector reforms. Indeed, theoretical and empirical evidence suggests that consolidation policies are more successful in supporting economic activity when they focus on the spending side of the budget. The abolition of tax expenditures is in many cases likely to have similar benefits as spending reductions. Fundamental reform in federal fiscal relations needs to include establishing effective commitment mechanisms in favour of consolidation, involving the federal government and the states, and reducing the distortionary impact of various redistribution mechanisms across government. Inroads have been made in cutting tax expenditures, and this needs to be continued in order to make the tax system less distortionary and generate the scope to reduce the effective taxation of labour earnings and profits, which are still high by international comparison.

The education system needs to be made more efficient

Improving educational attainment makes a substantial contribution to raising living standards, helping to offset the dampening impact of population ageing on economic growth in the next decades. While average educational attainment in Germany is currently high in international comparison, as reflected in one of the highest shares of the population of working age with at least upper secondary education in the OECD, secondary schooling outcomes are relatively weak and participation in tertiary education in Germany has not expanded to the extent observed in many OECD countries, resulting in one of the lowest tertiary graduation rates in the OECD. While some steps have been taken in recent years to improve secondary education outcomes – such as the wider introduction of centralised school exams – a comprehensive programme of measures is required strengthening evaluation of education outcomes as well as the autonomy of schools. Widening access to early childhood care and education facilities and strengthening their orientation towards providing education could also make a significant contribution to improve subsequent schooling results. Incentives of universities to offer attractive study programmes need to be improved, notably through the wider use of output-oriented university funding, and the independence of universities from administrative interference needs to be strengthened.

Continued labour market reform can raise the economy's capacity to generate employment

Major steps in labour market reform were implemented over the last three years. The thrust of reform focused on reducing work disincentives embedded in unemployment related benefits, and putting in place better activation strategies for the unemployed. Policies comprised organisational reform of the federal Labour Office, the introduction of new active labour market measures, the introduction of tax preferences for small jobs with only a few hours worked, deregulation of fixed term and temporary employment contracts and an easing of dismissal protection. At the beginning of 2005 a new income replacement scheme for the long-term unemployed was introduced, replacing former unemployment assistance and social assistance benefits. Many measures are steps in the right direction. However, reform is incomplete yet, and needs to be deepened and broadened to create the momentum for sustainable improvements in employment. Further institutional reform of the Public Employment Service is required to better activate the unemployed. Hurdles to labour force participation of older employees and females need to be further reduced. Moreover, more flexible employment contracts are necessary, while at the same time a segmentation of the labour market into regular jobs and marginal employment with subdued earnings prospects needs to be avoided. While there has been considerable aggregate wage moderation for a number of years, wage rigidities need to be reduced further to fight very high unemployment rates among the low-qualified.

Regulation of domestic markets for goods and services needs to become more competition-friendly

A wide range of reforms of the regulation of product markets need to be undertaken to reap the benefits of more intense competition on employment, productivity growth, and improved resilience of the economy in the face of adverse shocks. While outward policies – for example, with respect to foreign direct investment – are largely open, and the general competition legislation and enforcement framework is, in most respects, effective, measures need to be taken to reduce the administrative burdens on entrepreneurship and reduce the involvement of the government in business sector activities, notably through accelerated privatisation. Policies favouring small enterprises – which benefit, for example, from special protection in competition law – need to be revised, with a view to fully exposing them to competition of larger firms and avoid disincentives for small firms to grow. Regulatory challenges also exist in specific sectors, notably the network industries, where non-discriminatory access of market entrants to networks needs to be improved, and the liberal professions, the crafts, and retailing. For example, lowering regulatory entry costs in the crafts is likely to have a favourable impact on employment prospects of workers with vocational training, while more competition-friendly policies in sectors providing intermediate goods and services – such as telecommunications, transport, energy or the liberal professions – not only improves productivity performance within the sectors concerned but also in downstream sectors in which they are used in production.

Notes

1. Germany's export market is computed as a weighted average of import growth in 41 other countries, where the weights are the countries' shares in total German exports in the year 2000.
2. World trade in goods is approximated by the sum of OECD-countries' imports (without Germany) in the nine major SITC categories. German goods-specific export market growth is calculated as a weighted average of OECD-countries' imports in the individual categories. The weights used are variable, based on the current quarterly goods composition of German exports in these 9 categories. The original series for these calculations are taken from the OECD Monthly International Trade Statistics. Approximate real trade figures were obtained by the following calculation: The sum of OECD's US-Dollar based nominal trade in the individual goods categories was first divided by the US-import prices for these goods. Then these figures were multiplied by the ratio between the aggregate US import price and OECD import price in order to correct for nominal exchange rate changes. If, for example, the dollar depreciates, the US-dollar import price would rise stronger than the import price in other currencies. Thus, real imports of other countries would be underestimated. The relationship between US and OECD import prices should approximately correct this underestimation.
3. As far as the respending of oil revenues is concerned, in addition to the beneficial effect of a relatively high share of German exports to oil exporting countries, there is some evidence that the demand for German exports is more elastic to oil revenues than the demand for exports of other countries. See Bundesministerium für Wirtschaft und Arbeit (2005).
4. At a 10% error probability level.
5. There is evidence that private savings are preferably invested in assets that are heavily subsidised, see *e.g.* Börsch-Supan (2004). Between March 2002 and March 2003 the number of subsidised "Riester" retirement savings contracts rose from 2 500 to almost 180 000.
6. See Arbeitsgemeinschaft Deutscher wirtschaftswissenschaftlicher Forschungsinstitute (2005); Deutsche Bundesbank (2004); Kuhnert (2005).
7. At the beginning of the 1990s social transfers to the new states associated with the extension of the west German social security system to the east, massive industrial subsidies, and buoyant wage increases all combined to produce a temporary boost in domestic absorption that pushed up prices for domestically produced goods relative to foreign goods. The consumption push in eastern Germany was further accommodated by the introduction of the German Mark in the former German Democratic Republic at conversion rates far above the purchasing power of the old

currency in East Germany. Rapidly rising government debt added to the expansionary demand effect and put upward pressure on interest rates that triggered increased capital inflows. High wage settlements were sustained until 1995, with early retirement programmes, work provision schemes and related measures effectively insulating collective wage setting from massive losses in employment in the new states. Moreover, the eastern German capital stock became largely obsolete on impact, implying a substantial drop in the pan-German productivity level. Overall, these events combined triggered a real appreciation of the DM, which was associated with the swing in Germany's current account from a sizeable surplus into deficit. While real wages per hour – net of employers' social security contributions and deflated with the private consumption deflator – increased on average by 2½ per cent annually between 1992 and 1995, since 1996 they grew on average only by ¾ per cent annually. Cost cutting programmes by enterprises entailed further reductions in employment while hiring remained subdued. Over-capacity in the construction sector – largely induced by subsidisation for projects in the new states – is unwinding since more than a decade. Until recently equipment investment is driven to a considerable extent by the objective to streamline production processes rather than to widen capacity, as surveys among enterprises confirm. For further detail on policies and macroeconomic developments following reunification see Wurzel (2001).

8. According to Labour Force Survey data the unskilled account for some 15% in the working age population and 27% of unemployment. The unskilled are defined as individuals who have completed at most lower secondary education. In the definition of the Federal Labour Office the share in total unemployment amounts to around 34% (September 2004).
9. Excluding holders of *Mini jobs* as second jobs.
10. It is estimated that about one half of all vacancies in the economy are notified to employment agencies.
11. See *e.g.* Antars and Helpman (2004).
12. Information on important characteristics of German enterprises engaging in FDI, which is contained in the database on FDI-Statistics (*Direktinvestitionsstatistik*) of the Deutsche Bundesbank, has been analysed by: Becker, Jäckle and Mündler (2005). According to their results, the stock of FDI per enterprise increased by 26.5% between 1989 and 1995 and by 106.9% between 1995 and 2001. Over the same two periods the number of German enterprises engaged in FDI rose by 13.9% and 15.0%, respectively. The workforce in German enterprises employed abroad, weighted by the share of the equity participation of the German parent company, rose by 34.1% and 62.9%, respectively.
13. Deutscher Industrie- und Handelskammertag (2005).
14. Klodt (2005).
15. Deutscher Industrie- und Handelskammertag (2005).
16. See Becker, Jäckle and Mündler (2005).
17. See Becker, Jäckle and Mündler (2005).
18. See OECD (2004).

Bibliography

Antars, P. and E. Helpman (2004), "Global Sourcing", *Journal of Political Economy*, 112/3.

Arbeitsgemeinschaft Deutscher wirtschaftswissenschaftlicher Forschungsinstitute (2005), *Die Weltwirtschaft und die deutsche Wirtschaft im Frühjahr 2005*.

Becker, S., R. Jäckle and M.A. Mündler (2005), Kehren deutsche Firmen ihrer Heimat den Rücken? – Ausländische Direktinvestitionen deutscher Unternehmen, ifo Schnelldienst 1/2005.

Börsch-Supan, A. (2004), "Mind the Gap: the Effectiveness of Incentives to Boost Retirement Saving in Europe", mimeo.

Breitung, J., R. Chirionko and U. von Kalckreuth (2003), "A Vectorautoregressive Investment Model (VIM) and Monetary Policy Transmission: Panel Evidence for German Firms, Economic Research Centre of the Deutsche Bundesbank", *Discussion Paper*, 6/2003.

Bundesministerium für Wirtschaft und Arbeit (2005), "Direkte und indirekte Rückwirkungen eines höheren Ölpreises auf die deutschen Ausfuhren – eine ökonometrische Untersuchung", *Wirtschaftsanalysen Nr. 5*, *www.bmwi.de/Navigation/Wirtschaft/Wirtschaftspolitik/wirtschaftsfakten.html*.

Deutsche Bundesbank (2004), *Monthly Report*, November, Frankfurt.

Deutscher Industrie- und Handelskammertag (2005), Investitionen im Ausland – Ergebnisse einer DIHK-Umfrage bei den Industrie- und Handelskammern Frühjahr 2005, Berlin.

ifo (2001), *Finanzpolitik im Spannungsfeld des Europäischen Stabilitäts- und Wachstumspaktes*.

Klodt, H. (2005), "Mehr Arbeitsplaetze durch Auslandsinvestitionen", *Die Weltwirtschaft*, 4/2004.

Kuhnert, S. (2005), *Germany's Investment Gloom: Light at the End of the Tunnel?*, ECFIN Country Focus, Vol. 2, Issue 17, *http://europa.eu.int/comm/economy_finance/publications/countryfocus_en.htm*.

Meurers, M. (2006), "Identifying Determinants of Germany's International Price Competitiveness – A Structural VAR Approach", *Economics Department Working Papers* (forthcoming).

OECD (2004), *OECD Economic Surveys: Germany*, OECD, Paris.

Wurzel, E. (2001), "The Economic Integration of Germany's New Länder", *Economics Department Working Papers*, No. 307, *www.oecd.org/dataoecd/60/57/1899874.pdf*.

ANNEX 1.A1

Progress on structural reform – Summary of past recommendations and actions

This annex reviews action taken on recommendations from previous *Surveys*. Recommendations that are new in this *Survey* are listed in the relevant chapter.

Recommendations	Action taken
Remove obstacles to supply labour	
Reduce incentives for early retirement.	Prepared legislation to raise the standard retirement age from 65 to 67. Postponed phasing-out of search requirement exemptions for older benefit recipients.
Remove disincentives for women to work.	Plans to modify child care benefits and to increase child care tax allowances for one earner and two earner couples.
Increase the effectiveness of active labour market policies and placement.	Intensified evaluation of active labour market policies. Reformed subsidies for transitions from unemployment to self-employment and reduced ineffective subsidised employment schemes. Modified assignment of responsibilities for placement activities to local authorities. Ongoing reform in the PES to shift resources from benefit administration to placement. Introduced new subsidised employment scheme for the long-term unemployed.
Reduce tax wedge on labour.	Lowered income tax rates. Plans to reduce unemployment insurance contributions, financed by a rise in VAT, and to raise the top marginal income tax rate for labour income.
Reduce marginal effective taxation for low-skilled workers.	Widened range of income over which benefits for the long-term unemployed are withdrawn.
Remove obstacles to demand labour	
Widen scope for wage determination at company level.	Social partners have extended firm-level bargaining.
Reduce costs associated with employment protection legislation (EPL).	Planned removal of dismissal protection in the first two years of regular employment contracts.
Exploit temporary work agencies' employment potential.	Reduced subsidised placement in temporary work agencies.
Improve competition in the product markets	
Make domestic service markets in the liberal professions, crafts and retailing more open to competition.	Reduced restrictions on advertising in liberal professions.
Phase out state involvement in the business sector.	Cut a wide range of subsidies. Gradual progress in the privatisation of the telecoms and postal service incumbents. Consideration given to privatising the railways incumbent.
Abolish prohibition of below-cost pricing when dominant market power is absent.	None.
Strengthen competition in public procurement.	None.
Improve regulation of network industries.	Introduced *ex ante* regulation of network access in electricity and gas and raised regulatory powers. Simplified appeals on regulator's decisions in telecoms. Required approval of rail network access charges by regulator.
Strengthen vertical separation in network industries.	Raised managerial and accounting separation standards in the energy and railway sectors.

Recommendations	Action taken
	Improve the framework conditions for innovation
Remove administrative burdens on entrepreneurship.	Ongoing projects, such as strengthened regulatory impact analysis in some states. Abolished some tax expenditures and exemptions. Introduced new tax expenditures.
Increase the efficiency of tertiary education.	Gradual progress in take-up of degrees in new two-tier structure. Implemented competition-based selection of a small number of additionally-funded high performance universities. Raised autonomy of universities. Introduced student fees, coupled with loans and income-contingent repayment schemes, in several states.
Establish timetable for all government-funded innovation programmes and eliminate ineffective subsidies.	More frequent evaluation of subsidy programmes and public research institutes.
Facilitate immigration of qualified workers.	Progressed in university reform. Lowered income taxes.

ANNEX 1.A2

Explaining the movements in the savings ratio

The regression model aims at explaining the time-pattern of the savings rate, with a particular focus on consumption smoothing. For this end, a set of explanatory variables is included that proxies transitory or permanent changes in household income.

If current income falls in a cyclical downturn consumers might prefer stabilising their current consumption by reducing current savings and curbing some of their future consumption. By contrast, a current rise in permanent income increases consumption possibilities in each of the following periods and might therefore translate into current consumption in a way that leaves the savings ratio unchanged.* An expected increase in permanent income that did not yet materialise in current income might nevertheless increase current consumption, leading to a reduction in the savings ratio.

In the model, cyclical changes in income are approximated by the output-gap (*gap*), and permanent changes by the trend growth rate (Δyt), both of which are OECD estimates. In addition, changes in the terms-of-trade (Δtot), based on the ratio of the national accounts deflators for exports and imports, are included in the regression. Δtot, might reflect both temporary and permanent income effects. While the impact of the terms-of-trade on the savings ratio is theoretically ambiguous (see, *e.g.* Chowdhury, 2003), in empirical cross-country studies they are generally found to have a positive impact on savings (see Loayza *et al*., 2000). Moreover, theory suggests that the savings ratio depends on the returns on savings relative to the rate of time preference. To capture this effect the real-short term interest rate (*r*), as measured by the three-month-rate net of four-quarter changes in the private consumption deflator, was also included in the regression.

Preliminary data analysis revealed a sizeable degree of persistence in the consumption ratio (CQ) (defined as 1 minus the savings ratio). To avoid serially correlated residuals, lags up to five quarters had to be included on the right hand side of the estimated equation. Since the output gap variable is potentially endogenous, an instrumental variable approach was used for the estimation. To find appropriate instruments a separate regression with the output gap as dependent variable was estimated. Those lagged explanatory variables which significantly helped to explain the output gap were selected as instruments. Finally, a test was made whether the public deficit (as percentage of GDP) or real wealth (approximated by the DAX stock index divided by the consumption deflator)

* The life-cycle hypothesis of consumption by Modigliani and Brumberg (1954) implies that changes in permanent income can affect the savings ratio, since savings of young and old generations might respond differently to such changes.

has a significant effect on the consumption ratio, but both variables turned out to be insignificant in the regression. Over the sample period from 1970:Q1 to 2005:Q4 the following results were obtained:

Table 1.A2.1. **Regression results consumption ratio**

Sample: 1972Q1 2005Q4

Variable	Coefficient	Std. Error	t-Statistic
CQ (–1)	0.641	0.078	8.20
CQ (–2)	0.173	0.080	2.15
CQ (–4)	–0.159	0.084	–1.91
CQ (–5)	0.152	0.073	2.10
gap	0.003	0.001	3.14
gap (–1)	–0.004	0.001	–3.98
gap (–4)	0.001	0.001	2.07
gap (–5)	–0.001	0.001	–1.98
Δyt	0.117	0.036	3.21
Δtot (–1)	–0.061	0.032	–1.93
r(–3)	0.000	0.000	–1.84
Constant	0.170	0.046	3.67
DUM1_91	0.005	0.001	3.44
R-squared	0.90	Mean dependent var	0.881
Adjusted R-squared	0.89	S.D. dependent var	0.016
S.E. of regression	0.01	Sum squared resid	0.004
Durbin-Watson stat	1.95	Second-stage SSR	0.004

Note: DUM1_91 is a step dummy that captures the effect of reunification.

To obtain the cumulative effects of the explanatory variables on the consumption ratio together with the corresponding standard errors the equation was re-estimated in a non-linear coefficient formulation. This procedure can be illustrated by the following simple example: Suppose the dynamic equation is formulated as:

$$y_t = \sum_{i=1}^{n} \alpha_i L(i) y_t + \sum_{j=1}^{m} \beta_j L(j) x_t + \varepsilon_t,$$ where L is the lag operator.

Then, the cumulative impact of x on y is given by:

$$\beta = \sum_{j=1}^{m} \beta_j \Big/ \left(1 - \sum_{i=1}^{n} \alpha_i\right).$$

Thus, to obtain the estimate β directly, one can reformulate the estimation equation, for example, by replacing β_1 through:

$$\beta\left(1 - \sum_{i=1}^{n} \alpha_i\right) - \sum_{j=2}^{m} \beta_j .$$

With this procedure the following relationship was obtained (standard errors in parenthesis), capturing the cumulative response of the consumption ratio to changes in the explanatory variables:

$$\underset{}{CQ} = \underset{(0.002)}{-0.004 gap} + \underset{(0.29)}{0.61 \Delta yt} - \underset{(0.18)}{0.32 \Delta tot} - \underset{(0.001)}{0.002 r_t}$$

R^2-adj. = 0.89, DW-Stat. = 1.95.

The signs of the cumulative coefficients are in line with theoretical considerations. The negative sign for the output-gap suggests a certain degree consumption smoothing over the business cycle. Furthermore, changes due to increases in the trend growth rate, which signal higher permanent income for consumers in the future, lead to a decline in the current savings ratio. Consumers also partially offset changes in their real income which are due a change in the terms-of-trade, and finally higher interest rates lower current relative to future consumption.

Bibliography

Bewley, R.A. (1979), "The Direct Estimation of the Equilibrium Response in a Linear Dynamic Model", *Economic Letters*, 3.

Chowdhury, A.R. (2003), "Do Asymmetric Terms of Trade Shocks Affect Private Savings in a Transition Economy?", Bank of Finland, Institute for Economies in Transition, BOFIT, *Discussion Paper*, No. 3.

Friedmann, M. (1957), *A Theory of the Consumption Function*, Princeton University Press, Princeton, N.J.

Loayza, N., K. Schmidt-Hebbel and L. Servén (2000), "What Drives Private Saving Across the World?", *The Review of Economics and Statistics*, MIT Press, Vol. 82(2).

Modigliani, F. and R. Brumberg (1954), "Utility Analysis and the Consumption Function: An Interpretation of Cross Section Data", in K. Kurihara (ed.), *Post-Keynesian Economics*, Rutgers University Press, New Brunswick, N.J.

ANNEX 1.A3

Explaining movements in business investment

The analysis builds on work by the Deutsche Bundesbank (2004), which finds a simple co-integration relationship between business investment and GDP. This analysis is expanded here by testing whether components of the user cost of capital provide additional explanatory power for the evolution of business investment over time.

According to standard investment theory (see, *e.g.* Romer, 2001) the real user cost of capital (UCC^r) in the absence of taxes depends on the real interest rate (r), the depreciation rate (δ), the relative inflation ($\pi_I - \pi$), and the relative price of investment goods (p^I/p) (^{I} denotes investment):

$$UCC^r = [r + \delta - (\pi^I - \pi)] \cdot \frac{p^I}{p}.$$

If the deflator in the real interest rate is the same as the one employed for obtaining the real user cost of capital, π, this simplifies to:

$$UCC^r = [r^I + \delta] \cdot \frac{p^I}{p},$$

where r^I is the real interest rate based on the investment deflator. Therefore, in the absence of taxes and under the assumption of a constant depreciation rate, UCC^r can be represented by the two determinants r^I and p^I/p, which are predicted to have a negative impact on investment. However, taking into account that there is no consensus in the literature about an appropriate measure for the real interest rate (see Chirinko, 1993), a real interest rate measure based on the GDP-deflator was also considered in the econometric analysis.

Starting from the Bundesbank approach a baseline error-correction model was estimated for business investment over the period 1992:Q1 to 2005:Q4 that relates changes in business real investment (Δbi) to the error in the co-integration relationship between business real investment (bi) and GDP (y) and captures further dynamics by lagged changes of both variables (all variables are expressed in terms of logarithms). As a second step, the additional variables that determine the user cost of capital both in their lagged level as well as in contemporaneous and lagged first differences were tested for their significance in the equation. However, only changes in the log of the relative investment deflator ($\Delta pi - \Delta p$), lagged by three quarters entered significantly.

The final error-correction model was estimated directly without normalising the coefficient of business investment (bi) in the co-integration relationship to one. The normalisation and the standard error for the long-run coefficient of GDP (given below in parenthesis) were obtained by estimating the Bewely (1979) transformation of the unrestricted error-correction model. Additional econometric tests revealed that GDP can be treated as weakly exogenous for business investment, which permits including the contemporaneous quarterly growth rate in the estimated equation.

The error-correction term (*ect*) implied by the estimated co-integration relationship has the following form (standard error in parenthesis):

$$ect_t = bi_t - \underset{(0.21)}{1.29}\, y_t$$

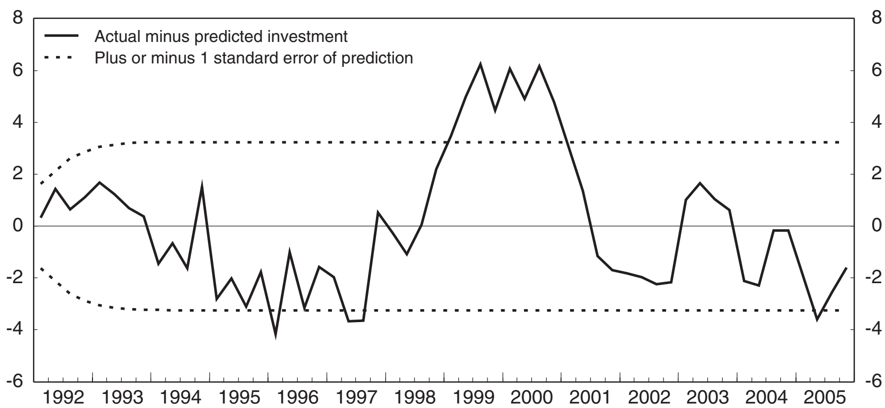
Finally, the estimated dynamic equation is (standard errors in parenthesis below):

$$\Delta bi_t = \underset{(0.05)}{-0.18} ect_{t-1} + \underset{(0.38)}{1.63}\Delta y_t + \underset{(0.36)}{0.67}\Delta y_{t-1} + \underset{(0.11)}{0.27}\Delta bi_{t-2} + \underset{(0.51)}{0.95}(\Delta pi - \Delta p)_{t-3} - \underset{(1.01)}{1.83} + resid$$

R^2-adj. for degrees of freedom = 0.44, DW-Stat. = 2.11

According to the estimates, increases in the relative investment deflator have a positive effect on investment. This appears plausible if this variable primarily serves as a predictor for future relative prices of investment goods: if investment goods are expected to become relatively expensive in the future investors might bring forward some of their planned investment today, although theory suggests that it is increases in the *change* of the relative investment deflator which affect the level of investment and the user cost of capital terms did not appear to be significant in the long-term co-integration relationship.

Figure 1.A3.1. **Deviation of actual business investment from model prediction**



Source: OECD.

Bibliography

Bewley, R.A. (1979), "The Direct Estimation of the Equilibrium Response in a Linear Dynamic Model", *Economic Letters*, 3.

Breitung, J., R.S. Chirionko and U. von Kalckreuth (2003), "A Vector Autoregressive Investment Model (VIM) and Monetary Policy Transmission: Panel Evidence for German Firms", *Discussion Paper* 06/03, Economic Research Centre of the Deutsche Bundesbank.

Chirinko, R.S. (1993), "Business Fixed Investment Spending: Modeling Strategies, Empirical Results, and Policy Implications", *Journal of Economic Literature*, Vol. 31, No. 4.

Deutsche Bundesbank (2004), *Monthly Report*, November, Frankfurt.

Romer, D. (2001), *Advanced Macroeconomics*, 2nd edition, McGraw-Hill.

ANNEX 1.A4

Explaining movements in the real effective exchange rate

The decomposition of the driving forces of the real effective exchange rate into real demand, supply and nominal shocks is obtained by estimating a three-variable structural vector auto-regression (SVAR).[1]

Economic model

The analysis rests on a stochastic open economy macro model with rational expectations that is explicitly set forth in Clarida and Gali (1994). The model stands in the Mundell-Flemming-Dornbusch tradition, capturing short- and medium-term output and price dynamics. All variables are expressed as differences of the respective quantities in the two regions considered (domestic economy and trading partners). For instance, the relevant output variable y_t of the model encompasses the difference of the output between the home country and the output of major trading partners: $y_t \equiv y_t^h - y_t^{tp}$. All variables except the interest rate are expressed in natural logarithms. With these conventions, the complete model can be summarised by the following equations:[2]

(1) $y_t = d_t + \eta q_t - \sigma[i_t - E_t(p_{t+1} - p_t)]$

(2) $m_t - p_t = y_t - \lambda i_t$

(3) $i_t = E_t(s_t - s_{t-1})$

(4) $p_t = (1-\theta)E_{t-1}p_t^e - \theta p_t^e$

The equations represent aggregate demand, money market equilibrium, the interest rate parity (short-run balance of payments equilibrium) and the aggregate price-setting behaviour (short run aggregate supply). Relative aggregate demand y_t depends on a demand shock y_t (*e.g.* discretionary variations in public expenditure), the real-exchange rate $q_t = s_t - p_t$ (nominal exchange rate minus price difference) and the expected real interest rate differential $i_t - E_t(p_{t+1} - p_t)$, where i denotes the nominal interest rate, and E the expectations operator. t denotes the time period. Monetary shocks enter the model by variations in the quantity of money m_t, which represent both, shocks in relative national money supplies as well as shocks to relative national demands for real money balances. Finally, the price setting equation implies that prices in period t are a weighted average of the market clearing price $E_{t-1}p_t^e$ expected in period $t-1$ and the actual market clearing price in period t. Thus, the degree of sluggishness in the model is related to the parameter $1 - \theta$. If $\theta = 0$, then prices are predetermined one period in advance and short-run output fluctuations would depend solely on aggregate demand. If in contrast $\theta = 1$ prices are fully flexible and output would be completely supply determined already in the short run, hence: $y_t = y_t^d = y_t^s$. Following Clarida and Gali, a random walk process is assumed for supply and nominal shocks y_t^s and m_t. By contrast, demand shocks are allowed to have a permanent and a transitory component. In particular, it is assumed that a fraction γ of any demand disturbance in $t-1$ is reversed in period t:

(5) $y_t^s = y_{t-1}^s + \eta_{St}$,

(6) $m_t = m_{t-1} + \eta_{Nt}$,

(7) $d_t = d_{t-1} + \eta_{Dt} - \gamma\eta_{Dt-1}$,

where η_{St}, η_{Nt}, η_{Dt} are orthogonal independently identically distributed shocks with mean zero. The long-run equilibrium of the model can be derived by assuming instantaneously adjusting prices, implying that all first differences of the variables are zero and output is only supply determined. The equilibrium levels for the three interesting endogenous variables are then given by:

(8) $y_t^e = y$

(9) $q_t^e = (y_t^s - m_t)/\eta + (\eta(\eta+\sigma))^{-1}\sigma\gamma\delta_t$

(10) $p_t^e = m_t - y_t^s + \lambda(1+\lambda)^{-1}(\eta+\sigma)^{-1}\gamma\delta_t$

Positive supply shocks (*e.g.* increases in productivity of the home country relative to trading partners) lead to a real depreciation and a decline in the relative price level in the long run. Positive real demand shocks lead to a real appreciation and a rise in the relative price level. Expansionary monetary shocks (*e.g.* relatively stronger money growth in the home country) lead to a real depreciation in the short run and a rise in the relative price level. An important feature of this three-variable system is that it is triangular in the shocks in the long run. Econometrically, this allows applying the Blanchard-Quah (1989) decomposition in order to identify the three structural shocks from an estimated VAR, while leaving the short-run dynamics unrestricted.

Data

The sample period begins the first quarter 1972. The real effective exchange rate used is the indicator of Germany's price competitiveness *vis-à-vis* Germany's 19 most important trading partners, based on consumer prices which is regularly published by the Deutsche Bundesbank. Relative GDP per capita and relative consumer prices are computed as geometric means of the country-specific variables, with the weighting scheme taken from Deutsche Bundesbank (2001). GDP per capita is employed instead of GDP (as in the original analysis by Clarida and Gali) in order to appropriately capture the event of German reunification, which statistically shows up as a structural break in the first quarter of 1991. While effectively reunification constituted a combination of an adverse productivity shock and an expansionary demand shock, using GDP (which rose with the statistical change over from West to the whole of Germany) might lead to a misguided identification of an expansionary supply shock at that time.

Unit-root and co-integration tests

The specified stochastic processes in the theoretical model above imply that yc_t, p_t, and q_i are non-stationary in levels, but stationary in first differences. Furthermore, there should be no long-run stable relationship between the levels of the variables, owing to the fact that there are three independent stochastic trends. Both characteristics of the data were verified by ADF and KPSS Unit-Root-Tests and Johansen's Co-integration tests. All variables could be clearly rejected to be stationary in levels. The ADF-tests for the first differences reject non-stationarity at the 5% significance level. At the same time, the KPSS-tests only weakly reject the hypothesis of stationary first differences of the variables. On the basis of these results, it seems justified to treat all variables as integrated of order one, I(1), in accordance with the model. However, the relative price level was found to be stationary in first differences only when accounting for a deterministic trend, implying a quadratic trend in relative prices. Therefore, a linear and a quadratic trend have been purged from the relative price series by an ordinary least squares regression. Finally, the hypothesis of non-co-integration could not be rejected even at very low significance levels on the basis of both Johansen's trace statistic and the maximum-eigenvalue statistic.

Structural auto-regression model

The statistical properties of the data suggest formulating the empirical model as a vector auto-regression VAR in first differences. Hence, defining $\Delta X_t \equiv (\Delta yc_t, \Delta q_t, \Delta p_t)'$, and employing a matrix of polynomials in the lag operator L: $B(L) = B_0 + B_1 L + B_2 L^2 + \ldots$, the reduced-form of the VAR, to be estimated, can be expressed as:

(11) $B(L)\Delta X_t = \varepsilon_t$,

where $var(\varepsilon t) = \Omega$ is the corresponding variance-covariance matrix. This system can be inverted into the following moving-average representation:

(12) $\Delta X_t = C(L)\varepsilon_t$, where $C(L) = B(L)^{-1}$, and $C(0) = I$

If the economic model outlined above is generating the data, the three endogenous variables should solely depend on the three types of structural shocks. Thus, the moving average representation of interest takes the form:

(13) $\Delta X_t = A(L)\eta_t$,

with $var(\eta_t) = I$, and $\eta_t = (\eta_{St}, \eta_{Dt}, \eta_{Nt})'$ [see equations (5) – (7) above], where S, D, and N index supply, demand, and nominal shocks, respectively.

Comparing the coefficients in equations (12) and (13) one can establish that $\eta_t = A_0^{-1}\varepsilon_t$. This implies that $A_i = C_i A_0$, $\forall i{:}i = 1,2,\ldots$, and for the long-run multiplier matrix $A(1) = C(1)A_0$. This produces an identity for the long run variance-covariance matrix: $A(1)A(1)' = C(1)\Omega C(1)'$.

The long-run restrictions of the theoretical model outlined above imply that $A(1)$ should have a lower triangular structure. This property allows identifying the structural shocks. Since all A_i for $i > 0$ are determined by the estimated C_i matrices from the unrestricted VAR, the restrictions effectively constrain the elements of the matrix $A_0 = \begin{bmatrix} a_{011} & a_{012} & a_{013} \\ a_{021} & a_{022} & a_{023} \\ a_{031} & a_{032} & a_{033} \end{bmatrix}$. As Blanchard and Quah (1989) have shown, the restrictions can be conveniently imposed on A_0 by a lower triangular Choleski decomposition of the estimated long-run variance-covariance matrix $C(1)\Omega C(1)'$:

$HH' = C(1)\Omega C(1)'$, where H is a unique lower triangular matrix.

After obtaining H one can calculate $A_0 = C(1)^{-1}H$ and recover the structural shocks from the estimated reduced form errors ε_t through $\eta_t = H^{-1}C(1)\varepsilon_t$. Finally, the historical decomposition of ΔX_t into the time-paths generated by the individual structural shocks, are given by the following expressions:

Historical path generated by supply shocks: $\Delta X_t = C(L)\begin{pmatrix} a_{011}\eta_{St} \\ a_{021}\eta_{St} \\ a_{031}\eta_{St} \end{pmatrix}$,

by demand shocks: $\Delta X_t = C(L)\begin{pmatrix} a_{012}\eta_{Dt} \\ a_{022}\eta_{Dt} \\ a_{032}\eta_{Dt} \end{pmatrix}$, and

by nominal shocks: $\Delta X_t = C(L)\begin{pmatrix} a_{013}\eta_{Nt} \\ a_{023}\eta_{Nt} \\ a_{033}\eta_{Nt} \end{pmatrix}$.

Notes

1. See Meurers (2006).
2. For simplicity, the identical formulation is used as in Clarida and Gali (1994). Detail on how to derive the solution of the model is found in the original reference or in Obstfeld and Rogoff (1996), Chapter 9.

Bibliography

Blanchard, O. and D. Quah (1989), “The Dynamic Effects of Aggregate Demand and Supply Disturbances”, *American Economic Review*, Vol. 79, No. 4.

Clarida, R. and J. Gali (1994), “Sources of Real Exchange-rate Fluctuations: How Important are Nominal Shocks?”, *Carnegie-Rochester Conference Series on Public Policy*, Vol. 41.

Deutsche Bundesbank (2001), *Monthly Report*, November.

Meurers, M. (2006), “Identifying Determinants of Germany’s International Price Competitiveness – A Structural VAR Approach”, *Economics Department Working Papers* (forthcoming).

Obstfeld, M. and K. Rogoff (1996), *Foundations of International Macroeconomics*, MIT Press.

ISBN 92-64-02515-4
OECD Economic Surveys: Germany

Chapter 2

Regaining fiscal credibility and improving public sector efficiency

Despite substantial structural reductions in government spending relative to GDP in recent years, the government debt ratio has reached high levels and expected ageing-related spending increases remain significant. While steps have been taken to lower the government deficit from 2007 onwards, including an increase in the standard VAT rate, further measures to ensure that government finances are on a sustainable basis should include further consolidation through better prioritisation of government spending. A stronger commitment to consolidation at all levels of government is necessary, inter alia by ending the bailing-out of states in financial difficulties. Reform of fiscal federal relations should include disentangling legislative responsibilities and reducing co-funding across levels of government, as well as widening the scope for sub-national governments to raise their own tax revenue. While tax revenues are modest, effective tax rates on enterprises and workers are high, with adverse effects on potential output, calling for a further widening of tax bases through the removal of tax expenditures, such as in the taxation of capital income.

Fiscal development and forces acting

General government debt is high

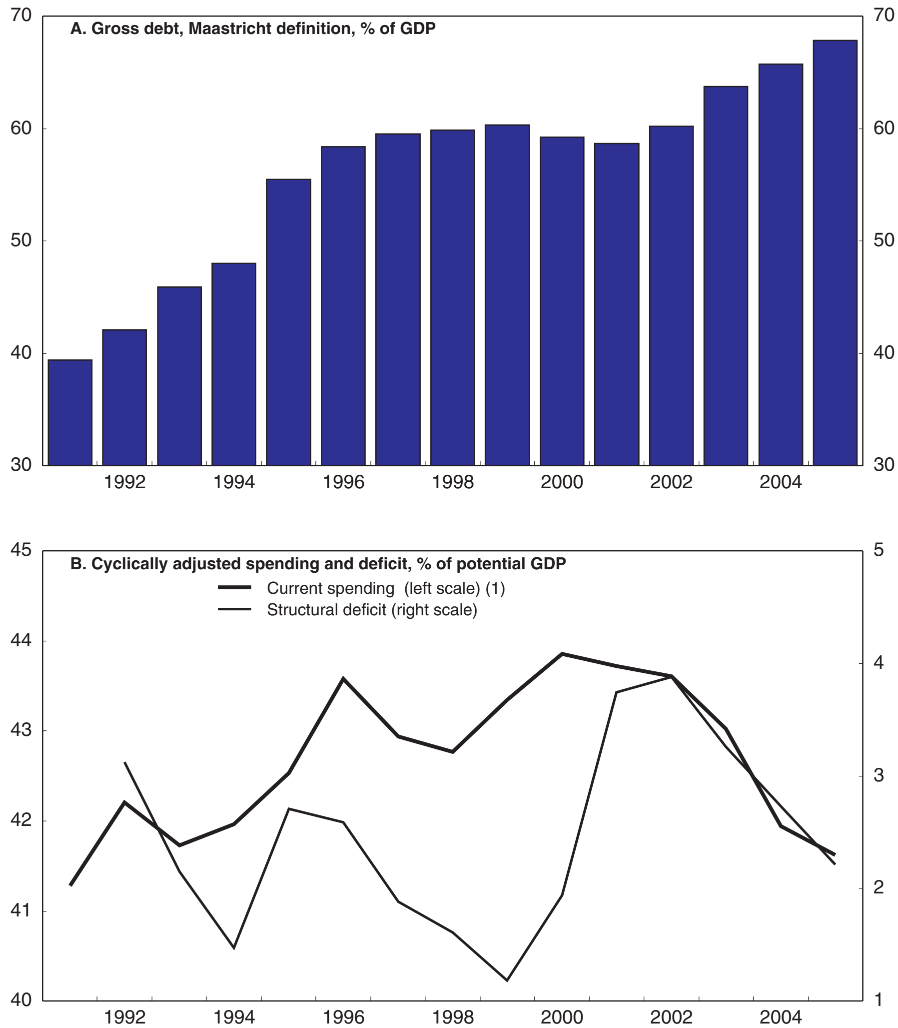
Between 1991 and 2005 general government debt (Maastricht definition) in terms of GDP increased by 28 percentage points, to some 68% of GDP (Figure 2.1, Panel A). While unification played a major role in this development, persistently high structural deficits and a trend increase in social spending indicate the need to respond to fiscal pressures *via* stronger prioritisation of government spending. The share of social spending in general government outlays increased from 48% at the end of the 1980s to 56½ per cent in 2003, although it stabilised over the last couple of years. Weak labour market performance explains much of the trend increase, but there were also discretionary expansions of social benefits, such as the introduction of early retirement programmes and long-term care benefits in the 1990s.

With tax revenues declining, significant reductions of government spending relative to GDP have not been sufficient to lower the government deficit substantially…

In recent years, significant efforts were made to curb government spending. Indeed, estimates by the OECD suggest that current cyclically adjusted general government spending, net of interest payments, dropped by 2½ percentage points of potential GDP between 2002 and 2005 (Figure 2.1, Panel B), more than in other OECD countries with relatively high debt levels. Government consumption declined, reflecting, in particular, reductions in government employment, low pay rises and a deceleration of health care spending following health-care reform measures taken in 2004 (see the 2004 *Economic Survey*). While outsourcing of government services contributed to the decline of measured current government spending, the impact appears to have been relatively modest, averaging 0.1% of GDP per year between 1998 and 2003.[1] A freeze on nominal annual pension adjustments in 2004 and 2005[2] contained social spending, although, at the same time, the reform of the unemployment benefit system for the long-term unemployed, introduced in 2005, has not yet generated the expected savings, leading to budget overruns of several billion euros. While these overruns are partly attributable to weaker than expected labour market conditions, inertia in the design of the new system also played a role (see Chapter 4). Subsidies for specific activities, notably agriculture and residential construction – including subsidies administered through tax deductions –, were also cut back. A broad range of further tax exemptions and expenditures were also reduced (see further below for details). Investment by the municipalities also contracted markedly for several years in a row.

However, consolidation on the spending side of the general government budget and the cutbacks in tax expenditures were not big enough to bring the deficit close to balance, given the substantial corporate and personal income tax reductions over a number of years, including the last step of income tax reductions introduced in 2005 (see the 2002 and 2004 *Economic Surveys*), as well as negative revenue surprises. With private consumption

Figure 2.1. **Fiscal stance of the general government**



1. Excluding interest payments.
Source: OECD Economic Outlook database.

having stagnated over the last three years, VAT receipts turned out to be weak.[3] Social security revenues remained subdued, as employment of individuals fully liable to social security contributions continued to fall. Overall, the general government deficit declined slightly from 4% in 2003 to 3¼ per cent in 2005.

... and population ageing will exert further pressure on government finances

Fiscal pressures on government finances are set to increase over the next decades to come due to the significant shift in the age distribution of Germany's population. The Federal Ministry of Finance published its first "Report on the Sustainability of Public Finances" on the basis of a commissioned study in 2005. The report provides projections of the impact of ageing on pensions, health care, long-term care, education and unemployment-related spending.[4] In the baseline projections, non-ageing related government spending as well as government revenues are assumed to remain constant relative to GDP. According to a policy scenario factoring in the plan to raise the statutory retirement age – albeit at a slower pace than is now foreseen by the government – the general government debt would increase to just above 100% by 2050.[5] Given that the transition to the increased retirement age as planned will be faster than assumed in the projections, the damping impact of the higher retirement age on general government debt is somewhat stronger than projected.[6] On the other hand, the projections assumed – in line with the government's fiscal targets at the time the report was drafted – that the general government deficit would have declined to 1¼ per cent of GDP by 2008, which is ¾ of a percentage point less than foreseen in the 2006 update of the government's Stability Programme. While the assumptions on labour force participation are cautious, the underlying assumptions appear optimistic in some other respects, notably on unemployment.[7]

Sub-central layers of government will not escape the pressures that demographic developments will place on government spending and revenues. By 2020 the share of pension outlays for state civil servants in state tax receipts is projected to increase from between 10 and 20% to between 17% and 28% in the old states and from below 1% to between 5% and 15% in the new states, given the present age distributions of civil servants and a set of population and employment projections.[8] Most of the new states will experience further marked increases in spending-to-tax ratios later. Other research, relating outlays for services provided by sub-central governments to the age profile of their constituencies, also points to demographic developments putting major pressure on the structure of spending by type of service provided.[9]

Overall, future fiscal challenges reinforce the need to further consolidate public sector budgets and adjust spending priorities at all levels of government. Empirical research indicates that spending reductions are more successful in securing lasting benefits from consolidation than raising taxes. First, reductions in the government deficit are often longer-lasting when consolidation is achieved on the expenditure side rather than the revenue side. Second, cross-country evidence suggests that positive confidence effects could offset any contractionary impact of fiscal consolidation on activity, notably if government debt is high initially, deficit reductions are substantial and consolidation is conducted through reductions in government spending – wage and transfer spending in particular – rather than via raising taxes.[10] One study suggests that expansionary effects on activity of fiscal contractions across EU countries also came about when a decline in real interest rates was absent.[11] The abolition of tax expenditures is in many cases likely to have similar benefits as spending reductions.

Fiscal policies aim at underpinning both consolidation and growth

The new government, which came into office in November 2005, has reinforced its commitment to continue fiscal consolidation. Germany's new Stability Programme, submitted to the EU in 2006, targets a reduction of the general government deficit to 2½ per cent of GDP in 2007 and to 1½ per cent of GDP in 2009 (Table 2.1). To this end, further reductions in civil service payroll spending, in part through less generous pay, as well as measures to counter the surge in benefit payments to the long-term unemployed, have been introduced (Table 2.2). Additional budgetary savings will result from further cuts in tax expenditures (see further

Table 2.1. **Medium term fiscal objectives for the general government**

Per cent of GDP[1]

	2005	2006	2007	2008	2009
Total revenue	43.4	43	43	42.5	42
Total expenditure	46.7	46	45	44	43.5
Net lending/borrowing	–3.3	–3.3	–2.5	–2	–1.5
Government debt	67½	69	68½	68	67
Memorandum item:					
GDP growth	0.9	1.4	1	2.3[2]	2.3[2]

1. Targets according to Germany's Stability programme from 2006.
2. The stability programme projects average yearly growth of 1.5% until 2009. On this basis, and given the stability programme's projections for 2006 and 2007, the Secretariat has estimated the growth rates for 2008 and 2009.

Table 2.2. **Isolated impact of measures taken by the new government on general government finances**

Per cent of GDP

	2006	2007	2008	2009
Revenues	**–0.1**	**0.5**	**0.6**	**0.7**
Expenditure	**0.1**	**–0.4**	**–0.5**	**–0.5**
Transfers	0.0	–0.3	–0.3	–0.3
Government consumption	0.0	–0.2	–0.3	–0.3
Investment	0.0	0.0	0.0	0.0
Overall impact on financial balance	**–0.1**	**0.9**	**1.1**	**1.3**

Source: Federal Ministry of Finance, 2006 update of Stability Programme.

below). Further reductions in subsidies for agriculture and regional economic development as well as measures to further curb health care spending are planned, although the latter are not yet specified. About one half of the planned measures to reduce the government deficit consists of expenditure cuts and reductions in tax exemptions. However, about half of the envisaged consolidation is intended to be brought about by an increase in the standard VAT rate by 3 percentage points in 2007, raising revenues of around 1% of GDP of which one third is to be used to reduce social security contribution rates.

At the same time the government is phasing in fiscal measures designed to raise medium-term growth prospects and stimulate the economy in the short term, with the budgetary cost estimated to rise from 0.2% of GDP in 2006 to 0.5% in 2009. The package comprises new tax expenditures for private household expenses, *inter alia* for the purchase of crafts services and child care (see Chapter 3 for details), a temporary increase in investment depreciation allowances in the taxation of company profits, more generous child care cash benefits, increases in government R&D spending as well as in transport infrastructure, and an increase in subsidies for energy-saving residential construction and refurbishment. Overall, the measures introduced by the new government are expected to leave the budget balance roughly unchanged in 2006 and improve the budget balance in subsequent years (Table 2.2). On balance, taking into account the implications on spending and revenues of measures that have already been legislated in the past, the OECD expects the structural deficit to fall only slightly in 2006, by 0.1% of GDP. In 2007, the reduction in the structural deficit should be around ¾ per cent of GDP, with the general government deficit projected to drop to 2¼ per cent.

The reductions in spending and tax expenditures are welcome elements towards a long-term consolidation strategy. The increase in VAT, however, should be placed in the specific context of German consolidation which started some years ago with strong emphasis on expenditure control, in association with cuts in direct taxation that increased the structural deficit. The overall sequence of tax reform since 2001 entails a substantial net reduction of the tax burden and shifts taxation from direct to indirect taxes, which is less damaging for growth potential. Indeed, German VAT rates are relatively low by international comparison.

The budgetary measures taken as well as those planned appear likely to set government finances on course to achieve the fiscal targets envisaged in the Stability Programme, subject to achieving planned savings in spending programmes where measures are not yet fully specified, notably through health care reform. Uncertainty also remains whether social transfer spending relative to GDP will decline as much as anticipated in the Programme (–1.5% of GDP). While the incipient cyclical recovery may reduce the cyclical component of the budget deficit considerably, this may be offset by pressures to raise discretionary spending, such as on account of wage increase demands of civil servants to offset past wage moderation. Indeed, structural current spending has shown a marked tendency to increase in previous cyclical upturns, compromising consolidation and making fiscal policy more pro-cyclical (Figure 2.1). Also, to put government finances on a sustainable track in view of ageing-related spending increases, further structural consolidation is necessary.

Over the medium term, fiscal consolidation – in quantitative and qualitative terms – will have to take place in such a way that potential growth prospects are preserved, with the implication that the bulk of adjustment has to fall on the spending side (including the elimination of distorting tax expenditures) and needs to be linked to public sector reform. Improved prioritisation of government spending can be achieved, *inter alia*, through reform of fiscal federal relations (see further below) and reform of budgetary techniques (see the 2004 *Economic Survey*). Scope remains to reduce government spending, for example, on subsidies, such as ineffective active labour market policies (Chapter 4) or subsidies to businesses (Chapter 5), which would also contribute to improve the functioning of labour and product markets.

Many special rules of taxation and tax concessions continue to imply large deadweight costs. At the same time, effective average and marginal taxation of incomes and profits in Germany remain relatively high in comparison to major competitors and the EU accession countries, despite the past reductions in personal and corporate income tax rates. Hence, improving the attractiveness of Germany as a business location calls for further reducing distortions by cutting tax concessions and subsidies while further reducing statutory tax rates. The steps to reduce tax expenditures need to be widened. Future tax reductions would have to be fully financed by cuts in spending and tax expenditures so as to conform with fiscal consolidation.

While the VAT hike is likely to boost private consumption in 2006, it is likely to cause economic growth to decelerate in 2007. The stimulation package might partly offset these restrictive effects, and some of the measures – such as the increase in government R&D spending – also aim at raising longer term growth prospects. However, the stimulatory effect on investment of a temporary reduction in the user cost of capital via higher depreciation rates is likely to benefit completely different agents than those that are hit by the VAT hike. Second, the newly introduced tax expenditures are likely to reduce economic efficiency (see further below). The subsidies for energy-saving residential construction may also not be the most cost-effective means to reduce greenhouse gas emissions (Chapter 5). Overall, some of the measures are of little help in fostering the consistency of the fiscal policy framework as they coincide with the restrictive effects of the VAT increase and reverse earlier reductions in depreciation allowances, although the government plans to phase out the higher depreciation allowances with the reform of enterprise taxation planned for 2008. These elements of the government tax and spending package should soon be revisited and complemented by further durable consolidation measures that improve the quality of government spending.

Toward more efficient government: Issues in public sector reform

An effective commitment mechanism for fiscal consolidation is needed

The size of future deficits appears to have been systematically underestimated in past fiscal planning. The Medium-term Finance Plan (*Mittelfristiger Finanzplan*, MFP) of the federal government, introduced in 1968, contains the government's projections of spending, revenues and deficits on a cash basis for each of the next five years. The Plan is presented to Parliament on an annual basis for information, together with the federal draft budget. From the MFP of 1974 onwards projected federal deficits two to four years ahead have been systematically lower than the corresponding outcomes. For the four-year-ahead projection the annual discrepancy between plan and realisation totals some 0.7 percentage point of GDP on average over the last three decades.[12] The discrepancy is particularly large in the 1970s and since the beginning of the 1990s. This profile indicates a lack of adjustment of fiscal plans to economic conditions. Both the beginning of the 1970s and of the 1990s were characterised by rapid boosts in general government spending during boom conditions, followed by economic shocks – the first oil price shock in 1974 and the burst of the unification demand bubble in the mid 1990s – that reduced the growth performance of the German economy.

The recent revision of the EU Stability and Growth Pact puts more emphasis on balancing the budget over the cycle while leaving governments much leeway in fiscal management.[13] Persistent overruns over targeted deficits and use of buoyant revenue associated with high-growth phases to finance tax cuts rather than budgetary consolidation call for effective commitment mechanisms at the level of the federation and the states ensuring that announced fiscal plans will be strictly implemented.

While the constitutions of the federation and the states contain "golden rules", requiring that for each year deficits must not exceed investment spending, these provisions did not prevent deficits from rising to unsustainable levels. The definition of investment spending is ambiguous and governments have repeatedly declared a state of "macroeconomic disequilibrium", which allows the golden rule to be breached. This is true, for example, for the 2006 budgets of the federal government and several states. Indeed, if considered in national accounts terms, at the general government level the golden rule has been repeatedly violated for several years. Also, all layers of government agreed on a "Domestic Stability Pact", which, in its present form, became effective in 2003. While the Pact is likely to support awareness of consolidation requirements, its present institutional design does not sufficiently shape budgetary processes in favour of fiscal consolidation. However, the government intends to agree new rules with the *Länder* concerning the distribution of the burden of sanction payments which may arise in connection with any violations of the European Union Stability and Growth Pact. Such an agreement would be helpful in supporting fiscal discipline as it would reduce incentives for free riding.

Agreement on fiscal rules takes place via the Finance Planning Committee (*Finanzplanungsrat*, FPR), consisting of representatives of the ministries of finance of the federal government and the state governments as well the federal ministry of economics and the communities. The statements of the FPR are non-binding recommendations which, as far as the federal government is concerned, are reflected in its Medium-term Finance Plan. For the last couple of years the federal government targeted spending reductions of 0.5% annually, and the states of 1% annually. For the period from 2007 to 2009 spending growth target limits have been set at 1% for both the Federation and the *Länder* and the municipalities.

Experience in other countries, like Spain, Switzerland or the United States in the 1990s, shows that formal spending or deficit rules for individual governments can help to contain government deficits if their credibility is backed up institutionally. For example, in Spain both the federal and regional governments are obliged to balance their budgets over the cycle. At the same time, the rule makes provisions to prevent fiscal restraint from crowding out public investment spending. If consolidation targets are violated, the government concerned needs to present an adjustment plan that specifies the path back to the target.[14] In the German context, the federal government and the states should adopt credible spending or deficit rules for the federal level and each state. Making fiscal rules credible requires institutional changes.

Decision powers of the inter-governmental Finance Planning Committee should be strengthened. For this end, the FPR could be transformed into a council of finance ministers, in line with the proposals of the Scientific Council at the Federal Ministry of Finance.[15] Based on the decisions of the FPR, individual spending paths for the federal government, including the social security system, and each state, including the municipalities, should be derived. The spending paths would provide the framework within which detailed budget proposals are made that are put to Parliament. Short and medium term economic projections on which fiscal targets are based should be taken from independent forecasters.

Second, the present set up of the FPR does not allow effective continuous monitoring and early corrective action if fiscal targets risk being missed. It would be an important improvement to create a preventive procedure with the co-operation of the *Länder* in order to establish incentives for fiscal discipline. While at present the FPR meets only twice a year, in spring and in autumn, a standing working group should be established as part of the FPR for the purpose of continuous monitoring of general government finances. Moreover, recommendations should be given in an early phase of budgetary implementation if fiscal indicators suggest that targets are at risk of being missed by the federal government or individual states. For such a framework to be effective it is necessary that the states are not bailed out by the federal government if they run into budgetary difficulties.

Third, it is not appropriate for medium-term planning that the FPR's recommendations as well as current information on revenues, spending and deficits are expressed in cash terms rather than in national accounts terms. Not least, this yields a misleading picture concerning compliance with the targets specified in the national Stabilisation Programme submitted to the EU. For example, some items, such as child care benefits, that are classified as spending in national accounting, enter cash accounting as revenue reductions. This implies, for example, that cash accounts might signal compliance with spending rules although they are violated in terms of national accounting. Similarly, the size of budget deficits can differ significantly between the national accounts and cash accounting. For example, in 2004 the difference between both concepts totalled 0.7% of GDP. Fiscal targets and control information need to be formulated in terms of national accounting conventions. Conversion of cash accounting statistics into the national accounting standard is straightforward, apart from timing of certain items that are associated with accrual accounting. The latter can be approximated by experience. Moreover, aggregate statistics for the general government need to be made available on a current basis so as to monitor the evolution of general government finances over the year.

Federal fiscal relations need broad-based reform

Previous *Surveys* have argued that reforming federal fiscal relations should be a major element of public sector reform. Overlapping responsibilities between the federal government and the states, and a high degree of inter-governmental co-financing are often associated with inefficient resource allocation and can slow federal legislation by complex mediation processes between the federal government and the states. A commission was established at the end of 2003 by both chambers of Parliament to make proposals on how to improve the allocation of responsibilities among the different layers of government. The Commission identified a large number of items of federal legislation requiring approval of the second chamber of Parliament representing the states, where it proposed to reallocate legislative responsibilities either to the states or to the federal government. Legislation concerning shop-opening hours and regional planning (*Flurbereinigung*) stand as examples. The Commission also recognised that the high degree of spending programmes of the states and municipalities that are co-financed by the federal government and the states, respectively, is associated with inefficiencies in resource allocation. However, economically weak states were more reserved in their readiness to assume greater responsibilities for their policies than states with higher per capita income.[16] Overall, the Commission did not agree on a reform package for implementation. Moreover, certain important issues were not addressed, such as the interstate tax redistribution system. The new federal government put reform of federal fiscal relations back on the policy agenda. Drawing on the proposals by the Commission, legislation is being prepared designed to *inter alia* reallocate legislative responsibilities either to the states or the federal government, depending on the perceived degree of their inter-regional relevance, as well as to reduce the degree of co-financing of spending programmes across levels of government. By implication, the quantity of federal legislation requiring approval by the states in the second chamber of Parliament is planned to be reduced substantially. In reallocating legislative competencies to the federation and the states, care needs to be taken that the degree of regional or inter-regional importance of legislation is adequately assessed. This section considers further policy areas where reform would create potentially large efficiency gains.

Co-financing needs to be reduced…

Co-financed spending accounts for a sizeable share of total public expenditures. Broadly, three earmarked schemes involving the federal government can be distinguished.

- "Investment Aid" (*Finanzhilfen*, FH) can be granted for major investment projects by the *Länder* or municipalities for the purpose of averting economic disequilibrium, equalising differing economic capacities or promoting growth. In practice, FH aid is extended to the states for the purpose of residential construction and modernisation, urban development and the development of municipal traffic infrastructure.

- "Joint Fiscal Tasks" (*Gemeinschaftsaufgaben*, GAs) denote spending projects by the states that are jointly determined by the federal government and all states, and cover the areas of improving the regional economic structure, improvement of agricultural structure, coast protection, university construction and research and development. In most schemes the financial contribution of the federal government amounts to some 50% of the project costs, but in some fields financial participation totals up to 90% of the total.
- Finally, grants for the "Disbursement of Funds" (*Geldleistungsgesetze*, DF) support social transfers by the *Länder* such as housing support, child-related benefits and state scholarships, with the share of the federal government totalling up to 100%.

Apart from these co-financed schemes, federal transfers are given to the states within the framework of the inter-governmental revenue redistribution system, and as budgetary aid to the new states and – until 2004 – to two western states.

While inter-governmental co-financing of projects can be warranted to the extent that the benefits of regional spending projects also accrue to inhabitants in other regions, previous *Surveys* have argued that in several respects the schemes do not appear to be well geared to achieving allocative efficiency and to controlling costs. The states and municipalities are facing incentives to expand spending as long as the benefits perceived exceed their own, partial budgetary outlays, even if the total costs of the project are large relative to its social value. By contrast, many fields in which co-funding occurs, are not, or only to a small degree, associated with regional spill-over effects that could justify mixed financing. Regarding FH, none of the areas in which the federal government is involved in co-financing is associated with significant inter-regional spill-over effects. Similarly, for several GAs, such as projects improving the agricultural structure, it is hard to identify inter-state spill-over effects. There are also few arguments that would support mixed financing of social transfers. In addition, there is evidence that split responsibilities across different administrations and differing objectives tend to seriously impede suitable programme evaluation and control. At the same time, co-financing has been found to be administratively costly with significant resources being devoted to the co-ordination process.[17]

To the extent that significant regional spill-over effects of policies are present, it is worth considering whether other instruments are better suited to internalise externalities than intergovernmental transfers. University construction stands as an example. Freedom of students to choose their university without obligation to pay fees implies a regional divergence between the costs for the provision of tertiary education and the returns associated with this provision. The latter can consist of returns from research or income tax receipts of high-income workers. Given the fact that the states can appropriate only a small fraction of the returns from education, there are incentives to react to extensions in another state's supply of tertiary education by curbing own spending for universities. Consequently, if the externalities remain uncompensated, the equilibrium outcome of the states' individual actions is under-provision of tertiary education services, as the return from extending the supply of tertiary services or improving their quality falls short of the overall return.[18]

Co-financing of university construction by the federal government in the system of GAs provides incentives to extend the supply of universities. However, the instrument is sub-optimal as allocation of funds is not closely linked to the size of inter-regional spill-overs and subject to both bargaining between the federal government and the various states as well as sizeable co-ordination costs. Hence, the GA instrument is unlikely to provide efficient internalisation of inter-regional externalities that are involved in university education. Indeed, empirical research indicates that spending on tertiary education of neighbouring states are significantly negatively correlated, pointing to the existence of significant inefficiencies in the present university financing system despite federal co-financing via the GA.[19] By contrast, introduction of study fees whose returns accrue to the universities would internalise spill-overs as the universities would receive funding of those who utilise their services. In the same vein, coupled with a sufficient degree of autonomy of the universities to shape the services they offer, fees would provide incentives for quality improvements that attract students. A majority of states still reject the notion of charging study fees.

The federal government plans to terminate the GA university construction, and to allocate the responsibility for university construction at the level of the states. A system of joint evaluation of the needs for capacity, involving the federal government and the states, will be set up. For a transition period (until 2013 in the first phase) the states will receive financial compensation out of the federal budget, whose size depends on the financial contributions of the federal government in the past. Thereafter the level of the transfers will be re-evaluated and compensation extended until 2019. It is questionable whether this reform is deep enough to yield a fundamental improvement in resource allocation. The states should give the universities the right to charge study fees that accrue to them. However, as this will not suffice to finance the university system public sector funding will remain necessary. In view of the externalities involved, funding should be provided by the federal government rather than the states. This would have to entail a re-allocation of responsibility for universities from the states to the federal level (see also Chapter 3 below).

Overall, responsibilities between the federal government and the states need to be disentangled. Co-funding of regional projects should terminate in all areas where substantial spill-over effects between governments cannot be established. This implies that FHs should be abolished and spending responsibilities fully transferred to the states and municipalities. In areas where significant regional externalities of project financing are present, consideration should be given to more efficient instruments to internalise externalities, such as inter-regional co-operation or fee financing. Funding of social transfers should be concentrated at one level of government. The revenue distribution between the federal government and the states needs to be changed to reflect the reallocation of spending tasks. For example, within the present framework of inter-governmental tax sharing this can be achieved by adjusting the fixed VAT shares that accrue to the federal government and the states, respectively.

… as does the Federally Commissioned Administration (Bundesauftragsverwaltung)

Several administrative tasks, such as tax revenue collection or planning of long-distance motorways, are commissioned by the federal government with the states. It is a common feature of the Federally Commissioned Administration (FCA) that the states act as agents for the federal government, entailing action, such as contracting with third parties, whose financial consequences are borne by the federation. As the interests of the states and municipalities might diverge from those of the federal government, there are incentives for the states to pursue their own interests at the expense of the federation. These principal-agent problems can imply significant inefficiencies in the public administration. They cannot be eliminated via tighter control by the federal government, since the states dispose of superior information about local conditions and administrative detail, which they can utilise in favour of their own objectives. Moreover, tighter control claims additional resources and is likely to lengthen bureaucratic procedures, with potentially adverse effects on private sector activity. Hence, in order to increase public sector efficiency the range of FCAs should be reduced by reallocating tasks to the federation and the states, respectively. Two areas in which FCA are associated with significant inefficiencies are considered below.

Federal motorways (federal highways *Bundesautobahnen* and federal roads, *Bundesstrassen*, FM) are owned by the federal government, which bears the costs of construction and maintenance. The states are responsible for planning and administration. Whether or not motorways are classified as FM depends on both the traffic load and the degree of integration of the motorways into the overall network. The states present new projects to be included into the federal network to the federal government. The federal government, in turn, incorporates the proposals into the Federal Road Construction Plan (*Bundesverkehrswegeplan*, BVP) if it considers the relevant criteria to be met, including project qualifications it might have made at an earlier stage of the planning process. Finally, Parliament votes on the BVP as part of the annual federal budget. The fact that the federal government finances FMs that are planned by the states provides incentives to the latter for excessive registering of road projects. Indeed, one State Auditor reports that it would take some 35 years to realise the high-priority construction projects registered by the state government, given unchanged federal funding.[20] As registration of routes in the BVP requires detailed and costly planning, the system appears to be associated with significant waste of public resources.

Moreover, to reduce administrative costs the states are cutting the staffing of the administrations concerned and increasingly out-source planning and control of construction projects. According to the Federal Court of Auditors services are often insufficient, leading frequently to additional construction costs that are borne by the federal government. Effectively, costs are shifted from regional administrations to the federation while overall costs increase.

Over time, federal roads can lose their function as inter-state connections, for example if they run parallel to newly constructed highways. In this case they are scheduled by the federal government to be down-graded as state roads. Down-grading cuts the total costs of maintaining and extending the roads as the construction standards for state roads are lower than those for federal roads. At the same time, down-grading moves financial responsibility for maintenance and road construction from the federation to the states and requires the consent of the states. The *Länder* down-grade only reluctantly, as this implies considerable additional burdens for their budgets. Moreover, the states have developed their own lists of state roads qualifying, in their view, for being upgraded as federal roads, which would move financial responsibilities in the opposite direction. Due to the natural resistance to downgrading, the federal administration has become financially responsible for an increasing set of motorways that have lost their function as inter-state connections. These roads are maintained and extended in line with the costly standards for federal motorways, implying a waste of public sector resources.

Principal-agent problems leading to over-spending are reinforced when they involve the municipalities as an additional player. Construction of roads bypassing municipalities has a high priority in the development of the federal road network. As soon as a new bypass is cleared for traffic the federation ceases to be financially responsible for the old road passing through the municipality. The Federal Court of Auditors notes that the original roads are frequently redesigned or upgraded immediately before completion or during the construction of the bypass, burdening the federation with excessive costs.[21] State governments and municipalities reach agreement about demands by the latter at the expense of the federal government. The fact that in the recent past the financing for bypass roads absorbed the largest share in total funding for federal motorways indicates that the financial consequences of this practice could be very substantial.

Overall, the system of planning and construction of roads is subject to severe principal-agent problems, which are reinforced by the fact that planning procedures are very complex, not least because they are subject to a multitude of interests involving agents outside the public sector as well. Efficiency gains associated with institutional change in the system of road planning are likely to be sizeable. The need to mobilise these resources is reinforced by both the necessity for fiscal consolidation as well as the fact that budgetary stress has already lead to a deterioration in regional road conditions and maintenance. One solution would be to re-allocate administration of motorways and federal roads to the federal level. By contrast, it would not be appropriate to re-allocate ownership and funding responsibilities for the entire federal road system to the states, since construction and maintenance of an interregional network by definition entails spill-over effects. However, in view of the fact that federal roads are more and more losing their inter-regional interconnection function to the motorway system, an intermediate solution appears feasible, which allocates administration of motorways at the federal level, while all federal roads given into the domain of the states. A similar approach has recently been chosen in Austria, where dispersion in responsibilities produced similar administrative problems. In 2002 ownership and financing of lower ranked federal roads was transferred from the Austrian federal government to the states.[22]

Tax revenue collection is also subject to significant principal-agent problems. While almost all taxes that generate high revenues, such as income and value added taxes, are exclusively in the legislative domain of the federation, the states are responsible for tax collection and auditing. The federal government has an interest in efficient tax collection so as to maximise total revenues. By contrast, individual states gain little in generating higher tax revenues in their domain, due to both tax sharing between the federal government and the states and the fact that differential tax revenue flows between the states are almost completely offset by a system of inter-governmental transfers. At the same time, lax tax auditing or collection might reduce the states' spending. Moreover, the states might have an interest in supporting regional business via the tax system, providing incentives for lax tax auditing. In several respects, efficient tax assessment cannot be carried out by single states alone. Hence dispersed responsibilities and resources require a high degree of co-ordination across the states and with the federal government to secure compliance to taxation rules, equal standards of tax administration and effective investigation of tax fraud.

There is empirical evidence that the dispersed administration of tax revenue collection in Germany is subject to significant inefficiencies. Indeed, econometric analysis suggests that high effective tax outflows implied by the inter-state fiscal equalisation system has a negative impact on the states' tax revenue collection efforts.[23] Moreover, the Federal Court of Auditors, in subsequent auditing reports, has pointed to several cases, indicating deficiencies and asymmetries in the states' administration of tax revenue collection, often caused by a lack of personnel and differences in the administrations' endowment with resources. For example, lack of auditing of the insurance tax, whose proceeds accrue exclusively to the federal government, implied significant shortfalls in revenues.[24] Co-operation and information sharing across different governments was found to be insufficient, leading to revenue shortfalls and higher costs of tax administration, and benefiting tax fraud.[25] In the same vein, development of a common tax administration software made little progress over several years, and dispersion of administrative responsibilities has hampered the development of risk management systems, designed to identify risks of tax fraud, according to a common federal standard.[26]

To abolish principal-agent problems of the types observed and internalise various external effects that are associated with the taxation of tax bases that are mobile across regions and might not comply with the tax rules, administration of revenue collection of those taxes whose revenues accrue exclusively to the federation or are shared between the different layers of government should be re-allocated from the states to the federal government. To the extent that the requisite constitutional change does not come about, it should be examined whether certain aspects that are relevant for efficient tax administration can be centralised. In particular, the federal government might get the responsibility for the development of a common tax administration software, whose implementation would have to be made legally binding for the central government and the states.

Inter-governmental revenue equalisation leaves much scope for improvement

All major tax receipts are shared between the different layers of government and are in the legislative domain of the federal government, with the notable exception of the local business tax. On top of this primary allocation of tax revenues the inter-governmental Finance Equalisation System (*Bundesstaatlicher Finanzausgleich*, BF) provides a secondary redistribution of tax revenues that aims at generating roughly equal living conditions across the federation. The BF involves vertical transfers from the federal government to the states and horizontal transfers between states. Roughly, each state's accruals in the BF depend on the difference between its per capita tax revenues – including about two third of the tax revenues of the municipalities – and per capita tax revenues of all states.

As mentioned above, it is a key weakness of the system that additional tax revenues generated in a state are almost entirely redistributed, providing disincentives for the states to develop their tax base and administer taxes efficiently.[27] Inter-governmental transfers should be re-designed so as to reduce the disincentive effects for developing the states' own tax base and tax revenue collection efforts.[28] To this end, equalisation transfer positions should be computed on the basis of notional rather than actual revenue. Moreover, more use could be made of lump sum transfers over a multi-annual period. This would entail designing transfers for each state so as to fill part of the gap between the states' differential per capita tax revenues for a base year, without adjustment to reflect the actual growth performance of revenues over the chosen period.[29] This would allow reducing the rates that govern variable transfers with adverse incentive effects on an annual basis.

The states have only very limited legislative power with respect to taxation, even for taxes whose revenues fully accrue to them. The states and the municipalities should be given more scope in generating own tax revenues, raising accountability of fiscal policies *vis-à-vis* electorates. One option would be to allow the states to incorporate a surcharge into a reformed – and correspondingly reduced – income tax schedule.[30] Levying an income tax surcharge on residents would be broadly in line with taxing the beneficiaries of services provided by the states. However, strong income taxing powers of sub-central governments are associated with negative externalities on other constituencies. In particular, too strong a taxation might cause the overall tax base to shrink and can weaken the redistributive role of federal income taxation. Limiting such adverse effects suggests confining the right for sub-central income taxation to setting a flat tax rate subject to a corridor whose width is to be determined by the federal government. While several OECD countries allow sub-national governments to set income tax rates, some countries, such as Norway and Iceland, introduced constraints of this type.[31]

The local business tax, for which municipalities have some discretion in setting the tax rate, is not well-suited to the financing of services provided by local governments. While the tax gives municipalities some incentives to foster businesses activity, most core public services provided by local governments such as education and social welfare serve resident individuals. Hence, the local business tax might only weakly match spending needs on local government services. Moreover, with business tax revenues being highly cyclical and municipalities being subject to relatively strict limits on borrowing, the local business tax reduces the ability of municipalities to smooth spending over the business cycle. Real estate taxes are a more suitable revenue source for municipalities over which they can influence tax rates, given the lack of mobility and the limited cyclical variation in the tax base. Indeed, real estate taxes play a significant role in financing local governments in many OECD countries, whereas they play a minor role in the funding of German municipalities. Giving the real estate tax a larger role in funding municipalities should be considered.

For more sub-central autonomy in setting tax rates to be meaningful, fiscal equalisation cannot be based on actual revenues. Instead, adjustment of the system along the lines suggested above is indispensable. Otherwise discretionary changes in local tax parameters would be neutralised by offsetting inter-governmental transfers. Some countries, such as Denmark, Finland and Spain have incorporated provisions that de-couple equalising transfers from actual tax receipts.

Within a system of federal fiscal relations that is transformed along the lines suggested above, bailing out of states with high deficits by the federal government should be terminated. Solidarity Pact II transfers to the new states should be strictly transitory and conditioned on the spending adjustment by the states in favour of investment projects which remove bottlenecks to higher growth.[32]

Reaping benefits from public-private partnerships

Public sector authorities in Germany are aiming at greater utilisation of public-private sector partnerships (PPPs) to finance infrastructure, based on the evaluation of costs and benefits over the life cycle of investment projects. Legislation which came into force in mid 2005 removed regulatory obstacles for PPPs in several areas, such as restrictions on private financing of infrastructure projects, ambiguities in procurement rules and discriminatory taxation of real estate.[33] PPPs exist already in Germany, but appear to be less utilised than in some other countries, especially the United Kingdom. Experience in other countries indicates that PPPs can be associated with efficiency gains if public sector administrations handle the complex set of issues for PPPs appropriately.

PPPs represent a co-operation between the government and the private sector to invest in new infrastructure and provide the related services. Typically, the government specifies the services it wants the private sector partner to deliver, while the partner designs, finances and builds the relevant infrastructure, and delivers the services the infrastructure generates. To the extent that the services are sold to the market, the private sector provider can use the expected income stream as collateral to finance the infrastructure investment. If the government pays for the services, collateral can be based on the contractual payment obligations of the government. In practice, the design of this basic scheme can vary in several respects. For example, the investment project might be financed by an agency that is linked to the government. By contrast, traditional government financing would entail government procurement of a specified investment project and government provision of the infrastructure services, either charging fees for services or free of charge.

PPPs are usually motivated by the expectation that they allow provision of infrastructure services at lower fiscal burden for government budgets. However, governments can usually borrow at lower costs on the capital market than private agents.[34] Hence, for PPPs to improve government finances involvement of the private sector needs to generate efficiency gains, *e.g.* due to the private sector's management skills and capacity for innovation, that are large enough to outweigh less favourable financing conditions on the capital market.[35] Reaping efficiency gains from private sector involvement requires, in turn, that various risks, associated with building, ownership and operation of infrastructure, are shifted to a large extent from the government sector to the private sector. For example, if the government guaranteed the private operator of infrastructure a revenue stream that is independent of the demand for infrastructure services, the lack of risk transfer would undermine incentives for the private sector partner to efficiently operate the infrastructure. In screening infrastructure projects for their suitability for PPPs the government needs to consider whether substantial risk transfers to private sector partners are feasible.

PPPs can considerably reduce the transparency of government finances and shift fiscal obligations into the future. If the infrastructure project is financed by the private sector partner, the costs of the investment are moved off the government's budget, relieving public sector finances from short-term fiscal pressure. But if PPPs are not associated with significant efficiency gains, short-term relief is obtained at the expense of higher total costs in present value terms. Similarly, if the project is funded via a public sector finance institution, debt servicing obligations are no longer reflected in general government debt levels. If the government backs up private sector borrowing for the purpose of financing PPPs, off-budget contingent liabilities arise. Loss in transparency of future fiscal obligations weighs particularly heavily in view of the high contingent liabilities of public sector finances that already exist on account of population ageing. Since PPPs are associated with shifting public sector obligations off-budget and into the future public sector authorities might have a preference in favour of PPPs even if these are not beneficial on efficiency grounds. The fact that, in first generation PPPs, German municipalities had recourse to significant sale-and-lease-back arrangements of local assets indicates the relevance of this potential. Federal fiscal arrangements can also create further incentives to enter PPPs despite lacking gains in efficiency. For example, as highlighted above, this is the case if the states' outsourcing of planning and construction of federal motorways coincides with insufficient enforcement of quality standards, effectively shifting costs to the federal government. Public sector authorities should only engage in PPPs if there is convincing evidence that efficiency gains over the lifecycle of the project outweigh higher financing costs of the private sector. Accruals of future fiscal obligations and contingent liabilities associated with the operation of PPPs and financing institutions should be made explicit within the accounting framework.

Private sector providers face incentives to maximise profits by compromising service quality. Setting up a PPP therefore requires that enforceable contracts can be written between the government and the private sector that specify service quality to be delivered in all relevant respects. This is often not the case, which precludes PPPs. Hence, the government needs to identify the quality standard of services it wants to be delivered, and translate them into measurable output indicators. Moreover, private sector partners operate in non-contested markets since they have the exclusive right to appropriate the returns from selling the infrastructure services. Hence, the public administration needs to make sure that prices are regulated in an efficient way.

Proper *ex ante* evaluation of the costs and benefits of investment projects over their life cycle under the alternative scenarios with and without PPP is key to the decision on whether or not to involve PPPs and how to design them contractually. P This involves estimating future revenues and expenditures that accrue up to the termination of the investment project, and measuring the costs of alternative policies with and without PPPs by comparing the present values of these flows. In a recent survey among German federal, state and municipal administrations, inquiring whether undertaken PPP projects were judged to be efficient, a very large fraction of sampled administrations did not respond or answered that they did not know.[36] Although this response might relate to the fact that several PPP projects were relatively recent, it could also reflect shortcomings in *ex ante* and *ex post* project evaluation. In other OECD countries cost benefit analysis of PPP projects is often outsourced to consultancy firms. At the same time, however, experience shows that building up knowledge on project evaluation and contract design within public sector administrations is indispensable for PPPs to be successful. This is reinforced by the fact that capital spending at stake is usually large and private sector partners and consultants are often large experienced firms. Indeed, OECD countries that are most advanced in utilising PPPs, notably the UK, Ireland and Australia, established specialised administrative units to deal with PPPs. In Germany, tasks forces were established at the federal and sub-federal levels that form a network designed to deal with PPP management issues. However, it should be examined whether further resources need to be allocated for the purpose that public sector administrations acquire the knowledge necessary to deal with economic and contract issues of PPPs.[37]

Continuing tax reform

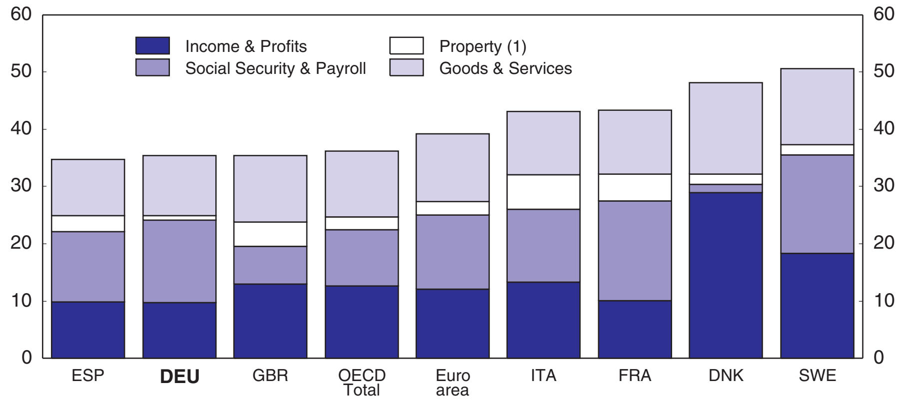
Notwithstanding significant reductions in corporate and income taxes over recent years, effective tax rates on company profits and on households' wage earnings remain relatively high in international comparison. At the same time, a majority of high-income OECD countries have higher tax revenues relative to GDP than Germany.[38] While relatively low revenues from taxes on property as well as on goods and services account for part of the difference (Figure 2.2),[39] the perforation of tax bases through numerous tax exemptions and expenditures in both direct and indirect taxation, which amount to about 2.5% of GDP, also contributes to lowering tax revenues (see the 2004 *Economic Survey*).

Distortions in the tax system need to be eliminated more consistently

The government has, over the past year, taken a number of measures to broaden the tax base, such as a reduction of the ceiling up to which private household capital income is tax exempt. The exemption of capital gains in real estate from capital gains taxation for private households has also been eliminated, with the exception of capital gains realised on the sale

Figure 2.2. **Tax revenue composition, 2003**

Per cent of GDP



1. Property includes other revenue which is negligible for all except France and Italy where it is respectively 1.6% and 2.6%.

Source: OECD (2005), *Revenue Statistics*.

of owner-occupied housing. Further tax exemptions and expenditures were removed by the new government formed after the general elections in 2005, including tax expenditures for owner-occupied housing development, tax advantages for specific investment funds making financial investments in specific industries (such as the media and shipbuilding), relatively favourable depreciation allowances for home construction, tax deductibility of commuting expenses, tax exemptions for capital gains accruing to businesses and, in part, tax exemptions for dismissal compensation.[40] Further planned measures include a reduction of the tax advantages for small-scale employment (*Mini-Jobs*).[41]

However, some recent measures taken by the incoming government entail widening of tax exemptions. In particular, the government has introduced tax allowances for private households which apply to wage expenses for craftspeople employed in the refurbishment of homes,[42] as well as allowances for household services, with an expected budgetary cost of 0.1% of GDP per year. While these measures might contribute to moving activity out of the shadow economy into legal employment they can create distortions. For example, households are likely to substitute subsidised services for similar services provided off the household premises, which do not benefit from the tax subsidy, such as restaurants or laundering services. Positive employment effects are less likely than under alternatives involving a non-distortionary allocation of resources. This is reinforced by the fact that wide parts of the craft sector are protected by regulations that constitute barriers to entry (Chapter 5). Financial support for child care given through the widening of child care tax expenditures could be better targeted at raising female labour supply and improving early childhood education (see Chapter 4). The planned temporary increase in depreciation allowances for machinery and equipment investment may also distort the timing of investment decisions and lead to perceptions of increased uncertainty regarding future tax-induced changes in the user cost of capital, with potentially adverse effects on long-term investment levels. However, the government plans to phase out the higher depreciation allowances with the reform of enterprise taxation planned for 2008. The tax expenditures for private household expenses on craft and household services should be reconsidered.

Moreover, much further scope remains for eliminating tax exemptions with distorting effects, which would raise substantial revenues, allowing a reduction in statutory taxes on business and labour income. For example the exemption of supplementary pay for work at night, during public holidays and weekends from taxation (including social charges) alone entails foregone tax revenues equivalent to € 2 billion and effectively subsidises labour supplied at these times. Indeed, the government is planning to eliminate exemption from social security charges for labour supplied at these times. Many sector-specific tax exemptions also persist.[43] For example, local public transport operators benefit from a 50% discount on fuel taxes, while an 80% rebate applies to agriculture, forestry and manufacturing. Exemptions also apply to shipping and air transport. An efficiency case might be made for exempting all fuel used as an intermediate good in production from fuel taxation, to the extent that fuel tax rates exceed the value attached to negative environmental externalities associated to fuel use.[44] However, most service industries, for example, do not benefit from rebates. Tax exemptions should be further reduced. In particular, the government should be more determined in phasing out the tax exemption for supplementary pay for labour supplied at night and during public holidays as well as exemptions from fuel tax liability benefiting specific sectors. To minimise adjustment costs and protect returns of sunk investments, phasing-out periods could be envisaged.

Reaching environmental targets could be achieved with lower costs to economic efficiency

More generally, there is a need to review the taxation of energy such as to ensure that abatement of carbon-dioxide emissions is achieved in a cost-minimising way. Caps on energy tax liabilities of energy-intensive industries entail that incentives to reduce emissions are absent at the margin in these industries, whereas other sectors are faced with substantial tax liabilities associated with the use of energy. Moreover, industries participating in the emissions trading regime of the European Union currently face higher abatement costs than other sectors as they have to pay both energy taxes and face the costs of pollution permits.[45] Exemptions for energy-intensive industries should gradually be phased out. Energy tax rates should be adjusted such that sectors not participating in the permit trading scheme pay higher energy taxes than other sectors. A phased pace of adjustment of energy taxes would ensure that adjustment costs are minimised.

CO_2 emission permits have thus far been allocated for free to existing businesses participating in the permit scheme, on the basis of past pollution records ("grandfathering"). Selling CO_2 emissions through an auction mechanism instead would help attain environmental targets at lower efficiency cost to the economy.[46] First, selling pollution permits through an auction mechanism would help reduce government debt without resorting to distortionary taxation. Second, potential incentive problems in grandfathering schemes could be avoided. For example, to the extent that agents can anticipate future grandfathering rules, incentives to abate pollution may be reduced, and non-viable incumbent firms may have incentives to stay in business to receive free pollution permits. CO_2 permits should be sold through auctions. For the period 2008-12, the minimum share of permits that must be allocated for free is fixed at 90% by EU rules. Germany should use its influence in the EU to reduce the minimum share that has to be allocated for free to enterprises.

The planned changes of VAT and social security contributions are no substitute for further structural reform designed to durably foster employment

The beneficial effects of the planned reduction of the unemployment insurance contribution rate by one percentage point, financed by one third of the revenues raised through the increase in the VAT rate, are limited. The rise of the VAT tax rate reduces incentives to work by reducing the purchasing power of wage income, although the tax base of VAT is somewhat broader than the tax base of the social security contributions, encompassing non-labour income, thus generating some limited scope in principle to lower the tax burden on labour overall. However, some government transfers, such as social assistance, may eventually be adjusted in line with prices, even though there is no automatic link between social assistance levels and price developments. If adjustments in line with prices occur, such transfers would rise eventually in line with the VAT increase. A further, though temporary, impact of the measure would be to raise competitiveness, as VAT is levied on imported goods but not on exported goods, while the opposite is true for social security contributions. This gain in competitiveness might temporarily boost activity, notably in the context of a fixed exchange rate regime. Overall, the planned coupling of the unemployment insurance contribution reduction with the VAT rise, though of some use at the margin, cannot be seen as a substitute for further efforts to create more room for reducing the tax burden on labour through the widening of tax bases and better prioritisation of government expenditure. As a step in this direction, the government plans to achieve a further one-percentage-point reduction in unemployment insurance contributions by improving the efficiency of the public employment service.

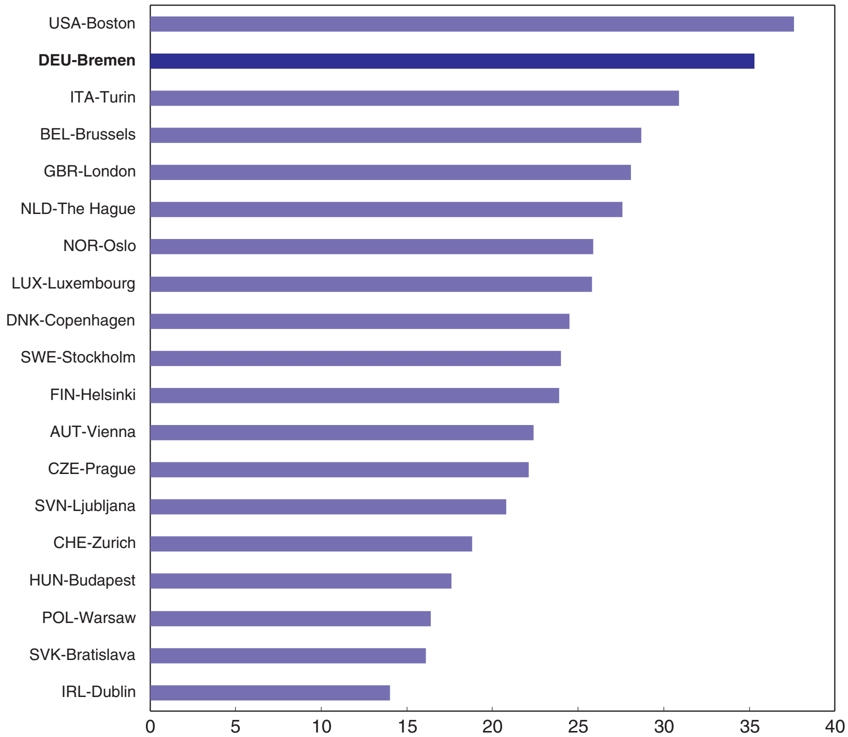
The government also plans to increase the top marginal income tax rate for all individuals earning above € 250 000 (€ 500 000 for couples), from 42% to 45%, which would apply only to labour income. This measure would raise relatively modest additional revenues at the expense of making Germany less attractive as a location for mobile highly skilled workers and lowering incentives to supply labour (in particular additional hours) among high-income earners. At the same time, the growth of supply of highly skilled workers is limited in view of low tertiary graduation rates and relatively restrictive migration policies towards highly skilled workers from non-EU countries. The measure also raises questions about the consistency of government policy, as the top marginal income tax rate has been lowered in recent years. Moreover, the measure might be difficult to reconcile with the introduction of a dual income tax, which is being considered and which – according to current proposals – would entail equal marginal tax rates for labour income and profit income of non-incorporated companies above a threshold determined by a notional return on equity (see below).

Taxation of enterprises and capital income needs to be reformed further

Effective taxation of the returns of investment at the level of a corporation is high in comparison to other European high-income countries. According to a recent study comparing taxation of corporations at the company level, effective average and marginal tax rates in German locations are higher than in many neighbouring countries (Figure 2.3). A similar comparison shows that Germany – together with Spain – has the highest tax burden on corporations across all EU countries.[47] In addition to corporate and income tax, companies are liable to the local business tax, a tax on profits partly accruing to municipalities, which also have some discretion over the tax rate. The high effective tax rates on businesses reduce the attractiveness of Germany as a business location and provide incentives for multinationals to shift taxable profits abroad.

Figure 2.3. **Average effective tax burden on the return of investment of corporations, at level of enterprise**

Per cent



Source: BAK Basel Economics, *IBC Taxation Index 2005 – Effective Tax Burden of Companies and on Highly Qualified Manpower*.

Exemptions in the taxation of capital income create further distortions, with potentially adverse repercussions on firms' investment and innovation activities. For example, private households are exempt from the payment of capital gains tax on participations in businesses if the participations fall below a threshold of 1% and are held for more than a year, while capital gains are taxed if they are part of the profits of a non-incorporated business. As a result, venture capital firms are taxed on realised capital gains if they provide management services to their client firms, as the capital gains are then considered part of business income, whereas realised capital gains might not be taxed if the venture capital firm provides management services (see the 2004 *Economic Survey*). With management services likely to play an important role in overcoming information asymmetries between venture capital funds and start-ups, the current system of capital gains taxation may discourage venture capital market development (see the 2004 *Economic Survey* for details).

In order to address the deficiencies in the taxation of companies, the government intends to reform company taxation by 2008. One option being considered is to introduce a dual income tax, which would subject all capital income to a uniform low tax rate while subjecting wage income to a progressive tax schedule. A dual income tax system could thus, in principle, remove some of the distortions in the taxation of company profits in the current regime. However, implementing a dual income tax also entails some problems. A proportion of profits of non-incorporated firms and the self-employed needs to be imputed as labour income, which in most countries with a dual income tax (*e.g.* Finland, Norway) is done by determining a notional normal return on equity, with profits below the notional return taxed as profit income and profits exceeding the notional return taxed as labour income.[48] This tax system could imply that, in many cases, relatively profitable firms would be subject to higher taxation, resulting in disincentives to undertake relatively risky investment projects which are likely to have higher expected rates of return.[49] Neutrality of the tax system with respect to firms' financing decisions and with respect to the choice of legal form would not be fully achieved.[50] In addition, a dual income tax system can generate incentives to over-declare capital income and under-declare labour income. Incentives to under-declare labour income, for example, by converting dependent employment into self-employment, could put pressure on the funding of social security systems which is largely based on payroll taxes.[51] Moreover, since profit income taxed at the level of the household does not, in the presence of full international capital mobility, affect corporations' location decisions, there is a case for keeping profit taxation at the level of the enterprise as low as possible while, in addition, taxing dividends and capital gains at the level of the household, thus departing from the principle of a uniform taxation of all business income.

In the reform of the taxation of enterprises, priority should be given to lowering the tax rates applying to business profits, notably by reducing or abolishing the local business tax and reducing corporate tax rates. Introduction of a dual income tax system is an option for reform but would require minimising the difference between the top marginal income tax rate and the business income tax rate. Taxation of dividends should be maintained, at moderate rates, consistent with minimising incentives for capital flight, while exemptions to the taxation of capital gains should be eliminated, bringing the taxation of capital gains more into line with the taxation of dividends. The government plans to eliminate exemptions on the taxation of capital gains of private households. In the same vein, the tax allowance for capital income for private households (*Sparerfreibetrag*) should be phased out.

The government is also planning to reduce the inheritance tax burden on small and medium-sized enterprises (SMEs). The planned changes foresee successively reducing the inheritance tax burden for every year an SME is kept by the inheritors. The inheritance tax liability would be relinquished after a 10 year period of ownership by the inheritors. These plans will, if they go ahead, add to the existing inheritance tax advantages for established small and medium-sized enterprises (see the 2004 *Economic Survey*) and would thus further hinder the allocation of capital to its most productive use. In addition, the planned changes would increase the complexity of tax rules and raise the attractiveness of costly tax avoidance measures. Indeed, inheritance tax liabilities may cause liquidity problems to small enterprises with limited access to credit. However, these could be dealt with in a less distortive fashion. Inheritance tax advantages for small and medium-sized enterprises should be phased out. To limit resulting liquidity problems, the inheritance tax liability could be assigned the status of long-term subordinated debt in the balance sheets of small enterprises.

Reform in health care funding needs to be integrated in tax reform

The funding of public health insurance – provided by public health funds – is based on payroll contributions. Participation in the public health care system is compulsory for all employed individuals (with the exception of civil servants) with annual wage earnings below the threshold of about € 47 000 per year, with all other individuals entitled to opt out of public insurance and obtain private insurance instead.

Box 2.1. Recommendations to put fiscal policy on a sustainable path and improve public sector efficiency

Consolidation needs to continue

- Over the medium term, fiscal consolidation – in quantitative and qualitative terms – will have to take place in such a way that potential growth prospects are preserved, with the implication that the bulk of adjustment has to fall on the spending side (including the elimination of distorting tax expenditures) and needs to be linked to public sector reform.

An effective commitment mechanism for fiscal consolidation is needed

- Decision powers of the inter-governmental Finance Planning Committee should be strengthened.
- Fiscal targets and monitoring indicators need to be formulated in terms of national accounting conventions. Economic projections on which fiscal targets are based should be taken from independent forecasters.
- Bailing out of states with high deficits by the federal government should be ended. Solidarity Pact II transfers to the new states should be conditioned on spending adjustment by the new states in favour of investment projects removing bottlenecks for higher growth.

Federal fiscal relations need broad-based reform

- Legislative responsibilities between the federal government and the states should be disentangled and involvement of the states in federal legislation reduced.
- Co-funding of regional projects by the federal government should terminate in all areas where substantial spill-over effects between governments cannot be established. Federal investment aid for the states should be abolished and spending responsibilities together with appropriate financing fully transferred to the states and municipalities. Federal co-financing in university construction should be terminated in its present form.
- The Federal Commissioning of Administration to the states (*Bundesauftragsverwaltung*) should be scaled back by reallocating tasks to the federal government level and the states, respectively. For example, the administration of the motorways should be allocated to the federal level, while long-distance roads (*Bundesstrassen*) could be assigned to the states. Administration of tax revenues which accrue exclusively to the federal government, or are shared between the different layers of government, should be re-allocated from the states to the federal government.
- Inter-governmental transfers should be re-designed so as to reduce the disincentive effects for states to develop their own tax base and tax revenue collection efforts. Equalisation transfer positions of the states should be computed on the basis of notional rather than actual revenue. Making more use of lump sum transfers from the federal government to the states over a multi-annual period is an option.
- The states should be given the right to raise own taxes. One option would be to allow the states to incorporate a surcharge into a reformed – and correspondingly lowered – income tax schedule. Giving the real estate tax a larger role in funding municipalities should be considered.

Box 2.1. **Recommendations to put fiscal policy on a sustainable path and improve public sector efficiency** *(cont.)*

The benefits from public-private partnerships (PPPs) should be more effectively utilised

- Public sector authorities should only engage in PPPs if there is convincing evidence that efficiency gains over the lifecycle of the project outweigh higher financing costs of the private sector. Accruals of future fiscal obligations and contingent liabilities associated with the operation of PPPs and financing institutions should be made explicit within the accounting framework.
- Quality standards for outsourced services need to be defined and translated into output indicators.
- Resources need to be allocated for the purpose of acquiring knowledge to deal with economic and contractual issues of PPPs.

Distortions in the tax system need to be eliminated more consistently

- Tax exemptions should be further reduced, making room to reduce high tax rates on labour and on enterprises. In particular, the government should be more determined in phasing out the tax exemption for labour supplied at night and during public holidays as well as exemptions from fuel tax liability benefiting specific sectors. The tax expenditures for private household expenses on craft and household services as well as the tax allowance for capital income for private households (*Sparerfreibetrag*) should be phased out.
- Inheritance tax advantages for small and medium-sized enterprises (SMEs) should be phased out. Instead, the inheritance tax liability of SMEs could be assigned the status of long-term subordinated debt.

Reaching environmental targets could be achieved with lower costs to economic efficiency

- Exemptions from energy taxes for energy-intensive industries should gradually be phased out. Energy tax rates should be adjusted such that sectors not participating in the CO_2 permit trading scheme pay higher energy taxes than other sectors.
- Consideration should be given to allocate future CO_2 pollution permits through an auction mechanism rather than through grandfathering. The government should use its influence in the EU to raise the limit on the proportion of pollution permits that can be sold through auctions.

Redistributing the burden of health care expenditure could be made more effective and be achieved at a lower cost to economic efficiency by basing redistribution on a broader definition of income (see also the 1997 *Economic Survey*). While the payroll contributions could, to this end, be replaced by contributions on personal income, a system of lump sum per capita *premia* could offer additional advantages (see the 2004 *Economic Survey*), *inter alia* increasing transparency of health care insurance costs, eliminating the dependence of the health funds' finances on labour market developments and providing a mechanism through which disincentives to work are reduced for second earners, such as married women, who currently benefit from free coinsurance through the spouse in the public insurance system. Such a system of per capita *premia* would need to be coupled with an income redistribution mechanism financed from tax revenue which would refund part of the per capita *premia* paid by low income households.

A further option of reform would be to extend compulsory health insurance under a universal funding scheme to the whole population. Compulsory health insurance policies could be offered by public and private insurers, removing the segregation between public and private health insurers.[52] Such a reform could remove the adverse selection of morbidity risks among individuals who can currently choose between private and public health insurance.[53] Moreover, under the current system scope for competition among health insurers is limited, as wage earners below the earnings threshold cannot opt for private insurance and individuals who opt for private insurance cannot generally switch to another private insurer once an initial choice of insurer is made.[54] However, to reap the benefits of more competition, more scope needs to be given to the public health funds to contract selectively with health care providers, turning the health funds into active purchasers of health care services (see the 2004 *Economic Survey*).

Notes

1. To the extent that outsourcing has also reduced non-tax revenue. See Kremer and Wedorff (2004).
2. The freeze in 2004 was discretionary whereas it reflected the introduction of a new pension benefit calculation formula in 2005. See the 2004 *Economic Survey*.
3. Corporate tax receipts collapsed in 2001 as corporations adjusted the distribution of profits to reductions in corporate tax rates, although they have been recovering since then.
4. The simulations are based on social security legislation as of 2004, except the planned increase in the standard retirement age (see also further below) and long-term care, where legislation stipulates nominally fixed payments for specific services. It is assumed instead that the unit costs of long-term care services provided under the long-term care public insurance scheme rise in line with economy-wide labour productivity growth.
5. See Bundesministerium der Finanzen (2005a) and Werding and Kaltschütz (2004). The projections assume that the retirement age would be raised from 65n to 67 years between 2012 and 2035 which would lower the debt-to-GDP ratio by 10 percentage points in 2050 in comparison to the level of debt if the statutory retirement age were to remain unchanged. The government envisages raising the statutory retirement age from 65 to 67 years between 2012 and 2029.
6. Alternative projections of ageing-related spending in European Commission (2006) suggest a similar increase in ageing-related spending overall, but with significant differences in its composition. In particular, owing to more realistic unemployment assumptions, unemployment-related spending is expected to decline less, while pension spending and health care spending increases are more subdued.
7. The unemployment rate is projected to fall to just above 3% by 2030, which is very low in comparison to estimated equilibrium unemployment rates in all OECD countries today. While labour supply growth will diminish and eventually turn negative over the projection period, overall labour supply growth is unlikely to have a substantial impact on unemployment rates in the long run. Moreover, older workers at present have a higher incidence of unemployment than other age groups and their share in total population of working age is set to rise, making such a low unemployment rate difficult to reach. Increased take-up of studies leading to higher degrees, as well as the need to increase public spending on continuing education among older workers to raise their employability might offset the projected dampening impact of smaller young cohorts on education spending. Moreover, education spending in some areas, such as in pre-schooling as well as in primary and secondary schooling, is already relatively low in international comparison. The adverse impact of the changes in the demographic composition of the labour force are likely to have on hours worked is not taken into account. For example, women are, given current policy settings, much more likely to work part-time and take up small jobs than men. Health spending projections leave spending increases induced by technological progress in medicine aside. However, OECD estimates indicate that technological advances account for about 1% yearly real spending growth over the past 20 years across OECD countries. Projected spending on long-term care only includes the public long-term care insurance scheme but excludes additional means-tested long-term care spending provided within the social assistance programme. Moreover, increases in participation of older workers might reduce the availability of informal care, putting additional pressure on government long-term care

spending. OECD estimates suggest that the impact of increasing participation of older workers on long-term health care spending could be substantial.

8. See Besendorfer, Phuong Dang and Raffelhüschen (2005).
9. See Seitz and Kempkes (2005).
10. See for example, Alesina and Ardagna (1998). The evidence in De Mello *et al.* (2004).suggests that the contractionary demand impulse that might be associated with fiscal consolidation measures are reduced by substantial offsetting movements in private savings that accompany structural reductions in the government deficit. In Arcangelis and Martina (2003), reductions of government wage and transfer spending have a small negative impact on output in Germany, which lasts for a few quarters. The maximum impact on quarterly GDP growth is estimated to amount 0.04 percentage points. The estimated impact of government spending on output in Germany estimated by ifo (2001) is also negative and only slightly larger. In Perrotti (2002), the short-term impact of a reduction of government spending in West Germany was estimated to be positive after 1980.
11. See Guidice *et al.* (2003).
12. This is considered, for up to 2002, in: Heinemann (2004).
13. See OECD (2005b).
14. For an assessment of the Spanish budget rule see Giorno and Joumard (2005). For an assessment of the Swiss Debt Brake see OECD (2006). For a discussion of the "golden rule" see Fatás (2005).
15. See Bundesministerium der Finanzen (2003).
16. See Hrbek (2005).
17. See OECD (2003).
18. Büttner and Schwager, (2004).
19. Büttner and Schwager (2004).
20. See Der Präsident des Bundesrechnungshofes (2004).
21. See Der Präsident des Bundesrechnungshofes (2004).
22. See OECD (2005a).
23. Baretti, Huber and Lichtblau (2000).
24. Bundesrechnungshof (2001).
25. Bundesrechnungshof (2000, 2001 and 2004).
26. Bundesrechnungshof (2000).
27. Söllner (2001) argues that a high marginal burden of the inter-state transfer system might imply disincentives for growth-oriented policies by the states even if policy makers focus on maximising votes rather than revenues. See Söllner (2001).
28. See OECD (1998 and 2003).
29. A "lump sum" system of this type of vertical transfers to the regions has recently been adopted by Spain.
30. This has been repeatedly suggested in the German policy debate. See for example the statement of the Scientific Council of the Ministry of Finance: Wissenschaftlicher Beirat beim Bundesministerium der Finanzen (1992).
31. See Joumard and Kongsrud (2003).
32. "Solidarity Pact II" transfers to the new states that are extended for the purpose of financing infrastructure investment are in practice to the largest part used to finance government consumption. See *e.g.* Ragnitz (2004).
33. Bundesministerium der Finanzen (2005b).
34. Private sector borrowing is usually more expensive than government borrowing as governments can spread risks across tax payers. See Arrow and Lind (1970).
35. See the discussion in International Monetary Fund (2004).
36. Deutsches Institut für Urbanistik (2005).
37. See OECD (2004a).

38. See OECD (2005c).
39. In 2002, indirect tax revenues in Germany amounted to 10.5% of GDP compared to 11.4 in the OECD and 12.4 in European OECD countries. OECD (2004).
40. Dismissal compensation payments below € 7 200 remain tax exempt.
41. The government is planning to increase the overall tax rate applying to such jobs from 25 to 30%.
42. Households can deduct 20% of the wage cost of craft services employed for the purpose of home refurbishment up to an annual limit of € 600.
43. Boss and Rosenschon (2004) list about 90 tax exemptions, which largely coincide with a listing from the Ministry of Finance.
44. In competitive markets and in the absence of market failure efficiency requires that intermediate goods generally not be taxed.
45. The pollution permit trading scheme covers energy production, production and processing of ferrous metals, the mineral industry and the pulp and paper industry for installations of a certain capacity. Of these only energy production benefits from specific reductions in taxes on fossil fuels. See OECD (2004b).
46. See OECD (2004b).
47. See Eicher, Elschner and Overesch (2005) and *www.zew.de*. In both studies the investment project is assumed to have a gross return of 20% and comprises a mix of machinery, construction, stocks, patents and financial assets with equal weight. Financing is assumed to be provided through equity, retained earnings and debt, although the weights used differ in both studies.
48. For example, the *German Council of Economic Experts*, in a proposal for implementing the dual income tax in Germany, proposed taxing profits of non-incorporated businesses at a uniform profit tax rate of 25% only to the extent that they fall below a notional return of equity of 6%. Higher profits would be taxed according to the personal income tax schedule. In addition, to reduce incentives for corporations to declare capital income as labour income, the proposal suggests imposing an additional 25% tax on dividends of corporations which are attributable to profits above the 6% threshold. See Sachverständigenrat (2004 and 2005).
49. To some extent, this is already the case for non-incorporated companies as a result of progressive income taxation.
50. For example, businesses with profits above the threshold return on equity would have incentives to substitute equity for debt finance to increase the share of profits taxed at the lower business income tax rate.
51. On the other hand, the self-employed with very low earnings might face opposite incentives, as the currently benefit from the general income allowance in the taxation of personal income which may not apply under a dual income tax.
52. Allowing individuals to freely switch insurer would require participation of all insurers offering compulsory insurance policies in the risk adjustment scheme, which is already applied to the public sector health funds. In addition, each insurer would need to be subjected to the obligation to accept all individuals wishing to enroll.
53. Private health insurers, unlike the public health funds, can, under the current system, adjust their *premia* with respect to individual risk characteristics.
54. This is to prevent adverse selection of risks among private insurers.

Bibliography

Alesina, A. and S. Ardagna (1998), "Fiscal Adjustments: Why They Can Be Expansionary", *Economic Policy: Issue 27*, pp. 487-517.

Arcangelis, G. and S. Lamartina (2003), "Identifying Fiscal Shocks and Policy Regimes in OECD Countries", *European Central Bank, Working Papers*, No. 281.

Arrow, K.J. and R.C. Lind (1970), "Uncertainty and the Evaluation of Public Investment Decisions", *American Economic Review*, Vol. 60.

Baretti, C., B. Huber and K. Lichtblau (2000), "A Tax on Tax Revenue", *CESifo Working Paper*, No. 333.

Besendorfer, E., E. Phuong Dang and B. Raffelhüschen (2005), Die Pensionslasten der Bundesländer im Vergleich: Status Quo und zukünftige Entwicklung, Diskussionsbeiträge/Discussion Papers 129/05, Institut für Finanzwissenschaft der Albert-Ludwigs-Universität Freiburg Im Breisgau.

Boss, A. and A. Rosenschon (2004), *Steuervergünstigungen in Deutschland: Eine Aktualisierung*.

Bundesministerium der Finanzen (2003), "Stellungnahme des Wissenschaftlichen Beirats – Verbesserungsvorschläge für die Umsetzung des deutschen Stabilitätspakts".

Bundesministerium der Finanzen (2005a), "Bericht zur Tragfähigkeit der öffentlichen Finanzen".

Bundesministerium der Finanzen (2005b), "Erleichterungen für Öffentlich Private Partnerschaften – das ÖPP-Beschleunigungsgesetz", *Monatsbericht des BMF*, September.

Bundesrechnungshof (2000), Bemerkungen des Bundesrechnungshofes 2000, Bundestagsdrucksache 14/4226.

Bundesrechnungshof (2001), Bemerkungen des Bundesrechnungshofes 2001, Bundestagsdrucksache 14/7018.

Bundesrechnungshof (2004), Bemerkungen des Bundesrechnungshofes 2004, Bundestagsdrucksache.

Büttner, T. and R. Schwager, (2004), Regionale Verteilungseffkte der Hochschulfinanzierung und ihre Konsequenzen, in: Franz, Wolfgang , "Bildung", Tübingen.

De Mello, L., P. Kongsrud and R. Price (2004), "Saving Behaviour and the Effectiveness of Fiscal Policy", *Economics Department Working Papers*, No. 397, OECD, Paris.

Der Präsident des Bundesrechnungshofes (2004), Gutachten zur Neuordnung der Verwaltung im Bundesfernstrassenbau, Kommission von Bundetag und Bundesrat zur Modernisierung der bundesstaatlichen Ordung, Kommissionsdrucksache 0082.

Deutsches Institut für Urbanistik (2005), Publik Private Partnership Projekte – Gutachten im Auftrag der PPP Task Force im Bundeministerium für Verkehr, Bau- und Wohnungswesen.

Eichler, M., C. Elschner and M. Overesch, *IBC Taxation Index 2005 Effective Tax Burden of Companies and on Highly Qualified Manpower*.

European Commission (2006), *The Impact of Ageing on Public Expenditure: Projections for the EU25 Member States on Pensions, Health Care, Long-term Care, Education and Unemployment Transfers (2004-2050)*, Special Report No. 1/2006.

Fatás, A. (2005), "Is There a Case for Sophisticated Balanced-Budget Rules?", *Economics Department Working Papers*, No. 466, OECD, Paris.

Federal Ministry of Finance (2004), *19th Subsidies Report of the Federal Government*.

Giorno, C. and I. Joumard (2005), "Getting the Most out of Public Sector Decentralisation in Spain", *Economics Department Working Papers*, No. 436, OECD, Paris.

Guidice, G., A. Turrini and J. In't Veld (2004), "Non-Keynesian Fiscal Consolidations in the EU? *Ex post* Evidence and *Ex ante* Analysis", *CEPR Discussion Paper*, No. 4388.

Heinemann, F. (2004), Zur Prognosequalität der Finanzplanung des Bundes, ZEW Konjunkturreport, December 2004.

Hrbek, R. (2005), Für einen Konvent mit weitem Mandat, Zeitschrift für Wirtschaftspolitik, No. 2/2005.

ifo (2001), *Finanzpolitik im Spannungsfeld des Europäischen Stabilitäts- und Wachstumspaktes*.

International Monetary Fund (2004), "Public-Private Partnerships", mimeo.

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

Kremer, J. and K. Wendorff (2004), "Germany after Qualification to EMU: A Disaggregated Approach to the Analysis of Structural Public Finance Developments", *Vierteljahreshefte zur Wirtschaftsforschung*, No. 73/2004.

Ludwig, V. and F. Pfeiffer (2005), *Abschreibungsraten allgemeiner und beruflicher Ausbildungsinhalte, ZEW Discussion Paper*, No. 05-36.

OECD (1998), *OECD Economic Surveys: Germany*, OECD, Paris.

OECD (2003), *OECD Economic Surveys: Germany*, OECD, Paris.

OECD (2004a), *OECD Economic Surveys: Germany*, OECD, Paris.

OECD (2004b), *Sustainable Development in OECD Countries*, OECD, Paris.

OECD (2005a) *Economic Surveys: Austria*, OECD, Paris.

OECD (2005b), *OECD Economic Surveys: Euro Area*, OECD, Paris.

OECD (2005c), *OECD Tax Revenue Statistics 1965-2004*, OECD, Paris.

OECD (2006), *OECD Economic Surveys: Switzerland*, OECD, Paris.

Perrotti, R. (2002), "Estimating the Economic Effects of Fiscal Policy in OECD Countries", *ECB Working Paper,* No. 168.

Ragnitz. J. (2004), "Solidarpakt II: Anpassungen erforderlich", *Wirtschaft im Wandel*, No. 14/2004.

Rehm, H. (2005), Öffentliche Finanzen im Jahr 2004, in *Wirtschaft und Statistik Vol. 4/2005*, pp. 388-394.

Sachverständigenrat (2004) *Jahresgutachten 2004/05,* "*Erfolge im Ausland – Herausforderungen im Inland*".

Sachverständigenrat (2005), *Jahresgutachten 2005/06, Die Chance Nutzen – Reformen Mutig Voranbringen*.

Seitz, H. and G. Kempkes (2005), *Fiscal Federalism and Demography*, Technical University Dresden, Department of Business Management and Economics, mimeo.

Söllner, F. (2001), Die Anreizwirkungen des Länderfinanzausgleichs – eine politökonomische Analyse, Konjunkturpolitik 47, 3/2001.

Werding, M. and A. Kaltschütz (2004), Modellrechnungen zurlangfristigen Tragfähigkeit der öffentlichen Finanzen, Ifo Institute of Economic Research and University of Munich, Study commissioned by the Federal Ministry of Finance.

ISBN 92-64-02515-4
OECD Economic Surveys: Germany

Chapter 3

The performance of the education system needs to improve

While average educational attainment in the population of working age is relatively high, with most individuals possessing at least an upper secondary degree, the tertiary graduation rate is one of the lowest in the OECD and secondary schooling outcomes are in need of improvement. Improving access to early childhood education, as well as a more consistent evaluation of school performance against nation-wide or state-wide performance standards, coupled with more school autonomy, notably in staffing decisions, can contribute to raising secondary education outcomes. Universities need to be given better incentives to offer attractive degree programmes with relatively short study duration, by making funding of universities more outcome-oriented and by further strengthening their autonomy with respect to budgetary, administrative and personnel decisions as well as student admissions. Student fees, coupled with a loan scheme and an income-contingent repayment scheme, should be introduced in all states.

Securing the supply of highly skilled workers is crucial for sustaining high levels of productivity growth through the generation and absorption of new technologies. Indeed, educational outcomes – for example measured in terms of average literacy scores – appear to make a substantial contribution to the level of GDP per capita.[1] For example, average educational attainment of the population of working age is an important determinant of ICT use.[2] Raising educational attainment can thus help offset the adverse impact of ageing on living standards. In a similar vein, improving the skills of workers at the bottom of the skills distribution, in particular, helps reduce benefit dependency, as unskilled workers are particularly likely to be affected by unemployment and high effective marginal taxation resulting from the withdrawal of social assistance benefits.

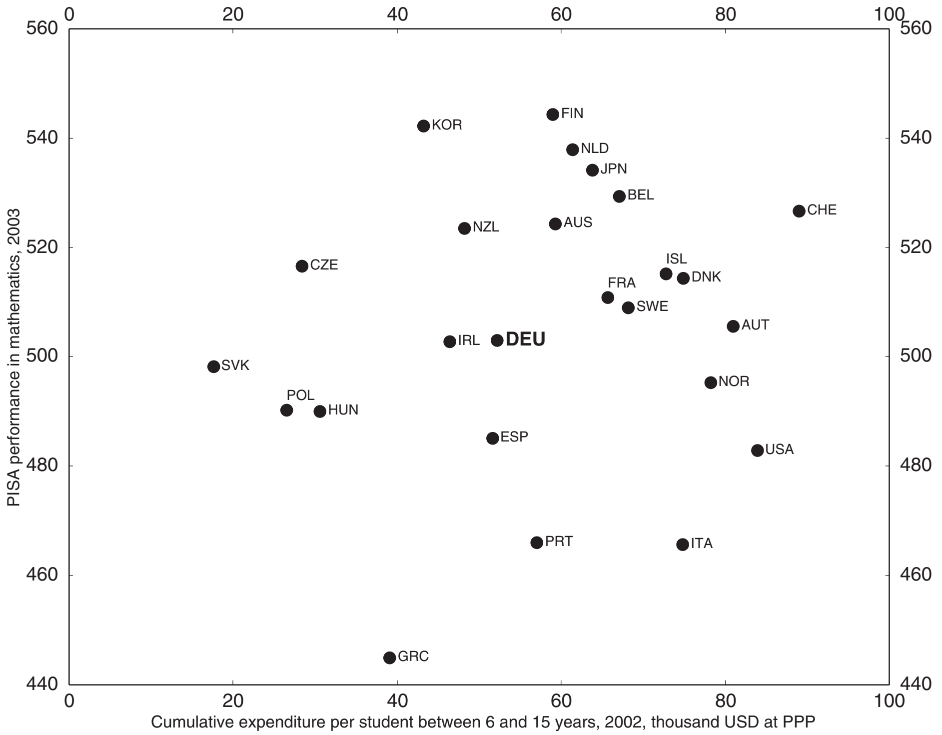
Outcomes in secondary education need to improve further

Student performance in the 2003 PISA exercise was close to the OECD average, with some improvement in comparison to the 2000 exercise. The results compare unfavourably with the performance that would be expected on account of the relatively high level of income per capita and the relatively high level of average educational attainment of the parent generation in Germany, as indicated by cross-country evidence.[3] Moreover, the distribution of scores across pupils was one the widest among OECD countries, with a large share of pupils performing poorly. Indeed, 9% of tested 15-year-olds did not master basic mathematical skills, more than in most OECD countries.[4] To a considerable extent, the large variation in test results reflects the strong correlation, relative to other countries, of schooling results with parental social background,[5] which is also the case when controlling for differences in migration background of pupils across countries.[6] These results suggest that there is considerable scope to improve education outcomes at the secondary education level.

While cumulative spending per pupil in pre-school, primary and secondary education in Germany is lower than in many high-income countries, spending across countries is weakly correlated with results obtained in the PISA study, suggesting room for improving efficiency of public spending in the education system (Figure 3.1). Indeed, if the conditions for efficient use of resources in education provision are not in place, an expansion of resources may not be successful in raising educational outcomes. Empirical evidence suggests that raising input levels alone – as measured, for example, by the availability of computing equipment and class size – has not improved pupil performance in the past.[7]

Many of the countries that performed well in the PISA tests have been shifting education policy and practice from a focus on inputs – the resources, structures and content of schooling – towards a focus on learning outcomes evaluated externally and measured against countrywide standards. Centralised setting of final school exams, combined with regular external evaluation of pupils' progress against universal standards, which apply to all schools, has been found to be associated with better pupil performance.[8] Empirical evidence shows that countries giving a large degree of autonomy to individual schools for organising their own programmes while setting national performance standards perform better than

Figure 3.1. **PISA results and spending**



Source: OECD (2003), *Learning for Tomorrow's World, First Results from Pisa* and OECD (2005), *Education at a Glance*.

other countries. Cross-country evidence also suggests that early selection of students may contribute to the dependency of test results on family background without raising average test results.[9] Wide access to pre-school early childhood education also improves education outcomes at the secondary education level, in particular of children from a disadvantaged background. Indeed, children from socially-disadvantaged background appear to perform better at school if they attended early childhood education.[10]

The federal states – which are in charge of education policy – have reached consensus on a number of national minimum performance standards which are differentiated across the different school types in the selective secondary schooling system.[11] Some states have given schools the option to take decisions more autonomously in selected aspects of school administration. Most states have introduced or are in the process of introducing centralised final school exams. However, while some states have introduced state-level tests to evaluate students' progress, regular external evaluation mechanisms of school performance against performance standards at several stages of secondary schooling are largely absent, although the joint creation, by all the states, of the Institute for Quality Development in Education (*Institut zur Qualitätsentwicklung im Bildungswesen*), which is in charge of developing tests to evaluate learning outcomes, is a step in this direction. Teacher performance is not regularly evaluated. School inspection is largely limited to ascertaining the adherence of schools to formal legal requirements, rather than the contribution of schools to educational outcomes. Managerial skills in the schools are lacking.[12]

Thus, while the measures taken point in the appropriate direction, they do not yet constitute a comprehensive reform programme covering all relevant aspects of education policy and the measures do not cover all schools. Moreover, early selection of pupils into several strands of secondary schools predominates. Setting different standards for different school types may entail the risk that performance targets for schools with pupils from socially disadvantaged backgrounds are not ambitious enough. At the same time, focussing on meeting minimum standards could potentially reduce incentives for schools exceeding minimum standards to further improve performance. Pupil performance should be regularly evaluated against country-wide or state-wide universal standards for schooling attainment in all schools, while leaving schools more freedom in determining suitable ways to reach their targets. Schools' management capacities should be expanded.[13] Consideration should be given to postponing selection of pupils into different types of secondary schools to a later age. Moreover, it needs to be ensured that incentives to improve performance are in place. Universal performance standards should be set which apply to all schools, while ensuring that schools performing above set standards have incentives to improve performance further.

Changes in teaching personnel management are necessary to reap the benefits of increased autonomy and accountability of schools. Schools' influence on the hiring of teaching staff is limited, and teachers – who generally have the status of civil servants – enjoy a high level of job security. Teacher promotion practices are largely oriented towards formal qualifications and seniority,[14] offering little scope to reward professional development and attract teachers to positions where supply is relatively scarce. Moreover, the labour market for teachers is segmented both across different school types as well as across the *Länder*, limiting choice in hiring decisions and exacerbating mismatch of supply and demand. For example, there are some obstacles in the recognition of job qualifications across states and vacancies available in one state are not generally known in other states.[15] Allowing schools to take their own hiring decisions, relaxing job security when teacher performance is poor and allowing schools to better reward good teacher performance would give schools effective tools to better reach performance standards. Indeed, international evidence on the effect of school autonomy on pupil performance suggests that decentralisation of decisions on personnel at the school level is particularly beneficial.[16] Schools should be allowed to make their own hiring decisions. Job security in the teaching profession should be relaxed, for example by making job tenure conditional on teachers reaching minimum standards in external assessments. Mobility of teachers across school types and states should be strengthened.

Attendance of pre-school early childhood education and child care facilities in Germany is relatively low, especially below the age of 3, with just above 60% of 3-year olds attending.[17] Moreover, provision is still often limited to part-time service, which also contributes to discouraging female labour supply. Access to pre-school education, while subsidised, requires payment of fees by parents, although exemptions based on means tests are available. Since subsidies are to a significant extent financed by the municipalities, there is a risk that provision of early education is scarce in municipalities with relatively poor socio-economic characteristics, where early childhood education would be particularly beneficial. Moreover prices are administratively set, giving rise to queues for placements, which entails the risk that higher subsidies would not raise supply if prices (including subsidies) remain constant. Early education and child care facilities are not sufficiently oriented towards improving subsequent educational outcomes at school. While steps have been taken to develop evaluation mechanisms, education outcomes in early education establishments are not routinely monitored and qualifications of staff to provide education are relatively weak.[18] An evaluation should be carried out to see whether fees in early education discourage attendance of early education facilities. Consideration should be given to provide subsidies to early education through a voucher system, with vouchers to be used in accredited early education facilities. Federal funding of a voucher system may be preferable, given the geographical spill-overs of early education resulting from labour mobility and the impact on subsequent benefit dependency. The level of the subsidy would have to be determined such as to limit discouraging attendance while eliminating rationing of placements. Early education outcomes should be evaluated against nation-wide or state-wide standards, with evaluation linked to accreditation.

Making take-up of university education more attractive would help weather the impact of demographic change on standards of living

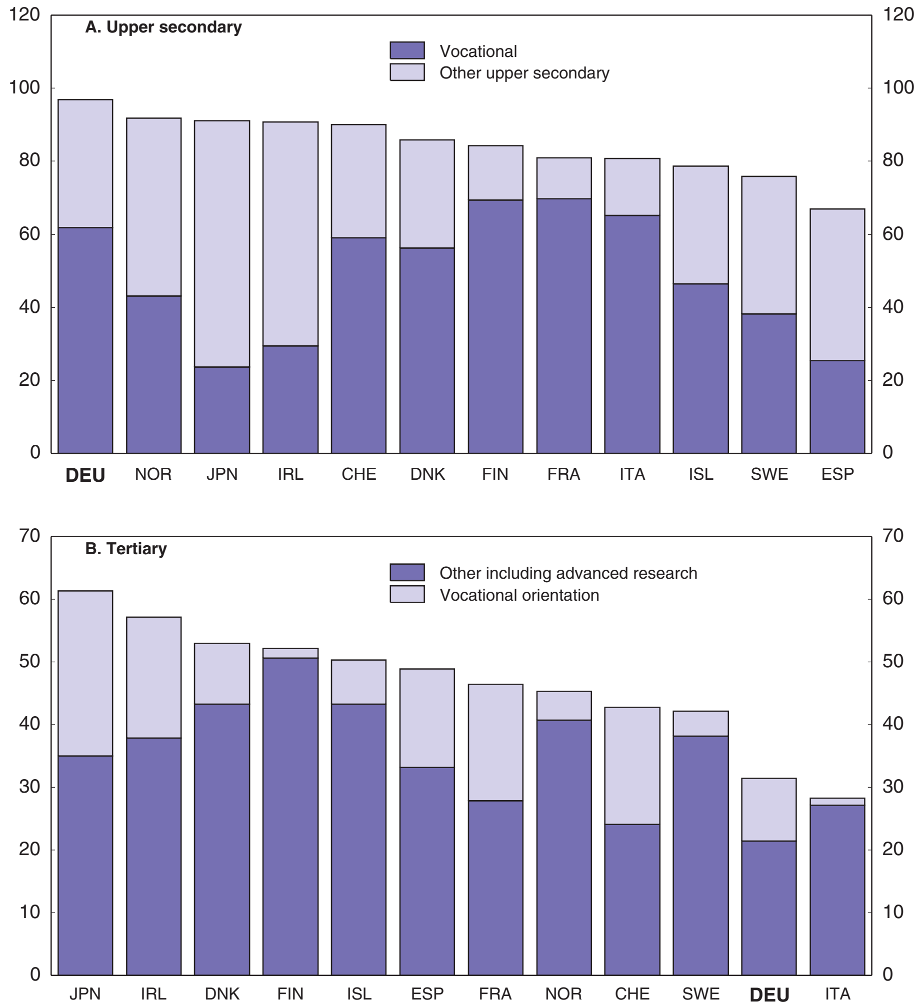
Participation in education at the upper secondary education level is well-developed in Germany, as reflected in one of the highest graduation rates among OECD countries (Figure 3.2).[19] A large proportion of students – close to two thirds of all students in upper secondary education – enrol in vocational training programmes, most of whom participate in dual system apprenticeship, which combines training at the workplace with formal school education. The dual apprenticeship system has contributed substantially to keeping youth unemployment rates low in Germany. However, the considerable efforts of many OECD countries to widen participation in tertiary education courses over the last two decades have not been matched by similar efforts in Germany. The proportion of students completing tertiary courses is today one of the lowest in the OECD, although the tertiary graduation rate has picked up in recent years.[20]

With the new cohorts entering the labour market being relatively small, large changes in graduation rates will be required to prevent a decline in the relative position of Germany with regard to the proportion of highly skilled workers in the labour force. Moreover, changes in the skill composition of the labour force may interact with the ageing process. Empirical evidence suggests that the human capital accumulated in upper secondary education programmes – notably programmes within the apprenticeship system – depreciates more quickly than human capital accumulated in tertiary programmes.[21] The difference in earnings between graduates of tertiary programmes and graduates from secondary programmes with vocational degrees increases somewhat between the age of 35 and 60[22] and the gap in employment rates between graduates of tertiary and upper secondary vocational education programmes increases markedly as workers approach retirement age, suggesting that labour market performance of graduates from tertiary degree courses develops more favourably as age progresses than is the case for graduates from upper secondary vocational courses (Figure 3.3). Indeed, given the need to extend the length of working lives, policies that better sustain human capital throughout working lives become more important.

Thus, the economic benefits of improving the attractiveness of tertiary degree studies could make an important contribution to weathering the impact of ageing on living standards. The duration of tertiary studies remains very long, reflecting both long statutory durations of chosen degree courses as well as the high degree of discretion students have to determine the amount of time they take in completing degree courses, which leads to average duration exceeding statutory duration.[23] Long study duration contributes substantially to high spending per graduate. Long study duration also contributes to the

Figure 3.2. **Graduation rates, 2003**[1]

Per cent of graduates to the population at the typical age of graduation



1. 2002 for DNK, FIN, ITA.

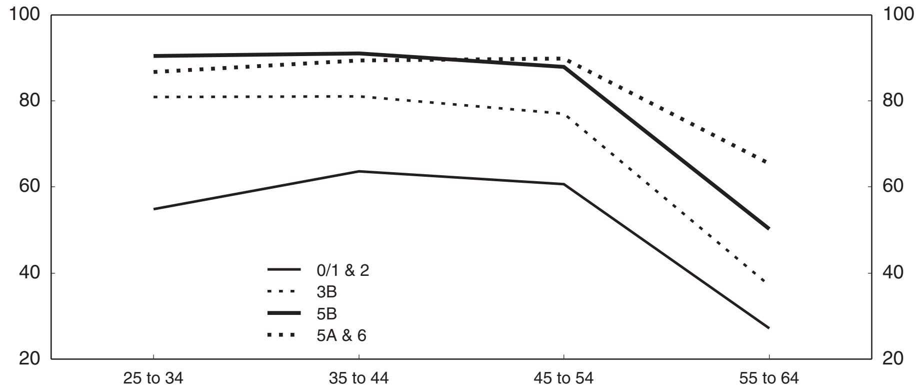
Source: OECD, *Education at a Glance* (2005).

low graduation rate from tertiary studies, reducing the private returns to education, increasing perceptions of risks associated to taking up tertiary degree courses on the part of potential students, and contributing significantly to the fact that – notwithstanding relatively low take-up – the drop-out rate is high. At the same time, average expenditures on tertiary education per graduate are among the highest in the OECD, indicating that there is substantial scope for efficiency gains.

A new two-tier degree structure, introduced in 1999, which allows university students to obtain bachelor and master degrees after studies of 3 or 4 years, respectively, is not yet sufficiently well established to reduce average study duration significantly. While about

Figure 3.3. **Employment by age group and highest education attainment, 2003**[1]

Per cent of population



1. Highest education attainment:
   0/1 and 2. Pre-primary to lower secondary.
   3B. Upper secondary vocational.
   5B. Tertiary education – 1st or 2nd qualification, short or medium duration, vocational orientation.
   5A and 6. Tertiary education – 1st or 2nd degree, medium or long duration and 2nd stage, leading to an advanced research qualification, academic orientation.

Source: OECD, Education and Employment, Labour and Social Affairs Directorates.

one third of degree courses are at present offered within the two-tier structure, these were taken up by 15% of students entering university in 2005.[24] The attractiveness of the new study programmes is likely to be influenced by the extent to which course structures are adapted to the shorter duration. While quality assessments along these lines are conducted in the course of the accreditation of the new study programmes, as required by EU rules, only a few of the new courses have been successful in receiving a favourable quality assessment.[25]

Incentives of universities to offer attractive study programmes could be improved by strengthening competition among universities. State and federal governments contribute almost all of the funding for tertiary education, with student fees as yet not playing a significant role, and education output generally only plays a minor role in the allocation of funding to universities. The funding of universities thus generates few incentives for universities to offer attractive study programmes (see the 2004 *Economic Survey*). To improve performance incentives for universities in teaching and research, a new programme ("*Exzellenzinitiative*") co-funded by the federal government and the states, foresees the tendering of funds for the highest-quality post-graduate teaching schools and research projects submitted by universities. For example, the universities submitting the 40 graduate school projects which receive the most favourable assessment from an independent evaluation panel will obtain additional government funding until 2011. However, this programme may not improve performance incentives of universities which do not apply for any funds under the scheme and few universities are likely to participate in the tendering process across a broad range of subjects.[26] Moreover competitive performance incentives under the scheme may well diminish once the tendering process of the funds is completed, especially if the programme is not renewed and renewals are not expected to depend on past performance. Thus, while the programme is a step forward, incentives to raise research performance and improve teaching quality need to be improved on a broader and more sustained basis. Allocation of government funding should be more strongly oriented towards output indicators, such as, for example, the number of graduates[27] or the results of quality assessments in the accreditation process. Moreover, the federal government should play a significant role in funding universities, given the significant geographical spill-overs (see Chapter 2), with federal government funding linked to output indicators.

For performance incentives to be effective, they need to be coupled with autonomy of universities, for example with respect to personnel management and use of funds. While some steps have been taken in enhancing university autonomy, there is substantial scope for further improvement. Federal framework legislation allows states to implement far-reaching autonomy, but this has only been fully implemented for some universities in one state.[28] Personnel regulation remains restrictive (see the 2004 *Economic Survey*). Universities can now choose at least 60% of their student intake themselves, but part of the student intake continues to be allocated through a centralised bureaucratic process. University budgets have become more flexible, allowing universities to shift funds more feely between budget items and to shift unspent budget resources to the following year. Some states have also introduced global budgets for universities.[29] However, global budgets have not been introduced throughout, and most states have reserved considerable rights to decide on administrative matters of universities.[30] Global budgets should be introduced for all universities. Administrative interference in universities should be removed and personnel regulations should be eased. In the allocation of students to universities more room should be given to choice by students and universities.

Notwithstanding significant scope for raising efficiency in tertiary education, substantial increases in the proportion of participation in higher education will require expanding the financial resources available to universities. With government finances under pressure, student fees could provide additional financial resources. Following a decision by the constitutional court to lift a ban on student fees contained in federal legislation, 5 of 16 states are planning to introduce student fees amounting up to € 1 000 per year of study by 2008. If the plans go ahead, the fees will flow directly from paying students to the university they attend and revenues will be ear-marked to providing supplementary funding of university teaching expenditure. Fee-paying students will have access to state loans in order to defer payment until they complete their studies. The loan schemes will be linked to income-contingent repayments and foresee that universities bear the default risk of their graduates, which may strengthen incentives to make degree courses more relevant for skills demanded in the labour market. Moreover, introduction of student fees will contribute to internalising the geographic spill-overs of the benefits associated to state government spending on tertiary education, as argued above. Student fees coupled with a loan scheme and income-contingent repayments should be introduced in all states. This should not be used as a substitute for public funding.

With most students eligible for tertiary education already enrolling in university courses, a significant increase in take-up of tertiary education will however also require widening of access to university. Access to university is at present largely limited to students with a higher secondary degree (*Abitur*) who graduate from the most academically-oriented track within the selective secondary schooling system, while more vocationally oriented secondary education programmes do not sufficiently prepare students for tertiary level programmes. Reflecting the strong dependence of secondary education outcomes on parental background, access to university in Germany is strongly linked to parental background as well in international comparison, indicating that scope to offer access to university to talented students with relatively unfavourable parental background is unexploited.[31] Improving secondary education outcomes and reducing their dependence on parental background would contribute to widening access to tertiary education. In addition, access to university should be widened, ensuring that non-academic tracks of secondary education prepare better for entry to university.

Box 3.1. **Recommendations for a more efficient education system**

Outcomes in secondary education need to improve further

- Pupil performance should be regularly evaluated against country-wide or state-wide universal standards for schooling attainment in all schools, while leaving schools more freedom in determining suitable ways to reach their targets. Schools' management capacities should be expanded.
- Consideration should be given to postponing selection of pupils into different types of secondary schools to a later age.
- Schools should be allowed to make their own hiring decisions. Job security in the teaching profession should be relaxed, for example by making job tenure conditional on teachers reaching minimum standards in external assessments. Mobility of teachers across school types and states should be strengthened.

University study programmes need to become more attractive

- Allocation of government funding to universities should be more strongly oriented towards output indicators, with federal government funding playing a significant role.
- University autonomy should be strengthened, introducing global budgets for all universities, further eliminating administrative interference in universities and further easing personnel regulations.
- Student fees for tertiary education courses, coupled with a loan scheme and income-contingent repayments, should be introduced in all states. This should not be used as a substitute for public funding.
- Access to university should be widened, ensuring that non-academic tracks of secondary education prepare better for entry to university.

Early childhood education and child care needs to be better oriented towards improving educational outcomes and access needs to be widened

- An evaluation should be carried out to see whether fees in early education discourage attendance of early education facilities. Consideration should be given to provide subsidies to early education and child care through a voucher system, with vouchers to be used in accredited early education facilities.
- Early education outcomes should be evaluated against nation-wide or state-wide standards, with evaluation linked to accreditation.

Notes

1. See OECD (2005b).
2. See Scarpetta and Nicoletti (2005).
3. On the basis of residuals from cross-country regressions of PISA results on these variables. See OECD (2004c).

4. OECD (2005b).
5. OECD (2004c).
6. Schütz und Wössmann (2005).
7. Wössmann (2005a).
8. Wössmann (2005b).
9. See Hanushek und Wössmann (2005) who show that inequality test results tend to increase relatively strongly in the course of secondary education in countries with early selection of pupils into different tracks of secondary schools. However, as is the case of school autonomy, no evidence is yet available for changes in educational outcomes over time resulting from the introduction of changes in selection rules.
10. Schütz and Wössmann (2005) and OECD (2004a).
11. Decisions on common standards generally require consensus of all states involved A number of such educational standards have been published by the conference of state education ministers (*Kultusministerkonferenz*).
12. Halász *et al.* (2004).
13. Halász *et al.* (2004).
14. The states of Baden-Württemberg and Nordrhein-Westfalen have introduced performance elements in rules governing promotions. See Halász *et al.* (2004).
15. OECD (2004a).
16. See Wössmann (2005a).
17. According to data from the Microcensus. See OECD (2004a). Early education and child care up to age 3 is provided in *Krippen*, up to age 6 in *Kindergärten*. Facilities are mostly provided by non-profit organisations, notably the churches, with some provision by municipalities.
18. OECD (2004a).
19. OECD (2005b).
20. OECD (2005b).
21. See the empirical analysis in Ludwig and Pfeiffer (2005), which is based on survey evidence on workers' assessment of the usefulness of education they received.
22. OECD (2005a). The effect is more marked for women than for men.
23. Egeln and Heine (2005).
24. Egeln and Heine (2005).
25. Egeln and Heine (2005).
26. In some states, no university applied for any funding under the scheme.
27. See, for example, OECD (2005c) for a discussion of possible education output indicators that can be used in university funding.
28. These are the *Stiftungshochschulen* in the state of *Niedersachsen*.
29. *E.g.* the state of Northrhine-Westfalia is introducing global budgeting in 2006. Ziegele and Müller (2005).
30. Hartwig (2004).
31. Egeln and Heine (2005).

Bibliography

Egeln, J. and C. Heine (2005), *Indikatoren zur Ausbildung im Hochschulbereich*, ZEW documentation 2005-1.

Halász, G., P. Santiago, M. Ekholm, P. Matthews and P. McKenzie (2004), *Attracting, Developing and Retaining Effective Teachers, Country Note: Germany*, OECD, Paris.

Hanushek, E. and L. Wössmann (2006), "Does Early Tracking Affect Educational Inequality and Performance? Differences in Evidence across Countries", *NBER Working Paper*, 11124.

Hartwig, L. (2004), OECD IMHE-HEFCE Project on International Comparative Higher Education Financial Management and Governance in HEIS, Bayerisches Staatsinstitut für Hochschulforschung und Hochschulplanung.

Ludwig, V. and F. Pfeiffer (2005), *Abschreibungsraten allgemeiner und beruflicher Ausbildungsinhalte, ZEW Discussion Paper*, No. 05-36.

OECD (2004a), *Country Note, Early Childhood Education and Care Policy*, OECD, Paris.

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

OECD (2004c), *PISA 2003 First Results*, OECD, Paris.

OECD (2005a), *Ageing and Employment Policies: Germany*, OECD, Paris.

OECD (2005b), *Education at a Glance*, OECD, Paris.

OECD (2005c) *Economic Surveys: Austria*, OECD, Paris.

Scarpetta, S. and G. Nicoletti (2005), "Product Market Reforms and Employment in OECD Countries", *Economics Department Working Papers*, No. 472, OECD, Paris.

Schütz und Wössmann (2005), *Chancengleichheit im Schulsystem: Internationale deskriptive Evidenz und mögliche Bestimmungsfaktoren, IFO Working Paper*, No. 17.

Wössmann, L. (2005a), *Leistungsfördernde Anreize für das Schulsystem*, Ifo Schnelldienst 19/2005.

Wössmann, L. (2005b), The Effect Heterogeneity of Central Exams: Evidence from TIMSS, TIMSS-Repeat and PISA, *Education Economics 13(2)*, pp. 143-169.

Ziegele, F. and U. Müller (2005), Einführung des Globalhaushalts in Nordrhein-Westfalen: Optimierung der Rahmenbedingungen, Arbeitspapier 61, CHE: Gütersloh.

ISBN 92-64-02515-4
OECD Economic Surveys: Germany

Chapter 4

Labour market reform should go on

Major steps in labour market reform have been implemented over the last three years. These need to be followed up in several respects in order to raise the economy's capacity to generate employment. The present tax and transfer system still implies significant disincentives for labour supply of older people and spouses, which should be eliminated. Unemployment related benefits and active labour market policies can be better geared toward activating the unemployed, while institutional reform of the Public Employment Service should continue. On the labour demand side, there remains scope to raise the efficiency of Germany's employment protection system. Also, provisions should be made to allow for a higher degree of wage flexibility across qualifications and regions to fight unemployment.

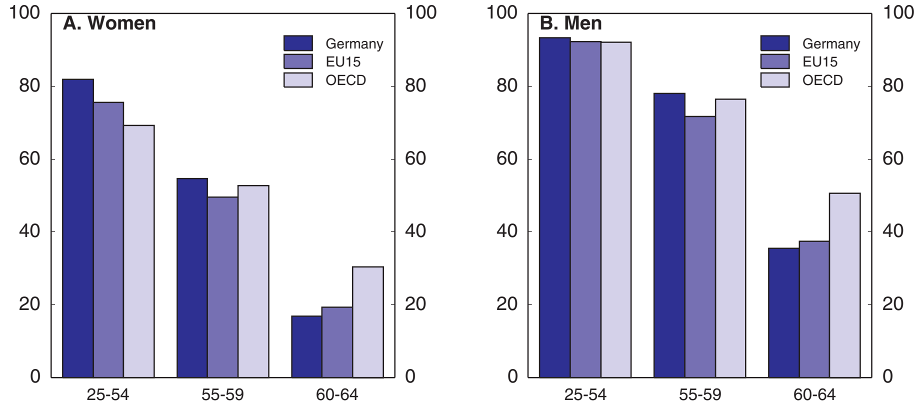
High levels of unemployment, which continued to trend up over the 1990s and into the present decade, and rising social charges have lead to considerable pressure on labour markets to adjust (see Chapter 1). In response, aggregate wages moderated and work conditions agreed between employers and employees became considerably more flexible over the last years. On the policy side, major steps in labour market reform have been implemented over the last three years. The thrust of reform focused on reducing disincentives in unemployment-related benefits to accept employment, and better activation strategies for the unemployed. Policies comprised: organisational reform of the Federal Labour Office; the introduction of new active labour market measures; the introduction of tax preferences for small jobs with only a few hours worked; deregulation of fixed term and temporary employment contracts; and an easing of dismissal protection. At the beginning of 2005 a new income replacement scheme for the long-term unemployed was introduced, replacing former unemployment assistance and social assistance benefits. As has been outlined in the last *Survey*, the thrust of reform are important steps in the right direction. However, reform is incomplete yet, and demands have come up in the public debate to implement complementary measures some of which risk impairing the effectiveness of what has already been achieved. This chapter considers major issues that are important for increasing the capacity of the economy to generate employment, and makes suggestions for further reform. The present tax and transfer system still implies significant disincentives for labour supply, which should de remedied. Activation strategies for the unemployed can be improved, and this includes further institutional reform of the Public Employment Service (PES). On the labour demand side, there remains scope to raise the efficiency of Germany's employment protection system, and provisions should be made to allow for a higher degree of wage flexibility across qualifications and regions.

Reducing disincentives to labour force participation of older people and spouses

Labour force participation of older workers in Germany is still low by international comparison (Figure 4.1). Since the second half of the 1990s channels into effective early retirement outside the pension scheme have gained importance. The main channels utilised for withdrawal from the labour force prior to retirement are extended periods of unemployment insurance benefits for older unemployed and a subsidised part-time employment scheme for older employees (*Altersteilzeit*, AT). The former allowed unemployed workers aged 58 and older to receive unemployment insurance benefits for up to 32 months without obligation to search for a job. In February 2006 the maximum eligibility period for the new unemployed in this age group was cut to 18 months. Also, extended eligibility periods for medium age groups were cut to the standard duration of 12 months. However, persons aged 58 and older are still exempted from the job search requirement. The AT scheme replaces part of earnings foregone if older employees decide to reduce full-time employment by 50%. Participants are allowed to choose how to distribute part-time employment over a maximum period of 10 years from the age of

Figure 4.1. **Labour force participation, 2004**

Labour force as per cent of population, by age group



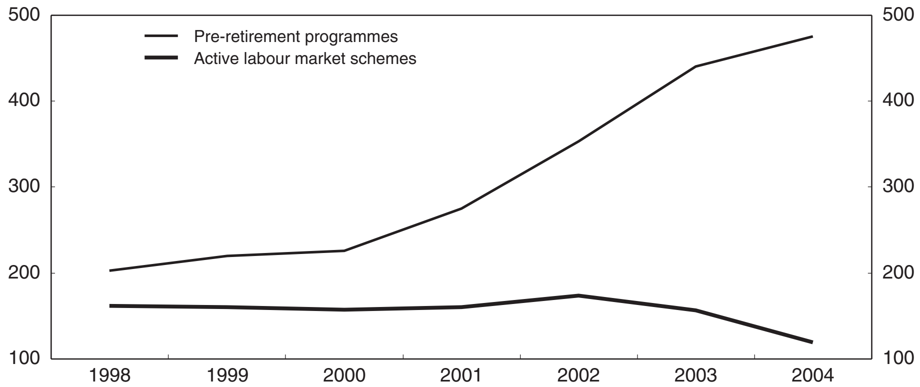
Source: OECD Employment Outlook.

55 onwards, subject to a collective agreement between the employer and a union and the hiring of a replacement worker. Most employees decide to work full-time in the first half of the period and not to work in the second half. Subsidies for new entries into the AT scheme will be terminated in January 2010. Both schemes have been used at increasing rates by employers in agreement with employees to terminate employment for workers at older age, thereby by-passing the provisions of employment protection legislation, which, in turn, shifts part of the costs of reducing the workforce from firms to the social insurance system.[1] Once the benefits under either scheme are exhausted, they might be followed up by early retirement pensions, although these will be completely phased out by 2016.[2] In 2004 the number of recipients of AT and extended unemployment insurance benefits was almost 4 times as large as the number of participants in active labour market measures designed to foster the hiring of older employees (Figure 4.2).[3]

This shows that policies to improve employment chances for older workers are undermined as long as effective early retirement is financially attractive. The abolition of extended eligibility periods for unemployment insurance benefits marks considerable progress in reducing incentives for older workers to drop out of the labour force. However, the fact that employees aged 58 and older continue to be exempted from job search obligations, in contrast to original plans by the government, suggests that employers will continue to offer pre-retirement packages that are effectively subsidised by the Federal Labour Office, followed up by early retirement pensions on account of unemployment as long as these are not completely phased out. Hence, the exemptions from the job search requirement should not be prolonged further. Subsidies for the AT (*Altersteilzeit*) scheme should be removed. Moreover, consideration should be given to phasing out the associated early retirement schemes in the pension system more quickly than presently scheduled or to make utilisation more costly by raising the discounts for retirement below the statutory retirement age. Germany's pension system offers various options for gradual retirement, which are hardly utilised at present. These options are likely to be exploited more fully, when subsidisation of early withdrawal from the labour force is abolished.

Figure 4.2. **Older people participating in pre-retirement programmes and active labour market schemes**[1]

Thousands



1. Considered in the pre-retirement programmes are recipients of unemployment insurance benefits of extended duration without obligation to search for a job, and participants in the subsidised part-time employment scheme for older people (*Altersteilzeit*).

Source: Eichorst and Spross (2005).

The new government has announced plans to increase the statutory retirement age in annual steps between 2012 and 2029 to 67 years of age. This measure, which speeds up the phased increase in the statutory retirement age that was envisaged earlier, would be an important step toward raising labour force participation of older people. Even then, the financial burden of Germany's pension system caused by the ageing of the population will imply a substantial increase in social charges (see Chapter 1 above). In the public debate, following the announcement of this plan, suggestions were made to exempt certain occupational groups with above average physical stress from the increase in the retirement age. These have been rejected by the government. Indeed, empirical evidence for OECD countries suggests that life expectancy differs across social groups by several years.[4] While it is appealing to account for this fact in the pension system, there are obstacles that could outweigh the benefits from such an approach. Empirical evidence on life expectancy by occupation is sparse. Assessments would have to undergo continuous adaptation as occupational characteristics are changing and new professions come into play. Incentives for professional groups to put pressure on the government for awarding them special treatment might pose a risk of permanent lobbying that could result in gradual extension of the occupations covered, undermining policies to curb early retirement.

In fact, persons with limited or no capacity to work are in principal covered by the pension scheme for reduced earning capacity (*Erwerbsminderungsrente*, EMR), which provides full or partial pension benefits depending on the degree of reduced capacity to work. However, persons, with partially reduced earnings capacity receive a full EMR pension if they cannot find a part-time job. In particular, for older persons with reduced earnings capacity it is assumed that such jobs are unavailable and thus they are automatically entitled for a full EMR pension. This exemption should be dropped, as suggested in the OECD *Report on Ageing and Employment Policies* for Germany.[5] Instead, persons with partially reduced earnings capacity should be obliged to register with the

Public Employment Service (PES) in order to be placed in part-time employment. As this is likely to reduce outlays for EMR pensions, there is scope to reduce the present transfers from the unemployment insurance system to the pension system.

The plans by the federal government to raise the minimum retirement age to 67 years should be implemented, without exceptions for occupational groups. At the same time, there is a need to harmonise the minimum entitlement age for preferential income taxation of pensions obtained from private (*Riester*) and occupational pension schemes with the statutory minimum age in the general public schemes. For the former schemes, income tax advantages accrue from the age of 60 onwards, providing further incentives outside the public pension system for early withdrawal from the labour force. These should be terminated for activation policies to be effective. Moreover, special pension rules for civil servants, such as linking pension entitlement to seniority wages, discourage labour supply of civil servants over the life cycle, and should be terminated as well.[6]

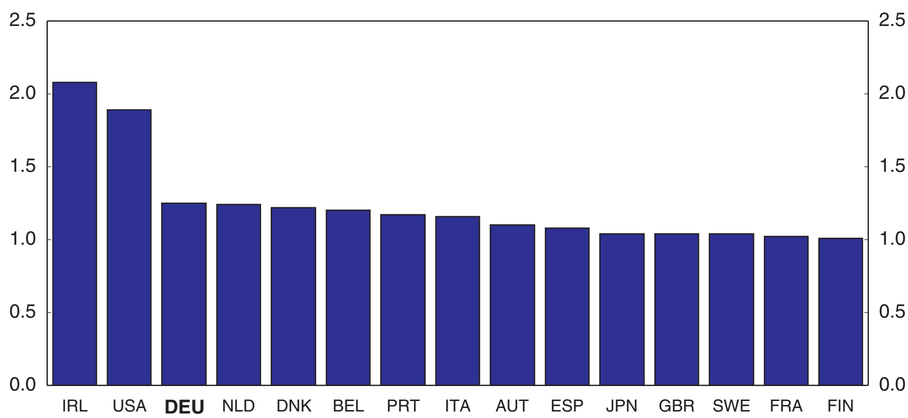
While female labour force participation in Germany is above the OECD average for those aged between 25 and 54 years (Figure 4.1) previous *Surveys* pointed to a number of features in the tax and transfer system providing disincentives for the labour supply of spouses. Policies designed to improve the compatibility of child rearing and labour force participation of spouses should rank high on the policy agenda, given that birth rates in Germany are very low, averaging 1.3 children per female, while the deterioration in age distribution of the population is projected to be more severe than in most other OECD countries. To address this issue, the new government has tabled legislation which substantially increases the ceiling up to which child minding expenses are deductible from the income tax bill. Also, the new regime widens eligibility to couples with a single working spouse – although at less favourable conditions than for working couples – while at present tax concessions are only granted to families with two working spouses and single parents. Moreover, the government plans to introduce a new income replacement scheme (*Elterngeld*) that replaces over one year two thirds of earnings foregone due to reductions in labour supply after childbirth. This is planned to abolish the present income replacement scheme (*Erziehungsgeld*), which provides flat benefits for up to two years after childbirth subject to an earnings ceiling.

Empirical work suggests that fixed costs of work, both monetary (notably fees for child care facilities) and non-monetary (such as commuting times) can be an important impediment to parents' labour force participation.[7] As fixed costs of work are higher for the second working spouse, and in view of the budgetary constraints to be observed, financial support for child minding outlays should be more focused on families where both spouses are working. Child care facilities are also likely to be better suited for providing some degree of formal education to children than personal child minders, who are normally lacking the relevant training. In Germany, the supply of kindergarten places falls significantly short of demand, while the important role kindergartens can play in pre-school education has not yet been sufficiently explored (see Chapter 3 above). Hence, financial benefits for child minding should give a preference to early education and child care institutions. Giving financial support to the users rather than the providers of services would help improve the efficiency of the child care sector. In the same vein, a voucher scheme might be more effective than tax deductibility as it would increase benefits for families with low income tax liabilities. Moreover, opportunities for full-day schooling should be extended.

The impact of the planned new income replacement scheme (*Elterngeld*) on labour supply is ambiguous. For families with lower income the scheme would improve incentives to expand labour supply beyond the present earnings threshold as it cuts the very high marginal implicit taxation of additional earnings at the threshold and shortens the maximal eligibility period by 50%. On the other hand, the high rate of envisaged income replacement would provide incentives to reduce labour supply for highly qualified persons with earnings in the upper tail of the earnings distribution who do not consider the lower income replacement by the present scheme as a relevant option.

In this context the present system of income tax assessment should be reconsidered. The system is based on the spouses' joint income rather than individual incomes, providing disincentives for labour force participation of second earners. Indeed, taxation of second earners relative to single earners is higher than in many other OECD countries (Figure 4.3). Simulation studies for Germany suggest that employment rates of spouses would substantially increase if the system moved from joint assessment to individual assessment.[8] Hence, given that financial support for child minding is scheduled to be extended, average effective tax rates on labour income of second earners in households should be reduced. For this end it should be examined whether it is feasible to replace the joint income tax assessment of spouses by individual tax assessment. There are also disincentives for the labour supply of second earners in the financing of health insurance. Spouses are entitled to full health insurance benefits regardless of their labour market status, but are only required to pay health insurance contributions if taking up a job. Hence, introducing contributions for health care co-insurance of non-working spouses should be considered. Such reform has been implemented in Austria.

Figure 4.3. **Ratio of average tax rate on family earnings: two earners relative to a single earner, 2004**[1]



1. Tax rates are computed as average income tax plus employee and employer contributions less cash benefits as % of labour costs. The numerator is for a two-earner household (earning 100% APW, 67% APW) with 2 children. The denominator is for a one-earner household (earning 100% APW) with 2 children. APW denotes the average gross wage earnings of adult full-time workers in the manufacturing.

Source: OECD Taxing Wages.

Toward more efficient employment policies

Work incentives for welfare recipients need to be further increased

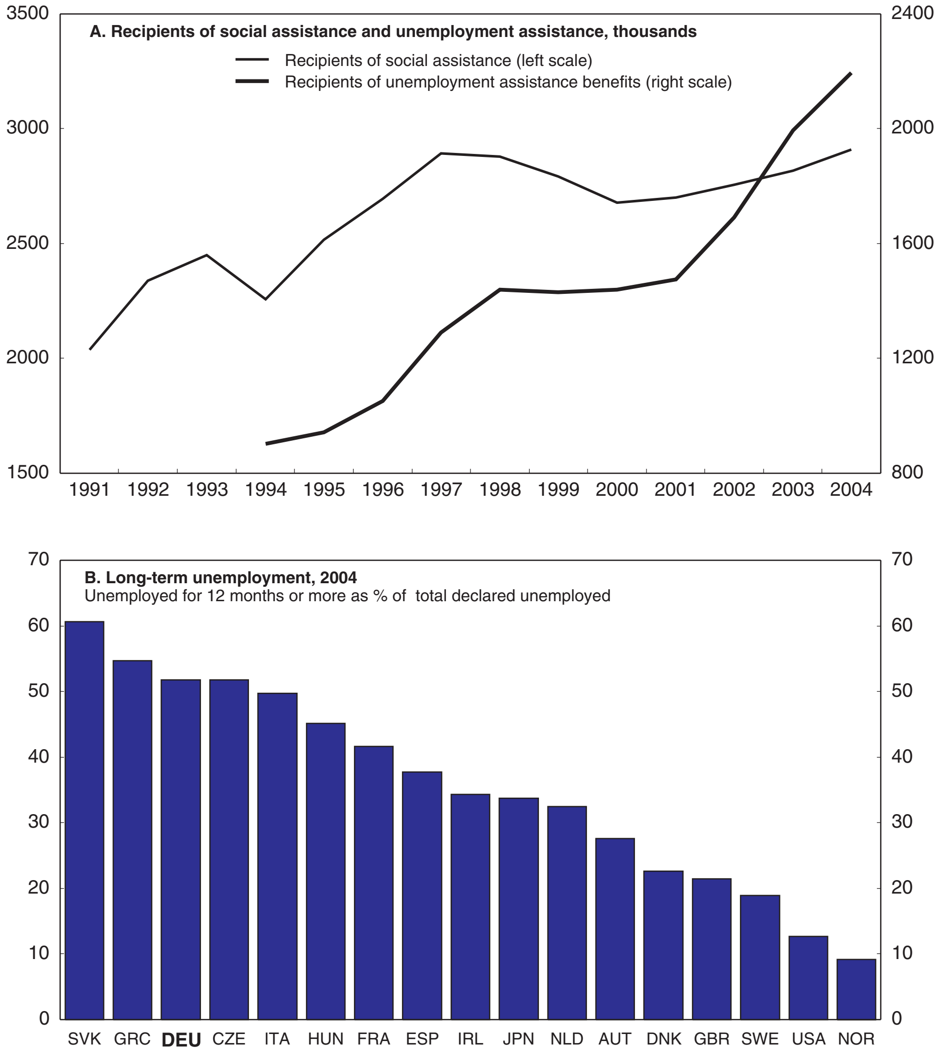
The Unemployment Benefit II (ALG II), introduced in January 2005, replaces the former unemployment assistance benefits (UA) and social assistance benefits (SA) by a single means-tested income replacement scheme for persons in need, who are able to work. As has been outlined in earlier *Surveys*, the fact that the two predecessor schemes of ALG II were subject to different rules and administered by different administrations posed various problems that hampered efficient activation of recipients. With the number of recipients of UA and SA benefits steeply rising, largely on account of increasing long-term unemployment, reform of the system became increasingly urgent (Figure 4.4).

Previous *Surveys* have argued that the indefinite duration of UA, high replacement ratios of SA for certain groups of low qualified workers and the high marginal implicit taxation of earnings due to rapid withdrawal of SA all reduced effective labour supply of benefit recipients and hampered wages from spreading out at the low end of the wage distribution that would induce higher labour demand for the low-skilled. This appears to be of particular importance in view of the fact that unemployment rates among the low qualified are very high and have increased in recent years (see Figure 1.7 in Chapter 1). Indeed, recent econometric research suggests that on average the long-term unemployed in Germany with low pre-unemployment earnings expect significant improvements in earnings in their next job, while reservation wages fall short of previous earnings if pre-unemployment earnings were relatively high. Moreover, reservation wages in Germany do not decline much over the unemployment spell.[9] In the same vein, several empirical studies, both for Germany as well as for other OECD countries, point to fact that predictable reductions of replacement ratios over the unemployment spell raise re-employment probabilities.

Hence, the scrapping of the open-ended UA scheme marks progress toward more employment friendly income support. Indeed, the introduction of ALG II appears to be associated with a drop in replacement ratios for most long-term unemployed who would have been eligible for UA in the old system.[10] Also, means testing for this group is stricter now than it was before.[11] However, simulations indicate that the new ALG II scheme leads to higher income replacement for a large share of persons who would have received SA or UA in the old system. Mainly, this arises because supplementary and one-off benefits in the old system, which were not paid automatically, are now integrated into ALG II.[12] Simulations also indicate that there are significant socio-economic groups where the new benefit regime implies income replacement that is close to or exceeds market wages.[13] This was already the case in the previous SA system, and is particularly relevant for low qualified persons living in households with children. Moreover, adult children, aged up to 25 years, receive full ALG II benefits even if they live with their parents in one household. In this respect, new legislation will come into force in July 2006 which reduces the generosity of the system. Unemployed workers whose eligibility for unemployment insurance (UI) benefits is reaching exhaustion receive for a period of two years' supplementary benefits, the level of which depends on the difference between the former UI claim and the level of ALG II. While supplementary benefits fall after one year, this provision cushions the drop in replacement ratios at the UI exhaustion point.

For transition into full-time employment, the implicit taxation of additional earnings due to benefit withdrawal is important. The main argument is that high transfer withdrawal rates over a considerable gross income band make work at low wages not worthwhile, thereby preventing a spreading out of the wage distribution at the

Figure 4.4. **Recipients of unemployment related benefits and unemployment**

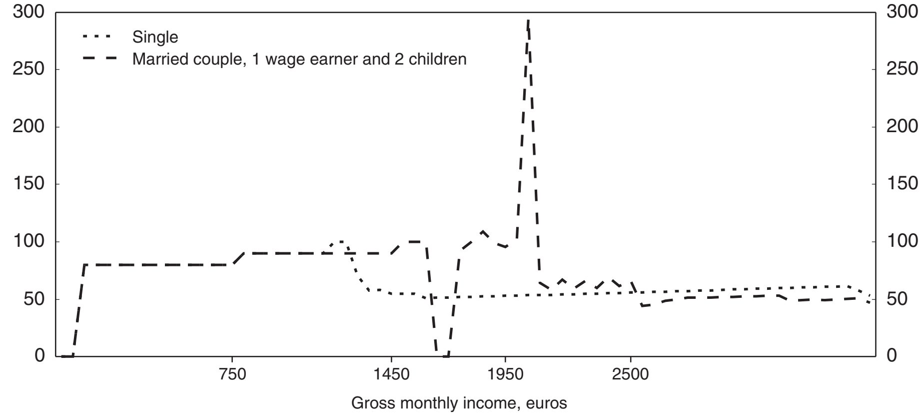


Source: Federal Labour Office, "Amtliche Nachrichten der Bundesagentur für Arbeit 2004"; Federal Statistics Office; *OECD Employment Outlook.*

low-earnings tail that would induce higher labour demand. In the previous social assistance scheme withdrawal rates rose quickly to between 85% and 100% of additional earnings.[14] In the new ALG II scheme the marginal implicit taxation of gross earnings still amounts to around 80% to 90% over a broad income band (Figure 4.5). Also – due to a complicated interaction between the income base, supplementary benefits for children, and housing benefits – for families with children net income steeply increases at a certain level of gross income while net income falls back at a higher level of gross income.[15] To compensate for this income loss would require sizeable increases in gross wages.

Figure 4.5. **Marginal implicit taxation of gross income under unemployment benefits II**[1]

Marginal implicit tax rate, per cent



1. Taken into consideration unemployment benefits II (*Arbeitslosengeld II*), housing benefits (*Wohnkostenzuschüsse, Wohngeld*), child benefits (*Kinderzuschlag, Kindergeld*), income taxes, social charges for employees. Regulation for western Germany as of fourth quarter 2005. For a married couple with gross monthly income between € 1 600 and € 1 700, the marginal implicit tax rate is strongly negative.

Source: IFO Institute for Economic Research.

Overall, this suggests rebalancing the parameters of income replacement in the ALG II scheme in order to improve work incentives and support the spreading out of the wage distribution in favour of workers with low qualification. One option of reform is to lower ALG II withdrawal rates. Spikes in the provision of ALG II benefits for families with children should be abolished. Replacement rates should be revisited to preserve incentives to take up employment. In the same vein, the supplementary benefit layer between UI and ALG II should be phased out in order to raise the digressiveness of income support when UI reaches exhaustion. Moreover, income support should be concentrated on the needy. At present this is not generally the case. In particular, for "mini jobs", paying up to € 400 per month, workers are exempted from the obligation to pay social charges and income taxation is reduced. The subsidies for social contributions are gradually phased out over a range of incomes up to € 800 (*Midi jobs*). These jobs are hardly taken up by the unemployed but mainly by working spouses. Second earners benefit most from the income tax concession, in contrast to employees with no other source of family income for whom the basic tax-free zone of the personal income tax system applies. The government has already decided to reduce preferential taxation of mini-jobs. Preferential tax and contribution treatment of mini and midi jobs might be terminated as part of a policy package that reduces withdrawal rates of ALG II benefits and lowers the income taxation of second earners. Action along this line would also be required for fiscal reasons as isolated reductions in benefit withdrawal rates are fiscally costly, at least in the transition phase. This reinforces the case to tighten sanctions in cases where ALG II recipients do not conform with job search rules (see further below). Furthermore, reform of the ALG II scheme would need to be combined with further regulatory reform designed to reduce wage rigidities in the lower tail of the wage distribution (see further below in this chapter) and enhance enterprise foundation (see Chapter 5).

Activation strategies for the unemployed have improved but need amendment

Job search requirements have been strengthened…

Job acceptability requirements for ALG II recipients were tightened. In principle, the long-term unemployed receiving benefits cannot refuse job offers, irrespective of pay and occupational characteristics. In practice, however, the range of job offers considered suitable is narrower. Wage offers some 30% below the standard for comparable occupations appear to be considered the limit for acceptability. Rejection by benefit recipients of acceptable job offers are to be sanctioned by the PES. Moreover, PES counsellors have some discretion in defining suitable work. In case of repeat rejections the sanctioning can result in a complete withdrawal of ALG II benefits.

PES monitoring of job search activities and imposition of sanctions in the case of non-compliance of benefit recipients with the job search rules are increasingly used among OECD countries as activation strategies.[16] For example, regular reporting requirements to the Labour Office and telling the benefit recipients that the reported contacts with employers would be verified were found to have had a positive impact on transition rates into employment. This is also true for other measures activating job search, such as search training courses.[17] In the same vein, empirical work indicates that reemployment rates can be substantially increased if conditions for job search are tightened via imposition of sanctions in case of non-compliance with job search requirements.[18] In particular, monitoring of job search activities was found to be important to reduce unemployment duration for persons with adverse socio-economic characteristics whose chances to find a job are relatively low, such as the long-term unemployed and low-skilled workers. This is consistent with evidence that workers with unfavourable labour market characteristics rely much more on formal channels of job search offered by the PES, which are relatively easy to monitor, rather than on informal channels of job search, which are hard or impossible to monitor, and which are often highly relevant for high-qualified job searchers. Imposing job search requirements and monitoring also act as a sorting device to separate those willing to seriously search for a job from those who do not. Empirical evidence for OECD countries suggests that some share of individuals who have been referred to a job search course respond by dropping their benefit claim rather than participating in the activation measure.

Available information indicates that until the recent PES reform counsellors of the Federal Labour Office rarely decided to impose sanctions, and the sanctions advocated were often not executed.[19] Empirical evidence elsewhere indicates, however, that credibility of the sanctioning regime is important for its success.[20] More recently, the rate of sanctioning has increased, but the dispersion in the application of sanctions between local labour offices appears to have been large and to have increased as well.[21] Hence, allocation of benefit recipients to profiling and monitoring schemes should be guided by socio-economic characteristics of the unemployed, and programme participation of benefit recipients, once assigned, should be strictly compulsory.

… and new active labour market measures have been introduced

There has also been a re-orientation of active labour market policies (ALMPs). Traditional ALMPs have been reduced. More emphasis is being put on short training spells and job search assistance. Indeed, several empirical studies for traditional large-scale work provision and training schemes in Germany concluded that the schemes were either

OECD ECONOMIC SURVEYS: GERMANY – ISBN 92-64-02515-4 – © OECD 2006

ineffective or even reduced re-employment probabilities of participants. Evidence from other OECD countries also points to large scale work provision schemes, which are not geared toward the individual characteristics of job searchers, being inefficient instruments to foster transition into employment.[22]

However, there is much scope to improve the design of ALMPs, and some changes to newly introduced measures have already been made. The *Ich-AG* support scheme granted unconditional subsidies to the unemployed who decide to set up their own business. The scheme was associated with very high take-up rates, and in the introduction phase of ALG II beneficiaries appear to have used it to a large extent as an instrument to prolong the effective duration of higher-level income replacement when unemployment insurance benefits ran out. The instrument has been modified since; in particular eligibility is now conditional on the presentation of a business plan. However, the scheme co-exists with a similar one (*Überbrückungsgeld*, UG), diminishing the focus of the activation strategy. The two schemes should be merged. Empirical evaluation of the UG scheme indicates that participants are less likely to re-enter unemployment after programme termination than former unemployed who did not receive support.[23] A comparable examination of the *Ich-AG* – after programme participation has terminated – is not yet available as the scheme has been introduced only recently. Later evaluation of the costs and the benefits of the instrument should take into consideration those of other programmes that give financial aid for starting a business.

Recipients of ALG II can be assigned to employment schemes in the secondary labour market ("Work Opportunities", WOs, *Arbeitsgelegenheiten*), lasting 6 months as a rule. The schemes, which have expanded rapidly, are offered by municipalities or welfare associations, and aim at easing the transition of long-term unemployed into the primary labour market. It has also been suggested that WOs can serve as a test for the readiness of benefit recipients to work ("workfare"). Refusal to accept participation in a WO is considered as a signal that there is a lack of willingness to co-operate with the Labour Office, triggering a reduction in benefits as a sanction.

Persons on WO retain the full amount of ALG II benefits. In addition, they receive a supplementary payment of between € 1 and € 2 per hour, paid by the Labour Office, which is considered as a compensation for additional outlays an individual incurs when he is working. While the size of the total remuneration associated with participation in WOs depends on the participant's family situation, personal disposable income under the assumption that the individual works 30 hours or more totals an amount that appears to be hard to realise on the primary labour market for low-qualified employees.[24] Similarly, while ALG II recipients who are not on a WO face very high marginal implicit tax rates when they expand their labour supply on the primary labour market, this is not the case for recipients on WO schemes. Hence, financially WOs are associated with disincentives for participating long-term unemployed to accept and expand employment on the primary labour market. Moreover, as municipalities and welfare institutions obtain a transfer from the Federal Labour Office if they offer WOs, they might have an interest in keeping WO workers on their scheme rather than fostering their transition into the primary labour market.

Willingness-to-work tests rest on the presumption that benefit recipients who are not seriously willing to work under market conditions will not participate in activation programmes since the disutility associated with programme participation is as big as the disutility associated with working under market conditions, while programme participation pays less than the market wage. WOs do not appear to be well geared for this purpose, given their financial generosity. Pay for participation in WOs should be revisited so as to preserve incentives for the low-qualified to accept jobs on the primary labour market while securing a subsistence level of income replacement for those in need that do not find work. Rather than giving a transfer to municipalities and welfare institutions that offer WOs, institutions should bear part of the costs of the income replacement for WO workers. In the policy debate it has been suggested to lengthen the duration of WOs for older long-term unemployed to up to several years. This proposal should not be implemented as it would very likely establish a new channel into non-participation of older people in the primary labour market. More generally, keeping benefit recipients in work provision schemes for many months or even years can significantly reduce the participants' available time and capacity for job search activities in the primary labour market. Empirical evidence suggests that this factor can be important in reducing employment chances. Moreover, care needs to be taken that no new industry of work provision schemes will be created, which would contradict the down-scaling of Germany's large-scale work-provision programmes. Instead, activation measures should be based on the persons' socio-economic characteristics as established in profiling exercises. The effectiveness of measures in raising employment chances and as willingness-to-work tests should be strictly evaluated, and instruments should be modified or dropped accordingly.

Further institutional reform in Public Employment Services is necessary

A major element of the reform of the Public Employment Service (PES) so far has been to give more scope to outsourcing. Private placement agencies are allowed to operate without licensing, the Labour Office can contract out placement services, and subsidies were given to Temporary Work Agencies (*Personalserviceagenturen*, PSA) that agreed placement activities commissioned by regional branches of the Labour Office. Up to now, Contracts between the Employment Agencies and PSAs specify both placement targets and the PSA's remuneration. However, according to independent evaluation studies, transition rates into normal employment were lower for unemployed workers utilising a PSA as an entry channel into employment than for unemployed workers who did not.[25] More recently, regional Employment Agencies have therefore been reducing their links to PSAs. Indeed, regional Labour Offices should not be obliged to establish a PSA. More generally, outsourcing of employment services should be based (as in Australia, the Netherlands and the UK) on the allocation of batches of unemployed clients to contracted providers, making tender decisions and payments on the basis of placement rates that different providers achieve.

First steps have been made in favour of internal organisational changes. In particular, computation of unemployment insurance benefits has been simplified and reception of clients reorganised so as to be better able to allocate resources in favour of placement activities rather than benefit administration. First evaluations by economic research institutes indicate significant improvements in the efficiency of service provision.[26] Also, there are agreements of goals between the different regional levels of the Federal Labour Office, referring to indicators such as reintegration or activation ratios. Incentive structures on how to reach a consistent set of targets are not yet established, however.[27] Until 2004 caseloads of job searchers per counsellor appear to have been very high by international comparison, which probably has been a serious brake for successful application of activation and placement strategies. Indeed, analysis for 2004 points to low levels of profiling activities. More recently, hiring of placement officers and reallocation of staff has led to considerable improvements in client-to-counsellor ratios. Yet, while new legislation foresees lower client-to-counsellor ratios for the long-term unemployed, further administrative reform is required to free resources for activation and placement within the first year of an unemployment spell.[28] Lacking significant progress in raising placement rates has lead to demands in the German policy debate for more radical PES reform, including the abolishing of the Federal Labour Office in its present form and the privatisation of placement and employment services. Experience in other OECD countries indicates that outsourcing of PES services can contribute to more efficient employment policies. However, only a few countries have extensively outsourced the placement and counselling roles. With or without outsourcing, the results depend on the management framework for employment services and benefit provision and the impact of employment services on labour market outcomes should be the driver of PES activity.[29] According to this criterion there are still serious obstacles in the organisation of the German PES that need to be addressed to be able to reap the benefits of recent reform initiatives.

A major goal of combining unemployment assistance and social assistance benefits in one single means-tested income replacement scheme for persons that are able to work was to reduce the administrative overhead inherent in the old system and to arrive at more coherent activation strategies for all persons on welfare benefits that are able to work. However, financing and decision powers with respect to employment policies remain dispersed in important respects. In most regions a new layer of administrations – associations between the local agencies of the Federal Labour Office and the municipalities – has been created that is in charge of administering ALG II and designing employment services for benefit recipients. The staff of the Associations remains employed by different public sector entities – the Federal Labour Office and the respective municipality – with differing contractual employment conditions, and this has lead to frictions in the administration of the Associations. Moreover, difficulties in harmonising activation targets across regions became apparent when the municipalities complained that the Federal Labour Office would hamper efficient job placement by centralistic ordinances. In response, an agreement was made between the federal government, the Federal Labour Office and the municipalities that leaves the determination of operational targets for the Associations to their governing council. However, the fact that the Federal Labour Office is responsible for the financing of ALG II and related employment services while the municipalities hold equal decision powers on ALG II related policy targets poses the risk that the municipalities can free-ride in their decisions at the expense of the Federal Labour Office.

Moreover, some 69 municipalities obtained the option to provide ALG II benefits and related services on their own responsibility. This option, allocated to a fixed number of municipalities, was the outcome of a compromise in the second chamber of Parliament, as the government envisaged assigning responsibility for ALG II policies to the Federal Labour Office while a majority of states wanted to assign responsibilities to the municipalities. While the "option municipalities" pay for ALG II benefits, the compromise between the two chambers of Parliament entailed compensatory transfers to the municipalities out of the federal budget. This arrangement further aggravates the segmentation of employment services. Impediments to exploiting economies of scope in administering the new benefit system became already visible as the option municipalities provided basic statistics on benefit recipients after the introduction of the new ALG II system only with a delay of several months.

Overall, consideration should be given to concentrating responsibilities for benefit and employment policies at one level of administration. Experience in other OECD countries suggests that the division of responsibilities between national and local government makes it difficult to measure the impact on labour market outcomes achieved by employment services and to implement changes in employment policies on this basis.[30] Full allocation of responsibilities to the Federal Labour Office would have the advantage that it could re-enforce coherent activation strategies over the entire duration of unemployment spells – that is for recipients of unemployment insurance benefits as well as for the long-term unemployed receiving ALG II. Moreover, this approach would align spending and financing responsibilities for both types of benefits in one hand, reducing the risk that some actors will adopt labour market policies that are not geared toward improving employment outcomes. On the other hand, it is sometimes argued that the municipalities dispose of better knowledge of regional labour markets and should therefore be given the responsibility for ALG II related policies. Postulating a sustainable advantage of the municipalities over the regional branches of the Federal Labour Office does not appear entirely convincing, however, given both the need for regional branches of the Federal Labour Office to develop efficient placement technologies in regional labour markets for recipients of unemployment insurance benefits and a higher involvement of private sector agencies in placement and activation services. Nevertheless, if responsibilities for ALG II related policies are assigned to the municipalities – either directly or via decision rights in Associations with the Federal Labour Office – this should be accompanied by a financing mechanism for ALG II that provides incentives for the municipalities to engage in efficient job placement.

Against the background of adverse incentives for efficient employment policies associated with the risk of financial free-riding, some OECD countries have designed incentive systems that better align both aspects. In several OECD countries regional administrations that are in charge of administering unemployment assistance benefits are also responsible for their financing. Basing the co-financing of the municipalities on the right base is important so as to minimise the risk of involuntary overruns that could trigger compensation demands from the federal government. Whatever the exact model used, it is important that regional ALG II budgets do not benefit from compensating transfers by the federal government in case of benefit over-runs. Indeed, as considered in more detail in Chapter 2 above, in a recent policy dialogue between the federal government and the states on options to reform federal fiscal relations there was general agreement that a higher degree of congruency between spending and decision powers at the different layers of government would be desirable. In line with this proposition, policy makers at the federal and the states' level should work to prevent new disparities between financing and decision responsibilities from opening up in the important area of institutional reform in the employment administration.

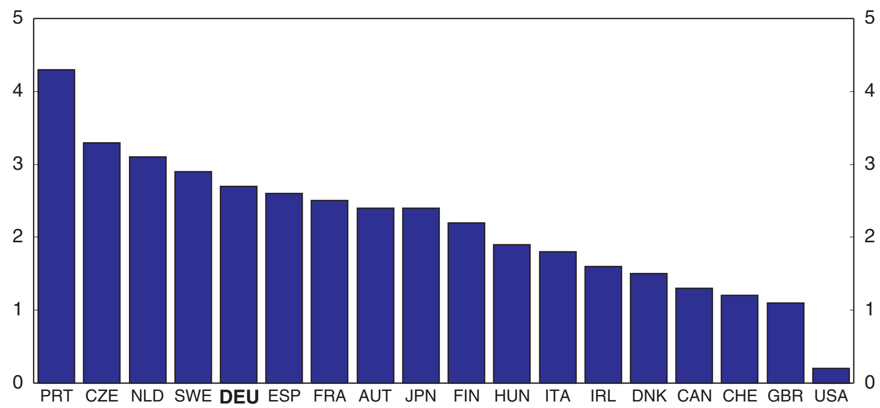
Effective management of employment policies also requires efficient separation of welfare recipients who are able to work from those who are not. As was the case in the past, the municipalities maintain the financial responsibility for income support for persons who are not able to work (social assistance). Given that the Federal Labour Office is responsible for the financing of income support for the needy who are able to work (ALG II and two thirds of housing benefits), the municipalities have an incentive to shift costs by classifying persons as being able to work who would otherwise obtain municipal social assistance benefits. Indeed, after the introduction of the new ALG II benefit system, cases have been reported where municipalities shifted persons, who could not be considered as being able to work, into the sphere of the Federal Labour Office. Hence, to exclude the risks of cost shifting arising from incentives to misclassify the earnings capacity of benefit recipients, it is important that the federation issues clear classification standards for the assessment of work ability and the Federal Labour Office maintains some control over the assignment of welfare recipients to ALG II benefits.

Employment protection remains in need of reform

Strict employment protection legislation (EPL) tends to increase unemployment duration for the low qualified and marginal groups on the labour market.[31] Reaping the benefits of deepening international integration in goods and factor markets also reinforces the need to allow for more flexible labour force adjustment. Up to now, efforts to ease EPL for regular employment contracts, which is relatively strict by international comparison (Figure 4.6), were quite modest (see the 2004 *Survey*). Instead, regulatory initiatives to increase the flexibility of labour contracts relied to a large extent on regulatory changes and financial support for non-regular forms of employment. This has contributed to the strong increase in a-typical contracts over the last years, such as employment via temporary work agencies (TWAs) or – quantitatively much more importantly – employment in mini-jobs with only a few hours worked per week (see Chapter 1).[32]

Figure 4.6. **Employment protection for regular employment, 2003**

Index of 0 to 6 from least to most restrictive legislation



Source: OECD (2004), *OECD Employment Outlook*.

To some extent this might increase the chances of the unemployed in finding jobs and ease transition into regular employment. Empirical analysis points to the fact that a substantial share of temporary employees move on to regular employment. However, there is empirical evidence for Germany and other OECD countries that strict EPL for regular employment provides incentives for firms to resort to more atypical forms of employment contracts such as fixed-term or temporary employment and minor employment with only few hours worked per week.[33] Hence, single-sided deregulation of EPL in favour of highly protected regular employment contracts risks creating a dual labour market with an increasing share of marginal or unstable jobs. Also, the rise in financially supported mini jobs in Germany is reducing revenues of the social insurance system, putting upward pressure on labour taxation. Dualisation of the labour market might also have adverse incentives for the development of skills for the low qualified. Not least, this would be counter-productive in view of the fact that the relative demand for skilled labour is increasing. Some empirical studies for the 1990s have argued that low-skilled workers in Germany tend to be more skilled than in some other countries such as the US.[34] This, in turn, can reduce the degree to which low-skilled labour is affected by adverse labour demand shocks, such as technology shocks that reduce demand for low-qualified labour while favouring demand for high-qualified labour.

The government plans to drop dismissal protection for the first two years of a regular employment contract. In exchange, the plans are to abolish the present option to offer fixed term contracts for the first two years of an employment spell. This initiative is likely to increase the flexibility of permanent employment contracts and contribute to reducing labour market segmentation. It should therefore be implemented.

At present, dismissal protection is subject to complex and non-transparent procedures. This is reflected in the fact that there are around 250 000 terminated court cases annually relating to dismissals. As outlined in the last *Survey*, legislation designed to simplify dismissal procedures became effective in 2004. *Inter alia*, complaints to the courts are subject to stricter time limits. Employers can offer a payment equivalent to half a month's salary per year of job tenure to dismissed workers, which workers can choose to accept instead of challenging the dismissal in court. However, it is questionable that this will lead to a significant reduction of uncertainty, as the present system is strongly influenced by case law, and provides few incentives to employees to co-operate with employers to terminate employment contracts in mutual agreement. Employees co-operating in their dismissal run the risk that they will be subjected to a waiting period for unemployment benefits. Hence, consideration should be given to modify the legislation that gives employers and employees the option to trade off severance pay against the right to challenge the dismissal in court. Workers and firms could be given an option to open work contracts after the probationary period to specify severance pay for workers in case of redundancy in return for a less stringent dismissal protection.

Economic analysis suggests that firms need to face some dismissal costs in order to avoid free-riding on the provision of unemployment benefits.[35] In the present unemployment insurance system, the uniformity of the employers' contributions to the scheme across enterprises contains an element of cross-subsidisation of employers with high dismissal rates by those with low dismissal rates. This could be internalised, at least partially, by linking the firms' current unemployment insurance contribution to their dismissal record over some period in the past. Reformed financing of unemployment insurance along this line, by better internalising the costs of redundancies, actually provides more employment protection, hence allowing some weakening of other aspects. Hence, introduction of experience rating should be considered as another option.

Toward more flexibility in setting wages and work conditions

Since the first half of the 1990s there is a trend toward more decentralisation in the determination of wages and work conditions. To a large degree this reflects a response to steep increases in collectively bargained wages after reunification and exits of enterprises and workers from employers' associations and unions, respectively. Collective agreements between the employers' associations and unions are increasingly incorporating opening

OECD ECONOMIC SURVEYS: GERMANY – ISBN 92-64-02515-4 – © OECD 2006

clauses that give some scope for agreements on the firm level between the firm's management and the work council, although exercising these clauses often depends on the approval of the collective bargaining partners.[36] Moreover, over the last 15 years the share of firms with firm-specific agreements negotiated between the management and a union has substantially increased, as has the share of enterprises that are not covered by collective agreements at all.

Firm-level agreements – based on opening clauses from multi-firm collective contracts, single-firm collective agreements or individual contracts – have been a main driver for a higher degree of flexibility in work conditions and wages. According to an enterprise survey conducted by the German chamber system, in 1993 some 15% of enterprises had started to introduce some form of flexible working time arrangements. By 2004 such arrangements were adopted by two thirds of the enterprises.[37] While international comparisons are sparse, there is some evidence that firm-based working time flexibility is high in Germany relative to the EU average.[38] In particular, a large share of enterprises has established working time accounts that allow for compensating periods of overtime by reduced hours worked within a period that can extend up to several years. Econometric research indicates that arrangements on working time flexibility and working time prolongation had a significant positive impact on job creation among firms with firm-specific determination of wages and work conditions. This is similarly true for firm-specific agreements on training. By contrast, agreements on employment guarantees, which usually trade off guarantees against employees' concessions in wage increases, were estimated to have a negative influence on job creation.[39] Indeed, depending on the comprehensiveness of employment guaranties, reductions in a firm's workforce can only be brought about via voluntary separations, causing higher severance payments than would have to be paid otherwise. Recent developments suggest that such agreements might well add to the costs of labour adjustment in times of falling product demand or rapid structural change requiring rapid adjustment in the firms' workforce.[40]

Wage rigidities would need to be reduced further to fight unemployment, notwithstanding the fact that there has been considerable aggregate wage moderation for a number of years in a row (see Chapter 1 above). Empirical research indicates that the responsiveness of real wages to local unemployment rates is low in Germany by international comparison.[41] While the wage dispersion among full-time employees has increased since the middle of the 1990s, reflecting to a large extent lower entry wages for new hirings, some studies indicate significant wage rigidities across qualifications.[42] Deficiencies in the benefit and placement system to activate the unemployed and make work pay might go some way in explaining wage rigidities. Moreover, recent econometric research for Germany suggests that the wage distribution by qualification is the more compressed at the lower end of the wage distribution the higher the union density by sector.[43] There is some indication that the difference in the inter-firm wage dispersion between industry-wide collective contracts and firm-specific contracts has declined in the 1990s. This is consistent with the observation that opening clauses in industry-wide wage settlements have become more common over the period.[44] Empirical work indicates that higher wage flexibility by qualification could generate significant employment effects.[45] This calls for institutional reform supporting such adjustment.

Some government provisions in support of collectively bargained contracts contribute to insulating collectively bargained wages from labour market conditions. Specifically, power of the federal government to impose the collective bargain outcomes on all firms reduces the scope for firm-level agreements outside collective bargains, notably in the construction industry. Some states have adopted legal provisions on public procurement which aim at eliminating contractors paying wages which are substantially below competitors wages or do not meet quotas for the employment of women. These legal provisions increase the cost of public procurement, raise transaction costs and reduce competition. Administrative extension of collectively bargained contracts should only be applied if negative consequences for the labour market can be avoided. Policies linking public sector procurement to collective wage agreements should be given up. Current labour law gives a preference to collective wage bargaining, which hampers firm-specific determination of wages and work conditions. As has been suggested in previous *Surveys*, consideration should be given to widening the scope for wage determination at the firm level so as to better align collective wage contracts with labour market conditions. In such a system collective bargaining outcomes would continue to serve as the default if firm-based agreements do not come about. Indeed, the importance of collective bargaining is apparent from the fact that a significant share of enterprises apply the provisions negotiated collectively between the social partners although they are not members of the employers association.[46]

New demands came up in the policy debate to prevent wages from falling to levels considered to be socially unacceptable by introducing legal minimum wages for the economy overall. The proposition was reinforced by the perception that increasing international competition on labour and product markets could result in non-acceptable downward pressure on wages. Indeed, empirical work suggests that the firms' option to offshore production has had a damping impact on German wage settlements. However, to the extent that minimum wages become binding, they risk to counteract policies that aim at increasing labour demand for the low qualified and raising employment chances for new labour market participants. Indeed, experience indicates that minimum wages too often started a slippery slope toward higher rates that cause labour market exclusion.[47] Increasing pressure to outsource labour intensive goods and services abroad reinforces the argument (see Chapter 1).

In the policy debate it has been proposed to base legally binding minimum wages on collective bargaining outcomes. According to this approach unions and employers associations would determine nation-wide sector specific minimum wages, which would be declared legally binding for all enterprises in each sector, independently of whether the enterprises are subject to collective bargaining outcomes, via administrative extension by the Federal Minister of Labour. However, this approach runs the risk to aggravate potentially adverse effects of minimum wages on employment creation as it would allow the social partners to set minimum wages at levels favouring "insiders" – workers that are already in employment – and reducing the chances of outsiders to enter employment. Indeed, facing packages of wage demands by the unions, employer associations may find it preferable to trade-off more modest increases in wages above the minimum level against higher growth in minimum wages. Moreover, to the extent that large enterprises have a larger weight than small enterprises in shaping bargaining outcomes there is a risk that administrative extension of minimum wages will hurt the competitiveness of small enterprises.[48] Also, nation-wide minimum wages would reduce the responsiveness of wages at the low end of the wage distribution to differential development of regional labour demand and supply conditions, hampering labour market adjustment across regions. In particular, this would adversely affect the new states.

OECD ECONOMIC SURVEYS: GERMANY – ISBN 92-64-02515-4 – © OECD 2006

Box 4.1. **Recommendations for a better labour market performance**

Disincentives to labour force participation of older people and spouses need to be eliminated

- The exemption from job search obligations of older recipients of unemployment insurance benefits should not be prolonged further. Subsidies for the part-time employment scheme for older people (*Altersteilzeit*) should be removed. Early retirement schemes that follow up extended periods of unemployment insurance benefits and subsidised part-time employment for older people should be phased out more quickly than presently scheduled.
- Persons with partially reduced earnings capacity should be obliged to register with the Public Employment Service in order to be placed in part-time employment.
- Plans to raise the retirement age to 67 years should be implemented with no exceptions for specific occupational groups. The minimum entitlement age for preferential income taxation of private or occupational pensions should be harmonised with the statutory entry age in the general public scheme.
- Financial support for child minding outlays should be more focused on families where both spouses are working, and a preference should be given to pre-schooling institutions. It should be considered to introduce a voucher scheme rather than income tax deductibility.
- Opportunities for full-day schooling should be extended.
- Average effective tax rates on labour income of second earners in households should be reduced. It should be examined whether it is feasible to replace the joint income tax assessment for spouses by individual income tax assessment. Introducing contributions for health care co-insurance of non working spouses should be considered.

Work incentives for welfare recipients need to be further increased

- Financial incentives for welfare recipients to take up work remain low. One option of reform is to lower withdrawal rates for unemployment assistance benefits (*Arbeitslosengeld II*, ALG II). Spikes in the provision of benefits for families with children should be abolished. Replacement rates should be revisited to preserve incentives to take up employment.
- The supplementary benefit layer between unemployment insurance benefits and ALG II should be phased out.
- Income support should be concentrated on those who are eligible for welfare payments. Within such a reform option, preferential tax and contribution treatment of jobs with very low earnings (*mini* and *midi* jobs) might be given up.

Activation strategies for the unemployed require amendments

- Participation of benefit recipients in activation programmes should be strictly compulsory once assigned by Labour Office counsellors. The effectiveness of active labour market policies in raising employment chances and as willingness-to-work tests should be strictly evaluated, and instruments be modified or dropped accordingly.
- The two available schemes supporting self-employed out of unemployment should be merged.
- Pay for participation in Work Opportunity schemes (WOs, *Arbeitsgelegenheiten*) should be revisited so as to preserve incentives for the low-qualified to accept jobs on the primary labour market. Employers within the scheme should bear part of the costs of the income replacement for WO workers. The duration of WOs for older long-term unemployed should not be lengthened.

Box 4.1. **Recommendations for a better labour market performance** *(cont.)*

Public Employment Services should undergo further institutional reform

- Outsourcing of employment services should be based on the allocation of batches of unemployed clients to contracted providers, making tender decisions and payments on the basis of placement rates that different providers achieve. Labour Offices should not be obliged to establish a Temporary Work Agency (*Personalserviceagentur*).
- Further administrative reform is required to free resources for activation and placement.
- Consideration should be given to concentrating responsibilities for benefit and employment policies at one level of administration. Allocation of responsibilities to the Federal Labour Office would be preferable. If responsibilities for ALG II related policies are assigned to the communities – either directly or via associations with the Federal Labour Office – this should be accompanied by a financing mechanism for ALG II that provides incentives for the municipalities to engage in efficient job placement.
- Clear classification standards for the assessment of work ability need to be issued, while allowing the Federal Labour Office to maintain some control over the assignment of welfare recipients to ALG II benefits.

Employment protection remains in need of reform

- Government plans to drop dismissal protection for the first two years of a regular employment contract should be implemented.
- Consideration should be given to give workers and firms an option to open work contracts after the probationary period to specify severance pay for workers in case of redundancy in return for a less stringent dismissal protection.
- Introduction of experience rating of unemployment insurance contributions should be considered as an option of reform.

Flexibility in setting wages and work conditions should be raised further

- Administrative extension of collectively bargained contracts should only be applied if negative consequences for the labour market can be avoided.
- Public sector procurement should not be linked to collective wage agreement outcomes.
- Consideration should be given to widening the scope for wage determination at the firm level.

Notes

1. In the case where workers are made redundant, current employment contracts are terminated in mutual agreement between the employer and the employee via a “work-termination” contract (*Aufhebungsvertrag*). Often, employers bridge the difference between the last net wage and unemployment insurance benefits by special compensation payments (*Abfindungen*).
2. Both early retirement schemes – following receipt of AT benefits or of extended UI benefits – are subject to phasing out regulation. Between 2006 and 2008 the minimum retirement age will be increased to 63 years. As the birth cohort 1951 will be the last one eligible the schemes will come to an end by 2016. For comprehensive analysis of retirement policies see OECD (2005a).
3. See Eichhorst and Spross (2005).
4. See OECD (2004a).
5. OECD (2005a).
6. OECD (2005a) and OECD (2004b).
7. See OECD (2004b), also Jaumotte (2003).

8. See Steiner and Wrohlich (2004) for Germany and Immervoll and Barber (2005) for comparisons across countries.
9. See Christensen (2005).
10. See Blos and Rudolph (2005).
11. One might also note that the reform brings Germany close to the OECD main line. While about half of the OECD countries have no intermediate assistance scheme between unemployment insurance benefits and social assistance there is almost no country with the level of UA benefits being related to the level of former earnings via fixed replacement rates as was the case with the German UA.
12. See Blos and Rudolph (2005).
13. Boss, Christensen and Schrader (2005).
Given the short period that elapsed since the introduction of ALG II, few empirical evidence of the impact of the new scheme on the transition into employment is available. Prior to the implementation of ALG II inflow into temporary work agencies appears to have increased. This might reflect an early response to the anticipated switch in the benefit regime, as the timing for this switch was known already in spring 2004. Experience from other OECD countries also suggests that announcement of new activation strategies can be associated with significant labour supply responses prior to the actual implementation of the new regime.
14. See OECD (2003).
15. See Sinn *et al.* (2006).
16. For an overview see OECD (2000).
17. For various examples from OECD countries see OECD (2005b), Chapter 4. In particular, for empirical evidence on job search assistance courses in Austria see Weber and Hofer (2004).
18. See Van den Berg, Van der Klaauw and van Ours (2004); Ashworth *et al.* (2004).
19. See Gray (2003); Gerhard (2004); Wilke (2003). According to this study, in the majority of cases where sanctions were advocated they were not executed.
20. See for Switzerland: Lalive, van Ours and Zweimüller (2002).
21. See Oschmiansky and Müller (2005). For empirical analysis on the decision to temporarily suspend payment of unemployment benefits see Mosley *et al.* (2005).
22. Econometric studies on the effectiveness of ALMPs in Germany have been summarised in previous *Surveys*. On the OECD see Martin and Grubb (2001) and OECD (2005c), Chapter 4.
23. See Caliendo and Steiner (2006).
24. See Boss and Elender (2005). For the types of families considered by the authors personal disposable income totals between € 926, – and € 2 143, – for a WO with 30 hours working time and an hourly supplement of € 2.
25. See Bundesregierung (2006).
26. See Bundesregierung (2006).
27. See Schütz (2005).
28. For the long-term unemployed, receiving the new "Unemployment Benefit 2", counsellor to – client ratios of 1:75 and 1:150 for young and older, respectively, recipients are targeted. In mid 2005 counsellor to – client ratios stood at around 1:200 on average. This marks substantial progress over past ratios, which were much more unfavourable, see Schütz (2005).
29. See Grubb (2005b).
30. See OECD (2005c), Chapter 5.
31. See Brandt, Burniaux and Duval (2005); OECD (2004c), Chapter 2.
32. Concerning temporary work agencies (TWAs) the previous government implemented two regulatory reform measures with opposite implications for the profitability of TWAs. Since January 2004 employees on loan need to be subject to the same wages and employment conditions than regular employees, restricting profit margins of TWAs. At the same time, the "prohibition of synchronisation" provision (*Synchronisationsverbot*) was dropped, which required that the contract period between TWA and the worker had to differ from the sub-contracting period from the worker's first assignment. The regulation implied that after the termination of the first temporary work assignment the TWA had to pay salaries for another quarter of the year to a worker who

could not be placed with another borrowing firms. As was argued in the 2002 *Survey* the regulation, which appears to have been unique for Germany, implied a squeeze of profits of TWAs that hampered the evolution of the market for temporary employment. The fact that loan employment accelerated 2004 points to the importance of the deregulation.

33. For Germany, Bookmann and Hagen (2001) found a significant positive relationship between the institutional redundancy costs for regular workers and the demand for fixed-term contracts. See also Brandt, Burniaux and Duval (2005); OECD (2004c), Chapter 2.
34. See Nickell and Bell (1996); Freeman and Schettkat (2001); Blau and Kahn (2001). There is some evidence that German firms invest more than US firms in training the low-qualified relative to the high qualified. See Pischke (2005).
35. See for example: Fath and Fuest (2005).
36. For an overview over different types of opening clauses from collective contracts see OECD (2003).
37. Deutscher Industrie- und Handelskammertag (2004). A large share of collective contracts contains opening clauses that allow firm-specific agreements on working time variations. However, achieving a higher degree of working time flexibility was also a major motive for employers to exit the employers' association. According to a study by Kölling and Lehman (2001) based on 13 800 companies in the IAB firm panel 22% of the firms, which left the collective wage agreement between 1996 and 1999 increased the weekly working time by at least 1 hour, 15% by more than 1 hour. On the other hand, some 11% of the companies decreased the weekly working time. This response was largely confined to west German enterprises. Surprisingly, there was no empirically significant time lag between the date of quitting the employer's association and the change in regular working time. This indicates that employers were able to quickly arrange the terms of employment with workers' representatives, sometimes avoiding statutory waiting periods. See Kölling and Lehmann (2001).
38. According to a study of the EU Commission in 1999 85% of German industrial enterprises have the option to vary the working time within a given year, as opposed to 80% in EU-15 average. Quoted according to Spitznagel and Wanger (2004).
39. See Hübler (2005).
40. In summer 2004 the management of Daimler-Chrysler in Germany and the IG Metall union agreed on a contract that excluded dismissals until 2011. In return, the employees' side agreed to wave pay rises of some 2.8% for 2005 that had already been agreed upon, and to accept partial working time extensions that were not compensated by proportionate increases in remuneration. Overall, concessions by the employees were estimated to generate savings of some € 0.5 billion. One year later, Daimler-Chrysler announced plans to reduce its workforce in Germany by several thousand employees. The costs of severance payments for voluntary quits are estimated to total some € 1 billion.
41. De Galdeano and Turunen (2005); Montuenga, Garcia and Fernandez (2003).
42. See *e.g.* Steiner and Wagner (1998),and Möller (1999) for investigations on the evolution of the wage distribution until the middle of the 1990s; More recent investigations include Fitzenberger and Franz (2001), Möller (2005), Pfeiffer (2004), Fitzenberger and Garloff (2005), Gernand and Pfeiffer (2006), and Kohn (2006).
43. See Fitzenberger and Kohn (2006); Gerlach and Stephan (2005).
44. See Gerlach and Stephan (2005).
45. See *e.g.* Fitzenberger and Franz (2001); Fitzenberger and Kohn (2005); Pfeiffer (2004).
46. Survey based investigations by Franz (2001) and Franz and Pfeiffer (2005) indicate that efficiency wage considerations prevent a large share of enterprises to exercise opening clauses in collective agreements giving some discretion in firm-specific wage setting.
47. OECD (2005b). Also: Abowed and Kramarz (2000).
48. Empirical research shows that the probability of a firm being subject to multi-firm collective agreements is positively related to firm size and age. See, for example, Hohaut and Schnabel (2003).

Bibliography

Abowed, J.M. and F. Kramarz (2000), *Minimum Wages and Youth Employment in France and the United States*, in D.G. Blanchflower and R.B. Freeman, Youth Employment and Joblessness in Advanced Countries, University of Chicago Press, Chicago.

Ashworth, K., A. Cebulla, D. Greenberg and R. Walker (2004), "Meta-evaluation: Discovering What Works Best in Welfare Provision", *Evaluations*, 10/2/2004.

Blau, F. and L.M. Kahn (2001), "Do Cognitive Test Scores Explain Higher US Wage Inequality?", *National Bureau of Economic Research Working Paper*, No. 8210.

Blos, K. and H. Rudolph (2005), "Verlierer, aber auch Gewinner", IAB Kurzbericht No. 17/2005.

Bookmann, B. and T. Hagen (2001), "The Use of Flexible Working Contracts in West Germany: Evidence form an Establishment Panel", *ZEW Discussion Paper*, No. 01-33.

Boss, A., B. Christensen and K. Schrader (2005), "Anreizprobleme bei Hartz IV: Lieber ALG II statt Arbeit?", Kieler Diskussionsbeiträge No. 421.

Boss, A. and T. Elender (2005), "Verstärkte Arbeitsanreize durch das Arbeitslosengeld II?", Die Weltwirtschaft 2/2005.

Brandt, N., J.M. Burniaux and R. Duval (2005), "Assessing the OECD Jobs Strategy: Past Developments and Reforms", *Economics Department Working Papers*, No. 429, OECD, Paris.

Bundesregierung (2006), *Die Wirksamkeit moderner Dienstleistungen am Arbeitsmarkt – Bericht* 2005 *der Bundesregierung zur Wirkung der Umsetzung der Vorschläge der Kommission* "*Moderne Dienstleistungen am Arbeitsmarkt*", Bundestags-Drucksache 15/98.

Caliendo, M. and V. Steiner (2006), Existenzgründungsförderung für Arbeitslose – Neue Ergebnisse für Deutschland, *DIW Wochenbericht*, No. 7/2006.

Christensen, B. (2005), Die Lohnansprüche deutscher Arbeitsloser – Determinanten und Auswirkungen von Reservationslöhnen. Kieler Studie 333, Springer Verlag, Berlin.

De Galdeano, A.S. and J. Turunen (2005), "Real Wages and Local Unemployment in the Euro Area", *European Central Bank Working Paper Series*, No. 471.

Deutscher Industrie- und Handelskammertag (2004), *Individuell und flexibel – Wettbewerbsfaktor Arbeitszeitgestaltung, Ergebnisse einer DIHK-Unternehmensbefragung Herbst 2004*, Berlin.

Eichhorst, W. and C. Spross (2005), "Die Weichen führen noch nicht in die gewünschte Richtung", IAB Kurzbericht No. 16/2005.

Fath, J. and C. Fuest (2005), "Temporary Layoffs and Unemployment Insurance: Is Experience Rating Desirable?", *German Economic Review*, No. 6, Issue 4.

Fitzenberger, B. (1999), "Wages and Employment Across Skill Groups – An Analysis for West Germany"*ZEW Economic Studies*, No. 6.

Fitzenberger, B. and W. Franz (2001), Jobs. Jobs? Jobs! Orientierungshilfen auf dem Weg zu mehr Beschäftigung, in Franz. W., H. Hesse, H. Ramser and M. Stadler (eds.), Wirtschaftspolitische Herausforderungen an der Jahrhundertwende, Mohr Siebeck.

Fitzenberger, B. and A. Garloff (2005), "Unemployment, Labour Market Transitions, and Residual Wage Dispersion", *ZEW Discussion Paper*, No. 05-04.

Fitzenberger, B. and K. Kohn (2005), "Skill Wage premia, Employment and Cohort Effects in a Model of German Labour Demand", Goethe-Universität Frankfurt, mimeo.

Fitzenberger, B. and K. Kohn (2006), "Gleicher Lohn für gleiche Arbeit? – Zum Zusammenhang zwischen Gewerkschaftsmitgliedschaft und Lohnstruktur in Westdeutschland 1985-1997", *ZEW Discussion Paper*, No. 06-006.

Franz, W. (2001), "Tarifbindung und die ökonomische Rationalität von Lohnrigiditäten", *ZEW Discussion Paper*, No. 01-01.

Franz, W. and F. Pfeiffer (2005), "A Note on Labour Contracts and Wage Rigidities: An Empirical Investigation Using Survey Data", *Applied Economics Quarterly*, No. 2/51.

Freeman, R.B. and R. Schettkat (2001), "Skill Compression, Wage Differentials, and Employment: Germany vs the US", *Oxford Economic Papers*, 53.

Gerhard, M. (2004), Hartz IV, "Nur mit ökonomischer Rationalität zum Erfolg, Wirtschaftsdienst 9/2004".

Gerlach, K. and G. Stephan (2005), “Wage Distributions by Wage-Setting Regimes”, *IAB Discussion Paper*, No. 9/2005.

Gernandt, J. and F. Pfeiffer (2005), “Einstiegslöhne bei unvollkommenen Arbeitsmärkten”, *ZEW Discussion Paper*, No. 05-26.

Gernandt, J. and F. Pfeiffer (2006), “Rising Wage Inequality in Germany”, *ZEW Discussion Paper*, No. 06-019.

Gorter, C., G.R.J. Kalb (1996), “Estimating the Effect of Counselling and Monitoring the Unemployed Using a Job Search Model”, *Journal of Human Resources*, 31.

Gray, D. (2003), “National *versus* Regional Financing and Management of Unemployment and Related Benefits: The Case of Canada”, *OECD Social, Employment and Migration Working Papers*, No. 14, OECD, Paris.

Grubb, D. (2005), “Trends in Unemployment Insurance, Related Benefits and Active Labour Market Policies in Europe”, in J. Keum (ed.) (2005), *Employment Insurance and Public Employment Services in Selected Countries*, Korea Labor Institute, Seoul (*www.kli.kr* – forums and seminars – 2005).

Hohaut, S. and C. Schnabel (2003), “Tarifverträge – nein danke!? Ausmassund Einflussfaktoren der Tarifbindung west- und ostdeutscher Betriebe”, *Jahrbücher für Nationalökonomie und Statistik*, Vol. 223, No. 3.

Hübler, O. (2005), “Sind betriebliche Bündnisse für Arbeit erfolgreich?”, *Jahrbücher für Nationalökonomie und Statistik*, Vol. 225, No. 6.

Immervoll, H. and D. Barber (2005), “Can Parents Afford to Work? Childcare costs, Tax-Benefit Policies and Work Incentives”, *OECD Social, Employment and Migration Working Papers*, No. 31, OECD, Paris.

Jaumotte, F. (2003), “Female Labour Force Participation: Past Trends and Main Determinants in OECD Countries”, *Economics Department Working Papers*, No. 376, OECD, Paris.

Kohn, K. (2006), “Rising Wage Dispersion, After All! The German Wage Structure at the Turn of the Century”, *IZA Discussion Paper*, No. 2098.

Kölling, A. and K. Lehmann (2001), “Arbeitszeitregelungen und Tarifbindung”, in: Beschäftigungseffekte betrieblicher Arbeitszeitgestaltung, Beiträge zur Arbeitsmarkt- und Berufsforschung, No. 251.

Lalive, R., J.C. van Ours and J. Zweimüller (2002), “The Effect of Benefit Sanctions on the Duration of Unemployment”, *IZA Discussion Paper*, No. 469.

Martin, J. and D. Grubb (2001), “What Works and for Whom: A Review of OECD Countries’ Experiences with Active Labour Market Policies”, *Swedish Economic Policy Review*, Vol. 8, No. 2.

Möller, J. (1999), “Die Entwicklung der qualifikatorischen Lohn- und Beschäftigungssstruktur in Deutschland”, *Jahrbücher für Nationalökonomie und Statistik 219*.

Möller, J. (2005), “Die Entwicklung der Lohnspreizung in West- und Ostdeutschland”. In: Bellmann, L., O. Hübler, W. Meyer, G. Stephan (2005), Institutionen, Löhne und Beschäftigung, *Beiträge zur Arbeitsmarkt- und Berufsforschung*, No. 294.

Montuenga, V., I. Garcia and M. Fernandez (2003), “Wage Flexibility: Evidence from Five EU Countries Based on the Wage Curve”, *Economics Letters*, 78(2).

Mosley, H., H. Schütz, G. Schmid, K.U. Müller, H. Christoph and F. Oschmiansky (2005), Pergformanzvergleich und Erfolgsbedingungen der Arbeitsagenturen, Wissenschaftszentrum Berlin, Berlin.

Nickell, S. and B. Bell (1996), *Changes in the Distribution of Wages and Unemployment in OECD Countries*, *American Economic Review*, Papers and Proceedings 82.

OECD (2000), *OECD Employment Outlook 2000*, OECD, Paris.

OECD (2001), *OECD Economic Surveys: Germany*, OECD, Paris.

OECD (2003), *OECD Economic Surveys: Germany*, OECD, Paris.

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

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

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

OECD (2005a), Ageing and Employment Policies: Germany, OECD, Paris.

OECD (2005b), *OECD Economic Surveys: France*, OECD, Paris.

OECD (2005c), *OECD Employment Outlook*, OECD, Paris.

Oschmiansky, F. and K.H. Müller (2005), Die Sanktionspolitik der Arbeitsagenturen: Eine empirische Analyse zu Sperrzeiten. In: Mosley, H., H. Schütz, G. Schmid, K.U. Müller, H. Christoph and F. Oschmiansky, Pergformanzvergleich und Erfolgsbedingungen der Arbeitsagenturen, Wissenschaftszentrum Berlin, Berlin.

Pfeiffer, F. (2004), "Ausmass und Konsequenzen von Lohnrigiditäten", *ZEW Discussion Paper*, No. 04-13.

Pischke, J.S. (2005), "Labour Market Institutions, Wages, and Investment: Review and Implications", *CESifo Economic Studies*, Vol. 51, No. 1/2005.

Schütz, H. (2005), Prozessevaluation von Arbeitsagenturen 2004 – Übergangsphase der Arbeitsvermittlung zwischen Arbeitsamt und Kundenzentrum. In: Mosley, H., H. Schütz, G. Schmid, K.U. Müller, H. Christoph and F. Oschmiansky, Pergformanzvergleich und Erfolgsbedingungen der Arbeitsagenturen, Wissenschaftszentrum Berlin, Berlin.

Sinn, H.W., C. Holzner, W. Meister, W. Ochel and M. Werding (2006), "Aktivierende Sozialhilfe 2006: Das Kombilohn-Modell des ifo Instituts", *ifo Schnelldienst*, No. 2/2006.

Spitznagel, E. and S. Wanger (2004), Mit längeren Arbeitszeiten aus der Beschäftigungskrise? IAB Kurzbericht, No. 10/2004.

Steiner, V. and K. Wagner (1998), Has Earnings Inequality in Germany Changed in the 1980s?, Zeitschrift für Wirtschafts- und Sozialwissenschaften 118.

Steiner, V. and K. Wrohlich (2004), "Household Taxation, Income Splitting and Labor Supply Incentives – a Microsimulation Study for Germany", *CESifo Economic Studies*, Vol. 50.

Van den Berg, G.J., J.B. van der Klaauw and J.C. van Ours (2004), "Punitive Sanctions and the Transition Rate from Welfare to Work", *Journal of Labour Economics*, 22/2004.

Weber, A. and H. Hofer (2004), "Are Job Search Programmes a Promising Tool? – A Microeconometric Evaluation for Austria", Institute for the Study of Labour, *IZA Discussion Paper*, No. 1075.

Wilke, R.A. (2003), "Eine empirische Analyse von Sanktionen für Arbeitslose in Westdeutschland während der 1980er und 1990er Jahre", *ZEW Discussion Paper*, No. 03-71.

ISBN 92-64-02515-4
OECD Economic Surveys: Germany

Chapter 5

Fostering product market competition would have large benefits

Much scope remains to make regulation of product markets more conducive to competition – notwithstanding progress in recent years –, with substantial benefits for consumer welfare, productivity and employment. While the general competition legislation and enforcement framework is mostly effective, measures need to be taken to reduce administrative burdens on entrepreneurship and reduce the involvement of the government in business sector activities, notably through accelerated privatisation. Policies favouring small enterprises need to be revised, with a view to fully exposing them to competition and avoiding disincentives for small firms to grow. Substantial regulatory challenges exist in specific sectors, notably in the energy and railways industries, where non-discriminatory access of market entrants to networks needs to be improved. In the telecommunications industry, competition in the local loop can be strengthened. Regulation of the liberal professions is among the most restrictive in the OECD. Entry barriers need to be eliminated in the crafts, and restrictions on large-scale retailing development could be eased.

Over the past decade, Germany has taken considerable steps to open product markets to competition. Germany moved early in allowing consumers to choose their suppliers in network industries, notably in the electricity and gas industries, and steps have also been taken to lower entry barriers in other sectors, notably in the handicraft sector. Many of these measures produced a noticeable impact on performance in the sectors concerned, reducing prices and raising productivity. However, despite success of opening markets to competition in some areas, such as in telecommunications, the regulatory framework in which many network industries operate has not yet been appropriately adjusted to generate sustained competition. Also, public ownership of enterprises, notably in the network industries, remains pervasive. In other sectors, considerable scope remains to remove regulations that effectively protect incumbents and hold back consumer welfare, employment and productivity growth by removing sector-specific barriers to entry and reducing costs associated with red tape, such as in retailing and the liberal professions. While the competition law enforcement framework is effective, the emphasis on the protection of small and medium-sized firms may not always benefit consumers. Indeed, there is a well-identified empirical connection between the intensity of competition in product markets and economic performance (Box 5.1).[1] In addition, empirical evidence indicates that countries with more competition-friendly regulation absorb adverse shocks to the economy more easily – experiencing smaller output and employment losses – than countries where regulation impedes competition. The benefits of strengthening the capacity of the economy to weather economic shocks are likely to be particularly big for euro-area countries, such as Germany, where country-specific economic shocks cannot be weathered through changes in the nominal exchange rate.

The relationship between product market competition and economic performance is robust

While product market indicators show progress…

The OECD aggregate indicator of product market regulation shows that, as in other OECD countries, substantial progress has been made over the past five years in making the regulatory framework more conducive to competition, placing Germany in a middle position with regard to the pro-competitive stance of its regulatory policies. As a strongly export-oriented economy, Germany maintains open outward policies, with relatively few regulations applying to FDI flows, although some restrictions apply to specific firms, such as on the country's largest automobile manufacturer and the largest electricity and gas supplier.[2] Nonetheless, inward FDI flows have generally remained modest relative to inflows experienced by other large European economies, despite some increase in recent years as changes in corporate governance and capital taxation rules have made foreign ownership of German firms easier.[3] The scale of activities of subsidiaries of foreign enterprises is also relatively small.[4] This suggests that factors other than regulations on FDI may reduce activity of foreign-owned enterprises in Germany.

OECD ECONOMIC SURVEYS: GERMANY – ISBN 92-64-02515-4 – © OECD 2006

Box 5.1. **Benefits of regulatory reform in Germany**

Regulatory reforms boost economic performance through various channels. A more competitive environment tends to increase output, investment, raises consumer welfare, boosting the purchasing power, and – through a reduction in scope for rent-seeking – employment. Regulatory reform in favour of product market competition also stimulates productivity growth by fostering innovation, giving firms stronger incentives to adopt best practice. Reform of regulation on goods and services used as intermediate products – such as professional services – boosts productivity performance throughout the economy, fostering more efficient use of intermediate goods.[1]

Strong productivity growth in the communications services as well as in gas and electricity over the past 10 years suggests that regulatory reform has spurred performance. At the same time, estimated average mark-ups of prices over average cost in both industries over the same period appear to have been relatively high (see Figure 5.1), although these estimates would not fully reflect any recent changes. In telecommunications services, in particular, prices have fallen significantly in recent years.

Table 5.1. **Labour productivity growth 1993-2002**[1]

	CAN	DEU	DNK	FRA	GBR	ITA	JPN	NLD	SWE	USA
Total manufacturing	3.0	2.4	3.6	3.8	2.1	1.6	3.5	2.9	7.0	5.1
Machinery and equipment	3.0	2.8	4.2	7.1	2.9	1.7	6.8	2.0	14.1	14.7
Office, accounting and computing machinery	17.8	11.4	25.6	17.1	11.6	1.9	n.d.	n.d.	5.4	n.d.
Radio, television and communication equipment	0.0	6.8	3.9	19.1	6.7	n.d.	n.d.	n.d.	41.3	n.d.
Electricity, gas and water supply	1.9	4.2	2.4	2.4	6.9	6.2	3.2	3.2	1.4	3.2
Business sector services	1.9	1.3	1.4	0.0	2.1	0.6	1.8	0.9	1.4	2.2
Retail trade excl. motor vehicles, repair of household goods	n.d.	0.2	–0.4	1.2	2.2	0.9	n.d.	0.8	n.d.	n.d.
Transport and storage	2.6	3.1	5.5	1.5	3.0	1.1	–2.1	1.3	1.9	1.5
Post and telecommunications	3.8	13.5	6.4	4.4	7.7	9.4	12.5	8.3	6.3	3.7
Financial intermediation	3.1	3.5	2.5	–0.8	2.3	1.7	4.6	0.1	1.9	3.7

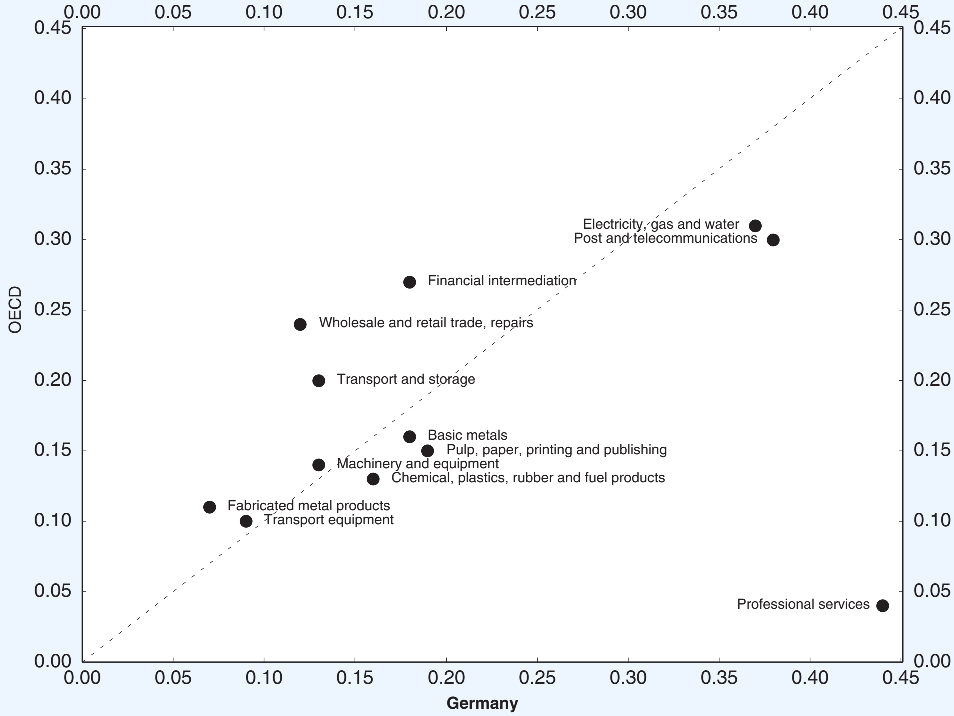
1. Real value added per number of employed. Period is 1993-2002 or nearest available year.

Mark-ups over the past 10 years also appear to have been high in professional services, in which regulation is among the most restrictive in the OECD. Mark-ups have been low, by contrast, in financial intermediation as well as in retailing and wholesaling, which are both characterised by relatively low levels of concentration, as well as in transport. In the latter sector low mark-ups may in part be accounted for by regulation of the airline industry that is more competitive than in other European countries, although price-cost margins in transport may also be influenced by the preponderance of local-government provision in public transport services. Conditions for competition within the railways sector need to develop further, as is the case in most countries.

Regulatory reform could, for example, strengthen innovation performance in R&D-intensive technologies, such as biotechnology and ICT, in which innovative performance in Germany appears to be less strong than in many other OECD countries (see 2004 *Economic Survey*). Indeed, while ICT producing service and manufacturing sectors have recorded high productivity growth rates, the sectors are smaller relative to the size of the economy than in other OECD countries. Enterprise start-ups play a particularly important role in carrying out

Box 5.1. **Benefits of regulatory reform in Germany** *(cont.)*

Figure 5.1. **Industry-level mark-ups in Germany and other OECD countries**[1]



1. The units are in excess mark-up over one, i.e. 0.28 means that the ratio of price over cost is 1.28. The period changes for each sector and country. The time span for estimated mark-ups in Germany is 1993-2002. The maximum span in other countries is 1975-2002. The mark-up is an average for the whole period. OECD results are the average of 17 member countries.

Source: OECD – STAN database and Secretariat calculations.

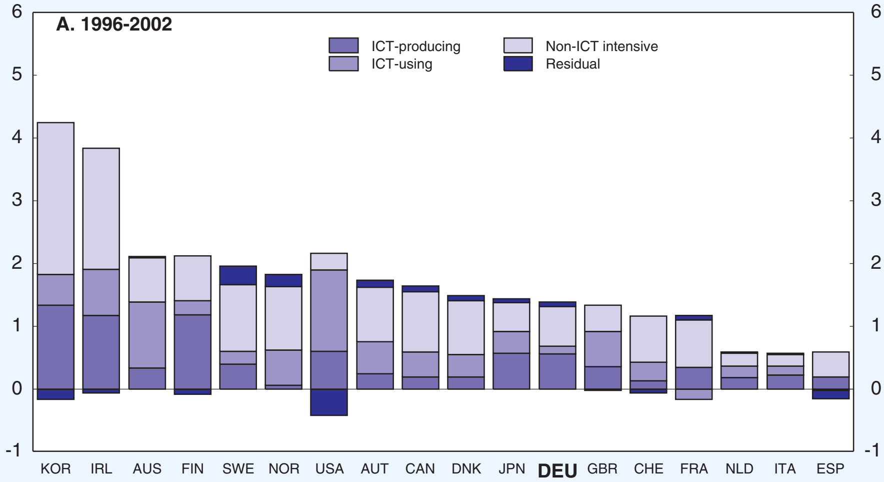
innovation in these fields. However, enterprise creation has remained subdued in Germany in recent years. While administrative barriers to firm creation are likely to exercise a direct impact, cross-country evidence suggests that the degree of anti-competitive regulation more generally explains part of cross-country differences in firm entry rates.[2]

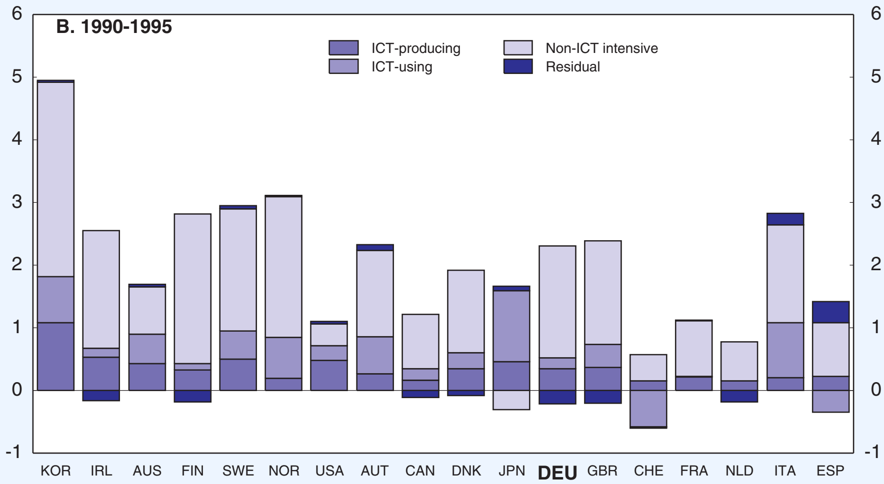
Regulatory reform could also strengthen the contribution of ICT equipment investment to productivity growth. Empirical analysis shows that both educational attainment and product market competition are closely linked to ICT use, and that the detrimental effect of anti-competitive regulation on productivity growth is the largest in sectors that use ICT intensively.[3] The contribution of ICT use to productivity growth appears to be relatively modest in Germany (see also the 2004 *Economic Survey*), with no evidence of recent catch-up. The proportion of ICT investment in total equipment investment remains relatively small, and ICT-using services have made little contribution to productivity growth (see Figure 5.2). Productivity growth in wholesale and retail trade, one of the sectors with the most intensive use of ICT technology, in particular, has been weak, even though investment in ICT in the German wholesale and retail trade industry appears to be higher than in other European countries.[4] Indeed, regulation of the retailing industry may well have contributed to relatively low productivity growth, as considered below.[5]

Box 5.1. **Benefits of regulatory reform in Germany** *(cont.)*

Figure 5.2. **Sectoral contributions to labour productivity growth**[1]

Per cent





1. Countries are ranked by total labour productivity growth 1996-2002. Labour productivity is computed as value added per person engaged.

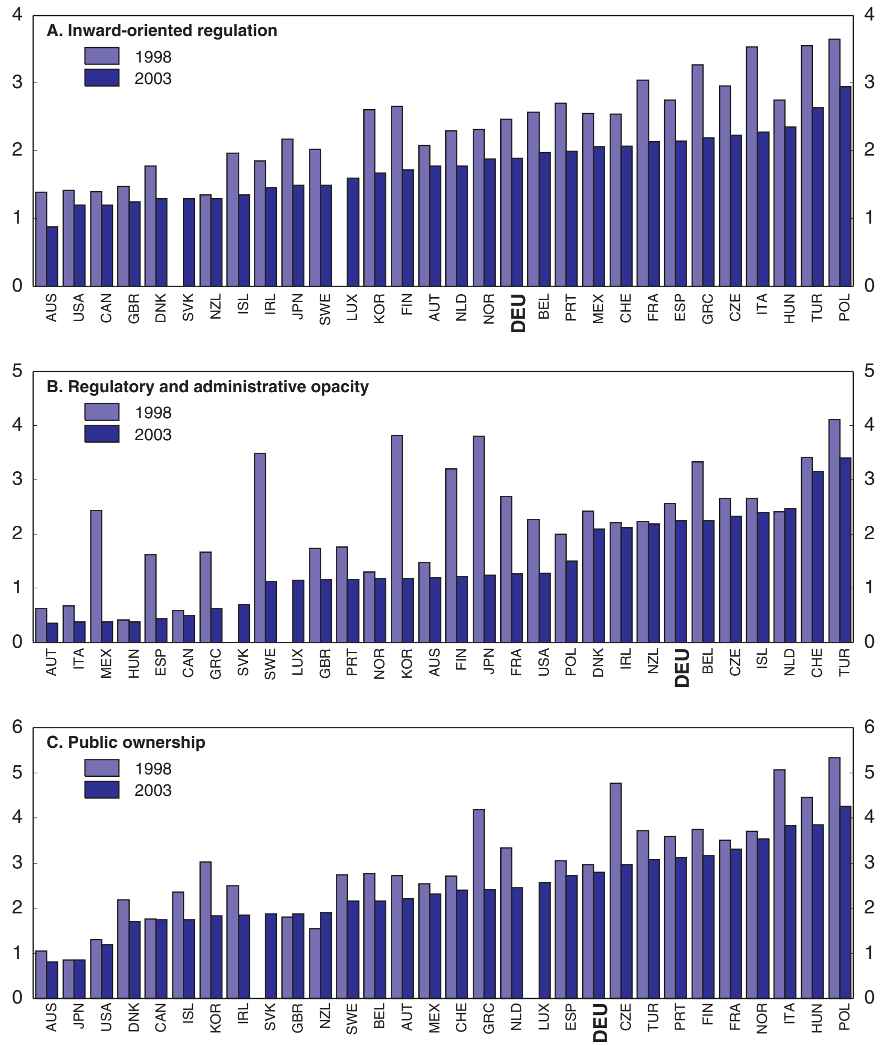
Source: OECD Secretariat calculations.

1. OECD (2005c) provides empirical evidence on the impact of sectoral reform throughout the economy through the use of intermediate goods.
2. Nicoletti, G. and S. Scarpetta (2005), "Regulation and Economic Performance: Product Market Reforms and Productivity in the OECD", *Economics Department Working Papers*, No. 460, OECD, Paris.
3. Nicoletti, G. and S. Scarpetta (2005), "Regulation and Economic Performance: Product Market Reforms and Productivity in the OECD", *Economics Department Working Papers*, No. 460, OECD, Paris.
4. ifo (2005) *Stand und Perspektiven der "New Economy" in ausgewählten Mitgliedsstaaten der EU aus deutscher Sicht* compares the level of ICT investment in 4 ICT-use intensive industries, namely banking, retail and wholesale trade, car manufacturing and machinery manufacturing, across France, Germany, Italy, the Netherlands, Sweden and the UK. In these industries ICT investment does not appear to be lower than in the other countries.
5. Comparisons across countries are however biased by changes in hours worked over time, as productivity is measured per worker.

With regard to domestic regulation, Germany scores less well in international comparison (Figure 5.3). Barriers to entrepreneurship are relatively high, in part on account of a relatively heavy administrative burden on enterprises. Owing to their sunk cost characteristic, administrative burdens are likely to favour incumbents over entrants and may be particularly costly for potential foreign entrants. Progress in privatisation in recent years has also been slower than in other OECD countries.

Figure 5.3. **Changes in product market regulation**

Indicator range 0 to 6, least to most restrictive



Source: Conway, P., V. Janod, and G. Nicoletti (2005), "Product Market Regulation in OECD Countries, 1998 to 2003", *Economics Department Working Papers*, No. 419, OECD, Paris.

... gains from further regulatory reform would be large

On the basis of synthetic indicators of regulatory stance, which are included in regressions of labour productivity, a rough idea can be obtained as to the impact of regulatory reform on economic performance. Estimates should, however, be seen as an illustration of the possible order of magnitude of performance effects, as they depend on a number of modelling assumptions and are subject to statistical uncertainty. Moreover, they do not take into account regulatory reform undertaken since 2003. Bearing these caveats in mind, the aggregate labour productivity level could rise by about 5% after 20 years as a result of moving to best-practice regulation in seven network industries. Employment gains could also be substantial.[5] In addition, moving sector-specific regulation in professional services and retailing to best practice is estimated to raise aggregate productivity levels by more than 3%, 10 years after moving regulation to best practice.[6]

General competition law and institutions are effective

Germany's general competition regime is well-developed, with well-understood rules and stable enforcement practices. The Cartel Office is a strong and experienced enforcement agency, characterised by its independent institutional culture. Germany was one of the first countries in Europe to adopt and apply vigorous merger control, and it has one of the most effective anti- cartel programs.

The Act Against Restraints on Competition (ARC) was amended significantly in 2005, introducing many changes inspired by recent changes in the EU competition law. These include a new analytical framework for the assessment of restrictive agreements, new enforcement powers for the Cartel Office, and increased incentives for private actions. In the area of abuse of dominance, however, German law maintains a "fair relationship" tradition that views competition law as a tool to protect small and medium-sized firms against aggressive competition by larger firms. Germany, in contrast to an increasing number of other OECD jurisdictions, has resisted moving to a more economics-based approach that would focus more on assessing whether or not conduct of market participants has harmful effects on competition and consumer welfare.

Institutions are strong

The principal enforcement institution is the Federal Cartel Office.[7] The Cartel Office's reputation as an independent authority that takes decision free of political influence and without consideration of non-competition policies is the result of long-standing consistent practice and of the statutory framework. The Minister of Economy and Technology has the statutory authority to issue only general instructions about decisions, but this authority has been used exceedingly rarely. Independence from political influence is further ensured by the organisation of the Cartel Office where decisions are adopted by independent "decision divisions." The Cartel Office's President, who is appointed by the Minster, cannot influence the content of decisions.[8] The Minister also has the authority to overturn negative decisions by the Cartel Office in merger proceedings where it considers whether restraints of competition are outweighed by the advantages to the economy as a whole. These interventions, which have been rare, have generated controversy and publicity. Germany currently has no federal consumer protection agency, but is required under EU law to create one for cross-boarder consumer disputes. The Cartel Office would be a natural choice to house this new federal agency. Experience in other OECD countries suggests that combining competition policy and law enforcement and consumer protection within the same agency can create significant synergies. Hence, the consumer protection agency should be installed under the roof of the Federal Cartel Office.

The Cartel Office's size has remained about the same during the last decade, taking new responsibilities as public procurement tribunal into account. Recognising the difficulty to compare with other competition authorities, the Cartel Office staff is smaller than in several other OECD countries (Canada, France, Netherlands), and about the same size as the UK's Office of Fair Trading (OFT). Especially the increase in enforcement activities following EU modernisation and the creation of the European Competition Network (ECN) might demand a larger staff. Unlike an increasing number of competition authorities in other OECD member countries, the Cartel Office has not created a separate economic unit. Many competition authorities have found that concentrating industrial organisation economic expertise in a separate economic unit under the supervision of a "chief economist" can raise the profile and strengthen the quality of economic analysis in competition law enforcement. Hence, the Cartel Offices' capacity for economic analysis should be strengthened. For this end, a separate economic analysis unit should be installed within the Cartel Office. Moreover, consideration should be given to increase the staff of the Office so as to be better able to deal with new demands of enforcement and analysis.

The Cartel Office's role is largely confined to law enforcement. It has no formal mandate to review proposed legislation for its impact on competition, which may limit its effectiveness in competition advocacy, although it advises the government in legislative proposals. In addition, public consultations and formal written contributions have traditionally played an important role in legislation. Since the 2005 reforms the Cartel Office is entitled to undertake sector investigations which could provide new opportunities for competition advocacy. Policy matters generally are under the responsibility of the Minister, with an important advisory role for the Monopolies Commission.

New legislation is inspired by recent changes in EU competition law

Rules on restrictive agreements have been brought into line with EU law

Agreements between otherwise independent firms can harm competition. Typically, "restrictive agreements" either restrict horizontal rivalry between competitors (including, for example, "hard core cartels") or they control vertical aspects of distribution. The 2005 amendments to the ARC introduced a new framework for restrictive agreements, to parallel the new approach of the European Commission. Legal standards governing restrictive agreements now apply directly, without a process of notification and approval. Although the previous system[9] was based on sound economic principles, pragmatic reasons justified the decision to follow the European model, in particular in light of the 2004 reforms in EC competition law which decentralised enforcement and aimed at greater consistency between national and European competition laws.[10] Using an identical framework should limit jurisdictional disputes.

Abuse of dominance is still concerned with protecting small and medium-sized enterprises (SMEs)

The prohibition against abusive conduct applies not only to firms considered to hold a "dominant" position in the market, with statutory presumptions of dominance based on relatively low thresholds.[11] In addition, prohibitions against price discrimination and "unfair hindrance" without objective justification, apply also where smaller firms are in a situation of "economic dependence".[12] The ARC also defines frequent below cost pricing as abuse, if it unfairly hinders SMEs and there is no acceptable justification.

As a result of statutory framework and policy goals, competition law is sometimes viewed as a tool to protect small and medium-sized firms against aggressive competition by larger firms.[13] An abuse can be found where there is concern that conduct might harm the position of smaller competitors, even where the conduct would be considered efficient and consumer welfare enhancing. This can result in decisions that cannot be rationalised on consumer welfare grounds since no explicit finding is required that a certain conduct (likely) will harm consumer welfare.[14] This approach distinguishes Germany from many other OECD countries, where an increasing number of competition authorities focus on harmful effects on consumer welfare, recognising that overly expansive enforcement runs the risk of deterring aggressive, yet legitimate competition that can benefit consumers, and of protecting instead less efficient competitors.[15] The *WalMart* decision of the Cartel Office illustrates the concern that a policy focused on protecting smaller independent firms could ultimately harm consumers (Box 5.2). The Cartel Office should strengthen the analysis of the likely economic effects of conduct, without emphasising the protection of small firms on grounds of them being small.

Box 5.2. **The Walmart case**

In *WalMart*, the Cartel Office relied on the prohibition against sales below cost to prohibit three large discounters (WalMart, Aldi, Lidl) from selling certain basic food products below cost, expressing concerns over the three firms' superior market power over independent grocery stores. The Cartel Office was not required to establish that the conduct in question could *harm* competition, and the Supreme Court, in upholding much of the Cartel Office's decision, confirmed that the finding of an infringement did not depend on a determination of a harmful effect. The Cartel Office has justified the decision on the ground that the three discounters' conduct benefited consumers only in the short run (in the form of lower prices), but their conduct likely would have harmed consumers in the long run as independent grocers would have ultimately exited the market, and the three discounters would ultimately have been able to raise their prices after independent stores exited the market. On the other hand, the OECD* has elsewhere expressed concerns that economic analysis would not have resulted in a prohibition decision since the three discounters' conduct actually *benefited* consumers (in the form of lower prices), and there was no credible evidence that their conduct likely would harm consumers in the long run: it was neither established that independent grocers would ultimately exit the market, nor would it appear plausible that any of the three discounters would ultimately be able to raise their prices after independent stores and rival discounters exited the market.

* OECD (2005c).

Effective merger control procedures have been retained

Germany has a well-established system of merger control, based on efficient procedures and a clear substantive test. The Cartel Office can prohibit mergers that "create or strengthen a dominant position". The standard of review remained unchanged during the 2005 reform of the ARC. As a result, merger analysis continues to focus more on structural changes resulting from a merger, and to a lesser degree on economic criteria to assess the merger's likely competitive effects. Even if a merger creates a dominant position, the Cartel Office can authorise it if the parties show that it will improve competitive conditions in another market, and that the improvements will outweigh the effects of dominance.

Enforcement practice could be made more efficient

The investigation and prosecution of hard core cartels is a top enforcement priority, and the Cartel Office has developed one of the most effective anti-cartel programmes in OECD member countries. A separate Cartel Unit is responsible for cartel investigations.

Sanctions imposed on cartel participants can be substantial. For example, total fines exceeded € 700 million in a cement cartel case, and more recently reached approximately € 150 million in a case against insurance companies. Criminal enforcement is possible only in the case of bid rigging. In these cases, prosecutors have brought a number of cases and even obtained jail sentences. The significant risk of substantial penalties gives credibility to the Cartel Office's leniency program which has been in place since 2000.

The 2005 amendments strengthened the Cartel Office's investigatory and enforcement powers, in many respects making adjustments required under the new EU regulations. The method of computing fines also was changed. Under the new system, fines can be up to 10% of a firm's annual revenues. The previous method, where fines could be up to three times the unlawful gains obtained as a result of the unlawful conduct, was more consistent with economic theory of deterrence. However, establishing the size of unlawful gains has proven to be difficult in the past, and the new method ensures greater consistency with the practice of most other competition authorities across Europe. Still, the current procedures, which focus on the imposition of fines on individuals rather than corporate fines, tend to lead to complicated, lengthy procedures. Public prosecutors must be involved if parties bring their case before a court, and it can take several years before a court confirms the imposition of a fine. Fining procedures need to be made more efficient.

Private action in competition cases already plays a more important role in Germany than elsewhere in Europe. For example, since 2002, private parties were involved in more than 900 competition cases, the bulk of which focused on injunctive relief against abuse of dominance. The 2005 amendments sought to facilitate private actions for damages. Among the measures introduced in 2005 are: a wider definition of the group that is entitled to bring an action; measures that ease the plaintiff's burden of proof in certain respects; and a greater role of consumer organisations in civil actions which were given the right to obtain disgorgement of unlawful gains. A significant novelty is the recognition before German courts of decisions of the European Commission, as well as member state court and competition authorities finding an infringement of EU competition law. Two issues that were not addressed in the 2005 amendments which could create significant additional incentives for more private litigation are rules concerning the gathering of evidence ("pre-trial discovery") and multiple damage awards. However, the ability to introduce further reforms in this direction might to some extent be limited by German constitutional law.

Public ownership of and support for industry is still substantial

Government ownership of enterprises remains considerable (Box 5.3) and is particularly concentrated in the network industries, giving rise to concerns over conflict of interest (see further below). State aid to business has also been generous in international comparison, with high levels of support for manufacturing and coal mining.[16] Most support for manufacturing has been given to foster regional development, in particular in Eastern Germany. About a third of total aid has been given to individual firms, rather than being available for firms in a particular region or sector, such as for rescue and restructuring purposes, which is likely to be particularly harmful in reducing competition and incentives for firms to become more efficient.

Many government support programmes are targeted to SMEs (*Mittelstand*), numbering about 800, according to a government listing.[17] Support includes more favourable depreciation rates, subsidised loan and credit guarantee programmes and innovation

 OECD ECONOMIC SURVEYS: GERMANY – ISBN 92-64-02515-4 – © OECD 2006

Box 5.3. **Government ownership in the business sector**

The federal government owns – in part through the fully government-owned bank *Kreditanstalt für Wiederaufbau* – 41.7% of the postal services provider incumbent, *Deutsche Post AG (DPAG)*, which in turn owns a majority stake in a major retail bank (*Postbank*), as well as 38% of the telecoms incumbent, *Deutsche Telekom AG (DTAG)*, respectively. It fully owns the railways operator *Deutsche Bahn AG (DBAG)*. Through the increasingly international activities of the postal service and railway operators, the government has indirectly also acquired stakes in commercial activities abroad.

In the energy sector, municipality-owned utilities control most of the electricity and gas distribution network, although some of these utilities have been privatised. The utilities are also often involved in the provision of other services, such as leisure services (for example, swimming pools), local transport, and, in some cases, telecommunication services. States and municipalities also own significant shares in the large vertically integrated electricity transmission and gas companies (RWE, EON). Sub-national governments also own significant stakes in banking, in which state-owned banks and municipality-owned banks play an important role. All three layers of government have stakes in airport and port operators, as well a few participations in manufacturing industries.

subsidies, which is often conditioned on firm size thresholds.[18] For example, a programme targeting co-operation of SMEs with research institutions is available for enterprises with at most 250 employees or € 50 million turnover. Such size limits may however have the unintended effect of reducing incentives of firms to grow. At the same time, they may distort competition between firms which qualify for the subsidies and those which do not. Large information costs may deter take-up of the schemes, which is likely to favour incumbent firms familiar with the schemes over market entrants. State aid to enterprises should be phased out, except where there is evidence that the aid can offset efficiency losses resulting from market failure. Firm size limits for support should only be maintained where there is evidence for market distortions to the disadvantage for small firms.

Administration burdens on doing business are excessive

The Federal government has made significant efforts to reduce administrative costs weighing on enterprises and individuals.[19] Nonetheless, new firms and small enterprises are still subject to the adverse consequences of high administrative burdens. The establishment of a limited liability company has been found to be relatively burdensome by international comparison, as reflected in above-average numbers of required procedures and elapsed time until the start of the business.[20] More generally, the fact that total administrative costs faced by enterprises are to a large extent independent of enterprise size implies that, relative to the resources available, administrative regulations are particularly burdensome for small enterprises. According to a survey among small and medium-sized enterprises, the time spent per employee to fulfil bureaucratic tasks is more than 11 times higher for companies with up to 11 employees than for companies with a workforce of 500 employees or more. Moreover, the share of companies denoting the level of administrative burdens as high or very high increased from some 48% in 1994 to 70% in 2003.[21] Enterprises with 20 employees or less have been estimated to account for some 90% of all German companies,[22] and the share of value added generated by SMEs appears large by international comparison. Against this background the impact of administrative deregulation on economic activity is likely to be large. The government is planning to introduce further measures to reduce administrative overheads. In particular the government is preparing legislation to further raise the size threshold for enterprises above which full accounting obligations apply, to shorten the amount of time taken to issue permits, lower statistical reporting duties, streamline auditing procedures and reduce the extent to which private enterprise personnel have to take on duties in the context of enforcing legislation.

Companies consider the assessment of tax liabilities and the passing on of taxes and social charges to fiscal authorities to be associated with high administrative costs. Indeed, German income and profit taxation is subject to a multitude of special provisions and tax exemptions, laid down in laws, ordinances and court rulings, implying a degree of complexity that is difficult to manage even for tax professionals.

In several respects, such as technical requirements for equipment or the design of workplaces, restaurants and shops on grounds of safety or environmental reasons, regulation impacting on the conduct of business is detailed and input-oriented. In the Work Place Act the modes of air circulation, heating temperature and lightening as well as the properties of the grounds, walls, windows and doors were until recently subject to detailed provisions. The same is true for the endowment of different types of rooms such as toilets, sanitary rooms, work-break rooms and work rooms. Admissible room dimensions are defined relative to the number of employees, daily work time, and endowment of the interiors. Technical requirements for inputs tend to prevent enterprises from searching for solutions that produce satisfactory outcomes in the most efficient way. This tends to increase costs and reduce product or process innovation. Moreover, there may be different provisions regulating similar characteristics in different or even contradictory ways.[23] Hence, attempts should be made to replace regulation defining inputs by regulation that sets output targets to be achieved. The implementation of a revised Work Place Act in autumn 2004 is a first step in this direction. Input-oriented provisions were streamlined somewhat, and a commission was established whose task it is to design new technical guidelines for securing the safety standards defined in the new act. This exercise should be utilised as an opportunity to move further towards output oriented targets. For example, detailed specification of the properties of rooms might be replaced by general provisions that workplaces need to be arranged such that they satisfy current safety, hygienic, ergonomic and other relevant standards. Responsibility of how to meet these standards in the most efficient way would be left to enterprises, while external auditing would be required to secure that provisions are being met. Setting general standards might well produce better safety and health conditions than specifying every fine detail on the input side, as employers are likely to build in a margin of security in meeting the standards. Moreover, areas should be identified where the requirement to seek approval for installations can be dropped and conformity with regulations be left to auditing.

Dispersed responsibilities across different auditors, for example with respect to technical properties of equipment, add to administrative burdens. While the municipal trade supervisory authorities (*Gewerbeaufsichtsämter*) are generally in charge of auditing safety regulations, other authorities or licensed enterprises commissioned by public sector authorities are in charge of supplementary auditing relating to specific conditions, *e.g.* for safety regulations relating to food processing or the operation of restaurants or the operation of elevators. In addition, professional associations (*Berufsgenossenschaften*) providing insurance against work accidents are auditing compliance with their accident prevention regulations. This dispersion in responsibilities implies that auditing for similar purposes is wide spread, weighing on firms' resources. Hence, auditing competencies for similar objects of examination should be bundled within one agency only. This could be a private sector company with technical expertise that is commissioned and licensed by public authorities. Care should also be taken that auditing requirements are adequate with respect to the different degrees of risk associated with the operation of equipment in firms of different types and scales, so as to avoid excessive auditing.

Administrative inefficiency is also generated by the fact that the provision of certain services is in itself subject to excessive regulation and lacking market testing. Professional associations (*Berufsgenossenschaften*) have the monopoly, under public law, to provide insurance against work-related accidents and occupation-related sickness. They are endowed with the authority to issue accident prevention regulation and audit the firms' compliance with the regulation. They are governed according to the co-operation principle (*Selbstverwaltung*), with parity representation of employers and employees in their governing committees. This administrative approach provides few incentives to contain the administrative burden for enterprises associated with accident prevention. Indeed the present organisation is seen by firms to add to the burden already imposed by administrative opacity.[24] Regulatory and auditing competences on the one hand and insurance of work-related accidents and sickness on the other hand should be separated.

More generally, reducing the administrative burden for enterprises in a durable way requires establishing regulatory impact analysis that assesses the cost to business and potential benefits of new and existing regulation. Some countries, like Denmark and the Netherlands, set targets to reduce bureaucratic burdens for business, and shape their legislation accordingly. The federal government has established a task force for the purpose of identifying regulatory burdens that warrant reconsideration. While this initiative has already triggered legislative action, in the past initiatives of this type have had the character of sporadic exercises. Regarding the states, Hesse and Bavaria stand as examples where commissions assess bureaucratic costs associated with new legislation, and there are also plans to screen existing regulation for the purpose of simplification. Expert groups to asses the regulatory burden for enterprises and households of existing regulation should be established at all layers of government. Moreover, mandatory regulatory impact analysis that assesses the costs and benefits of new legislation should be incorporated into the legislative process, both at the level of the federation as well as the states.

Regulatory challenges in network industries are significant

Germany moved relatively early in opening network industries to competition, notably in the railways industry, which was opened to entry of transport service providers in 1994, and the energy sector, in which all consumers were given the right to freely choose the supplier in 1998. However, the regulatory framework and ownership structure in these industries have not resulted in sustained competition. Swift liberalisation was at first accompanied by relatively small changes in the regulatory framework, leaving the determination of network access conditions to self-regulation rather than to a sector regulator and introducing only limited requirements for the separation of network access provision from potentially competitive activities. This contrasts with the approach taken in most other OECD countries, such as the UK, which have opened energy markets more gradually, accompanied by more far-reaching regulatory reforms, including the introduction of a sector-specific regulator and ownership separation of vertically integrated companies. In the telecommunications industry, where a sector-specific regulator was introduced in Germany in 1998, competition has been more firmly established, although the strong position of the incumbent in the local loop is still holding back competition. The government has recognised the weaknesses in the regulatory framework in the energy industry and responded with new legislation. This section of the chapter considers important aspects of regulatory reform in network industries, with special emphasis on the energy sector.

The government introduced an independent sector regulator for the electricity and gas sectors in 2004, as required by EU legislation. The task of regulating the energy sector was assigned to the Regulator for Telecommunications and Post (RegTP) which was renamed Federal Network Agency (*Bundesnetzagentur*, FNA). The government also extended the FNA's powers to regulating access to the railway network in 2006, thus placing all major network industries under the regulatory oversight of one agency. The choice of a single regulator in charge of all network industries could offer advantages over the introduction of separate agencies for each sector. In particular, conflict over demarcation of competencies across sectoral agencies and distortions through inconsistent regulatory approaches in different sectors can be avoided. The creation of a single network regulator may also reduce risks of regulatory capture by the interests of the firms operating in the sector, which could reduce the effectiveness of a regulator's pro-competitive policy stance. For example, a single regulator could facilitate redeployment of staff to the different sectors for which the agency is responsible,[25] reducing exposure of staff to a single sector and diversifying career prospects.

While the FNA is formally separated from the government, its institutional structure weakens its independence in some respects. The government can issue orders to the FNA to take specific decisions. While decisions on individual price regulations can only be overturned by a court decision and are taken by staff who are not subject to political appointments, decisions about which specific telecommunications market segments should be subjected to *ex ante* regulation are taken by the "presidential chamber" of the FNA, which includes the president and his deputies, who are political appointments, and the government has considerable discretion to dismiss them. In addition, their initial term of office can be renewed by the government. The independence of the regulator should be strengthened by reducing the degree of discretion the government has in dismissing the chairperson and deputy chairpersons, lengthening their term of office and removing the option of reappointment. The regulator should not be subject to orders by the federal government.

Public ownership in network industries persists, which can impede competition. Access to the networks, which are often natural monopolies, needs to be regulated by the government, while access of private sector enterprises to the network may reduce profits of the state-owned incumbent, posing conflicts of interest which can result in reductions in the scope for competition. Indeed, the high profits of the postal services incumbent, *Deutsche Post AG (DPAG)* from services offered under its exclusivity license suggest that DPAG has not been forced to lower prices sufficiently, notwithstanding reductions of prices imposed by the regulator.[26] Most recently, prices were lowered in January 2006 and prices may fall further, notably for business customers, after the expiration of DPAG's exclusive licence on 1 January 2008. Earlier interventions on price regulation by the government with the Regulator for Telecommunications and Post (RegTP), shortly before the privatisation of part of the incumbent postal services operator, may have aggravated perceptions of conflicts of interest. Privatising remaining government stakes in network operators would reduce potential conflicts of interest between the role of the government as the owner of incumbent operators and its role in promoting competition.

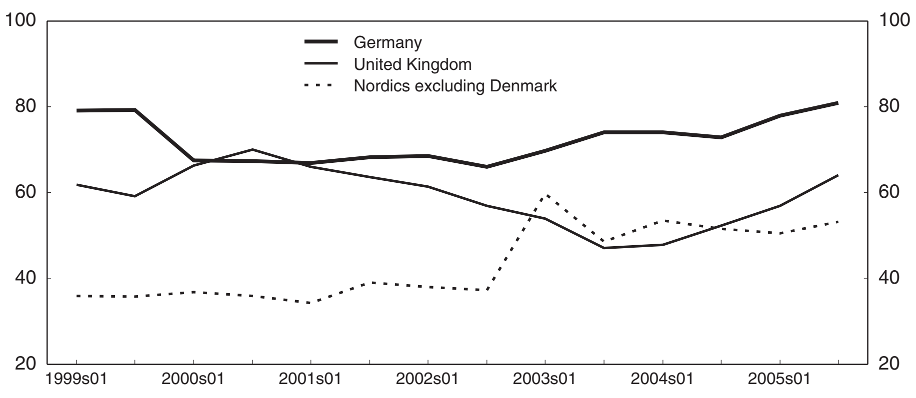
Moreover, as publicly-owned enterprises are likely to be less guided by profit than privately owned enterprises, the former may be willing to use profits from monopoly business to provide services in competitive market segments below cost, resulting in distorted prices in both the monopoly and competitive market segments. Publicly-owned incumbents – such as the railways or the postal services operator – have been transformed into enterprises of private law, which has given them much more freedom in their commercial activities than they used to have as administrative entities of the government. This, in turn, has widened the scope for such cross-subsidisation to new business areas. Indeed, the post and railway incumbent operators have both become major players in the provision of logistics services. In expanding their activities, state-owned enterprises may also benefit from lower financing costs than privately-owned competitors, distorting competition and shifting risks associated to these activities to the government. Local utilities are also likely to have considerable scope for cross-subsidisation. In addition, incentives of publicly-owned local utilities to compete with the gas and electricity retailing business of other local utilities are likely to be lower than if they were privately-owned. The government should accelerate privatisation of its remaining stakes in enterprises, notably the incumbents in the post and telecommunications services. Sub-national governments should be encouraged to privatise the electricity and gas business of local utilities. Privatisation of the railway incumbent needs to be placed within a coherent framework ensuring functioning competition (see also further below).

Sustained competition is absent in energy markets

Liberalisation of energy markets in 1998 did not result in sustained reductions in prices. While electricity prices fell in the first two years following liberalisation, notably for large business customers, prices rose again soon after (Figure 5.4). Gas prices responded less markedly to liberalisation, as the industry was highly concentrated at the wholesale level when liberalisation was introduced (Box 5.5). While the carbon tax, introduced

Figure 5.4. **Evolution of electricity prices for large industrial consumers**

Euros/megawatt hour[1]



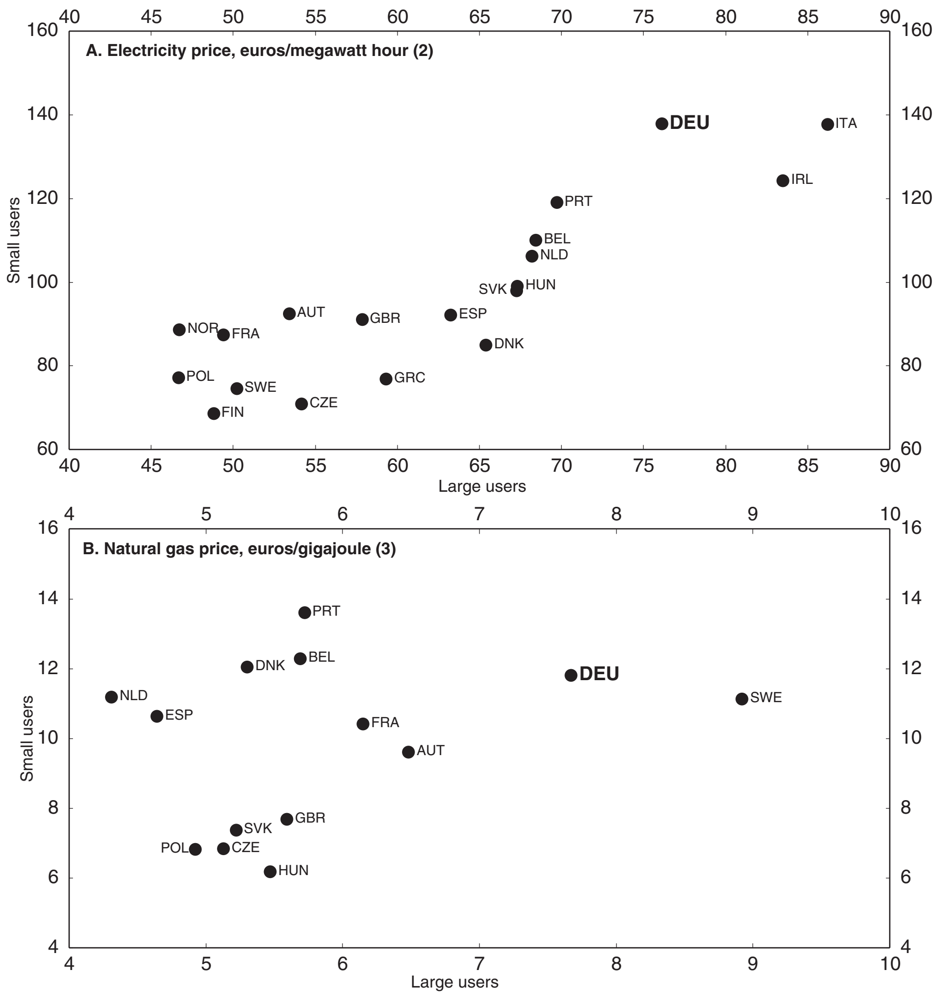
1. All prices exclude all taxes and are for Eurostat category Ie. 2005s1 refers to the first half of 2005.

Source: Eurostat, New Cronos.

in 1999, and more recently the increasing cost of oil and carbon dioxide emission permits contributed to rising electricity prices, these factors appear to account for only a fraction of the increase, while lack of competition appears to have played an important role, driven by increasing market concentration (Box 5.4).[27] Pre-tax retail prices for gas and electricity are among the highest in EU countries, notably for small customers (Figure 5.5).

Figure 5.5. **Retail energy prices**[1]

2005, second half



1. All prices exclude all taxes.
2. The price for large users is the average of prices for larger industrial consumers (Eurostat categories Ie and Ig); that for small users is the average of prices for small industrial and medium household consumers (Ib, Dc and Dd). Prices for Germany include municipal charges for rights of way.
3. The price for large users is the average of prices for larger industrial consumers (categories I3 and I4); that for small users is the average of prices for small industrial and medium household consumers (I1, D2 and D3).

Source: Eurostat, New Cronos.

Box 5.4. **The electricity market**

Full liberalisation of the electricity market was followed by a wave of mergers. Nine vertically integrated electricity suppliers (*Verbundunternehmen*), owning the county's electricity transmission network as well as the bulk of its generation, merged to four, which control about 80% of generation capacity. With much of the remaining 20% of capacity supplied by plants for which electricity is a by-product (combined heat and power plants) or guaranteed preferential access to the transmission grid (renewable energy), the share of price-setting power plants controlled by the four *Verbundunternehmen* is even larger.[1] There has been no significant entry of new firms into the generation business since liberalisation, although foreign firms acquired stakes in the *Verbundunternehmen*, and suppliers of subsidised renewable energy emerged. In other countries, entry mostly occurred through gas-powered plants. Attempts to enter the generation business with such plants failed in Germany, with the potential competitors citing, *inter alia*, problems with gas supply contracts and high gas prices as the reasons for their withdrawal. Also, wholesale prices have been relatively low, reducing the profitability of entry in the electricity generation business.[2]

The distribution network is locally fragmented, consisting of about 950 small mostly municipality-owned local utilities (*Stadtwerke*), considerably more than in any other European Union country.[3] The *Stadtwerke* integrate both distribution and retailing services. They also provide gas distribution and retailing services, heat, water supply, waste collection and public transport. The degree of vertical integration has been increasing, with the large four *Verbundunternehmen* acquiring shares in the *Stadtwerke*. For example, the two largest electricity generation and transmission network owners, RWE Energie and E.on, acquired stakes in about 40 local utilities between 2000 and 2002.[4] Vertical integration is further strengthened through municipality ownership in the *Verbundunternehmen*, notably in RWE.

New firms entered the electricity retailing business following liberalisation, although many initially successful firms have since gone out of business. Margins in retailing appear to be low, with 40% of the household retailing market estimated to be subject to margins below the cost of retailing in 2004.[5] The share of small customers who have switched retailer since liberalisation is 5%, considerably less than in the UK, where more than 50% switched. Switching was more widespread among customers with high consumption, but still fell short of levels observed in the Nordic countries and the UK.

Interconnection capacity across the borders to several countries is low, limiting the degree of competition that can originate from foreign electricity generators. Moreover, potential competition from French imports is limited by the substantial stake EdF, the dominant vertically integrated electricity supplier in France, owns in *Energie Baden Württemberg* (EnBW), the *Verbundunternehmen* operating in the south western region of Germany.

1. OECD (2005a), *OECD Economic Surveys*: France, OECD, Paris.
2. Recently, wholesale prices have increased significantly, which may reflect higher prices for pollution permits.
3. Brunekreeft, G. and S. Twelemann (2005), "Regulation, Competition and Investment in the German Electricity Market: RegTP or REGTP", *Energy Journal*, Vol. 26, special issue and European Commission (2005b).
4. Kuhlmann, A. and I. Vogelsang (2005), "The German Electricity Sector – Finally on the Move?"*CESifo DICE Report*, 2/2005.
5. Müller, C. and W. Wienken (2004), "Measuring the Degree of Economic Opening in the German Electricity Market", *Utilities Policy*, Vol. 12.

Box 5.5. **The gas market**

Most German gas is imported, with about 18% originating from domestic production. Concentration in wholesale supply of gas, from domestic and imported sources, was already strong before 1998. Since then *Ruhrgas* has retained control over 50% of wholesale gas supply.* *Ruhrgas* also controls more than a third of transmission pipelines and a large share of storage facilities. Wholesale gas suppliers have also strengthened their position through long-term supply contracts with their customers, making market entry of competitors difficult. In response to high network access costs, *Wingas*, a joint venture of BASF, a large industrial consumer of gas, and of *Gazprom*, a Russian gas producer, has built its own pipeline network, which in part runs parallel to a fraction of the *Ruhrgas* network.

As in the electricity sector, vertical integration has grown significantly following liberalisation. The owners of transmission pipelines (such as *Ruhrgas*) increasingly purchased shares in the *Stadtwerke*, which dominate the geographically fragmented distribution and retailing sectors, with about 730 distribution networks owners operating in the market. *Ruhrgas*, for example, owns stakes in 8 regional and 15 local distribution companies. Moreover, the gas and the electricity industries are closely intertwined, with two of the electricity *Verbundunternehmen* being major gas wholesale suppliers and owning substantial proportions of the gas transmission network. Ownership across the two sectors increased considerably when *Ruhrgas* and *EON* merged in 2002, following a decision of the Economics Ministry to overrule the Federal Competition authority's disapproval of the merger. The merger also increased vertical integration within the gas industry, combining Ruhrgas position as the leading wholesale supplier and owner of a large part of the gas transmission and storage network with EON's gas distribution activities. Few gas customers have switched suppliers, and switching has been virtually absent among small customers.

* European Commission (2005b).

Network access prices in the electricity and gas sectors are some of the highest among EU countries.[28] Wide disparities in the access prices of local distribution networks within Germany also suggest that considerable scope to achieve price reductions has remained unused.[29] High network access prices have reduced scope for competition to exert downward pressure on retail prices, allowing vertically integrated companies to cross-subsidise their activities in potentially competitive markets (retail and wholesale trading of gas and electricity, as well as electricity generation), squeezing the price-cost margins of potential competitors.

The new regulatory authority needs to be firmly established…

The regulatory framework proved inadequate to bring network access prices down to internationally comparable levels. The terms of access to the networks were largely determined by self-regulation through "*Association Agreements*" (*Verbändevereinbarungen*), in which associations of suppliers and consumers in the electricity and gas markets were represented. Network access prices were subject to *ex post* control by the Federal Cartel Office on the basis of general competition law, notably the requirement to provide non-discriminatory access to the networks and the prohibition of abuse of market power. Requirements to separate network services from the potentially competitive retailing and generation activities were at first limited to accounting separation, with the exception of electricity transmission, where legal and managerial unbundling was required, in line with EU legislation,[30] while no measures were taken to limit vertical ownership integration in the industry.

 OECD ECONOMIC SURVEYS: GERMANY – ISBN 92-64-02515-4 – © OECD 2006

Several features of the regulatory framework contributed to the unsatisfactory outcome: By allowing incumbent suppliers to collectively negotiate network access conditions with customers' associations, the interests of incumbent suppliers (as opposed to those of potential market entrants, who were not represented) were likely to play a substantial role in the negotiated outcomes. Indeed, small customers were underrepresented in the *Association Agreements*.[31] In addition, the powers of the FCO proved to be too limited to ensure non-discriminatory access to the networks and information on costs available to the FCO were unsatisfactory. For example, the FCO could only formally request information on costs from network operators which were suspected to breach competition law, which hampered cost comparisons across network providers.[32] In addition, although a special unit of the FCO was devoted to cases in the electricity industry, staffing was limited.

Against this background, the government has put the FNA in charge of regulating the terms of access to most of the electricity and gas network grids, with regulation of small, local networks[33] assigned to state regulatory authorities. Indeed, an independent sector regulator can potentially offer more scope to foster competitive market conditions, acting to raise consumer welfare, leaving less room for the vested interests of incumbent suppliers, than the Association Agreements. Assigning some distribution network operators to regulation by the state authorities and others to regulation by the FNA may, however, lead to an uneven playing field among, for example, companies using electricity as an input. Regulation at the level of the states could also raise concerns about conflicts of interest, given that the states may be close to the interests of the local governments within their respective territories, which own most of the electricity distribution network operators. While a committee (*Länderausschuss*) has been installed at the FNA to harmonise regulation, the need to harmonise the regulatory stance may be associated with higher regulatory costs. Regulation of all electricity and gas network operators should be assigned to the FNA.

... while effective ex ante *regulation is needed...*

New legislation setting the rules for the regulation of network access in the electricity and gas industries was introduced in July 2005. In a transitory phase expected to last for a year, the FNA and state regulators are approving all network access prices in the gas and electricity industries on the basis of average cost benchmarks for groups of network operators with similar cost characteristics (such as population density). The regulators are subsequently expected to move to price-cap regulation,[34] although this move will require further legislation. Moreover, the powers of the new regulators have been strengthened, for example, with respect to obtaining cost information from network operators. The new regulators also have more staff at their disposal than the FCO used to have and the burden of proof in court cases has been shifted to network operators.[35] The move to benchmark and price cap regulation, backed up by stronger powers of the regulator, generates scope for lowering network access prices while preserving incentives for operators to reduce operation costs. Indeed, experience in other countries shows that price cap regulation has resulted in substantial cost reductions in network transport costs.[36] In the UK, for example, network access prices have fallen by 50% since introduction of price cap regulation.

However, the new regulatory framework for the determination of network access prices leaves some issues unresolved. The detailed cost-based rules draw to a large extent on the cost accounting rules of the *Associations Agreements*,[37] which have not proven effective in ensuring low network access prices and may leave too little room for the

Federal Network Agency to develop best practice on the basis of its own regulatory experience. For example, the regulatory rates of return on capital for network operators in the electricity and gas industries that the FNA has been prescribed to calculate cost-based regulated prices, have been kept at 6.5 and 7.3%, respectively until the onset of price-cap regulation, which are likely to be excessively high, in view of the relatively low risk involved in operating the networks.[38] The government plans to review the regulated returns on capital. Indeed, excessively high prices set in the cost benchmarking exercise may lead to excessively high prices in the longer term, as they will serve as starting point in price cap regulation. Moreover, different depreciation rules apply to capital which is already installed and new capital, introducing the risk of an un-level playing field between incumbents and potential market entrants. Some observers have voiced the concern that cost benchmarks for regulated network access prices might be based on average costs of network providers rather than the costs of the most efficient provider.[39] Notwithstanding greater powers for the FNA to obtain cost data from operators, data on cost continue to be based on commercial law accounting rules, which may not best serve regulatory purposes.

The FNA is empowered to develop a coherent model for the forthcoming price-cap regulation framework. Within this framework, the FNA should be given more room for deviating from the cost accounting rules, increasing the scope for the regulator to draw from its own experience in regulating the industries in the future. It should be carefully monitored whether network access prices in the energy sector are determined according to the costs of the most efficient providers. The regulatory rates of return on capital which enter the calculation of regulatory price caps should be brought into line with the return on investments with similar risk characteristics. A level playing field between incumbents and entrants should be ensured and the quality of cost information be raised.

... and widespread vertical market integration requires a policy response

The high degree of vertical integration in the electricity and gas industries has generated incentives for incumbent companies to discriminate against market entrants in competitive market segments, such as electricity generation. With the regulation of network access prices likely to become more effective, incentives on the part of vertically integrated network operators to engage in non-price discrimination are likely to become stronger.[40] While rules against abuse of dominant market power apply, the powers of the FNA to prevent non-price discrimination could be stronger. For example, vertically integrated electricity network operators can terminate contracts with competitors, *e.g.* in the retailing business, at any time for an important reason, leaving room for the operator to exercise discretion in such decision subject to subsequent judicial review, with the energy regulator exercising no specific control as to whether such practices would be discriminatory.[41] The powers of the FNA to prevent non-price discrimination should be strengthened.

Vertical integration of generation and transmission in incumbent electricity companies (*Verbundunternehmen*), in particular, has created scope for incumbents to exploit information advantages over competitors. For example, the procurement of *balancing energy*, which is needed to keep electricity supplied and demanded on the transmission network equal at all times, has been a source of discrimination of competing generation companies (see Box 5.6). Indeed the costs of *balancing energy* in Germany are considerably higher than in other European countries.[42] In the electricity industry, an independent systems operator should be introduced for the transmissions network, with no ownership links to the electricity generation industry.

Box 5.6. **Discrimination of competitors in electricity generation: the case of balancing energy**

In Germany procurement of balancing energy from generation plants is the responsibility of the four owners of the transmission network, the *Verbundunternehmen*. The market for *balancing energy* is split into four regions which correspond to the geographic coverage of the transmission network of each of the four *Verbundunternehmen*. Since the *Verbundunternehmen* own most of generation capacity, they operate both on the demand side and supply side of the balancing energy market, generating incentives to procure balancing energy from their own power plants at a high price, discriminating against potential competitors in the generation market. Scope to discriminate arises from information advantages of the *Verbundunternehmen* over competing generation companies.[1] For example, technical standards which have to be met by suppliers of *balancing energy*, can be set such as to discourage competitors.

While each of the large four *Verbundunternehmen* can, in principle,supply *balancing energy* in regions covered by other transmission network owners, this does not appear to happen in practice.[2] Persistent price differentials between the price of balancing energy and the spot price on the power exchange suggest that the balancing market is not competitive, as market participants do not appear to take advantage of the opportunity to arbitrage by shifting supply from the spot market towards the balancing market. Rising costs of *balancing energy* have contributed substantially to rising access charges to the high-voltage transmission network.

The need to actively manage the transmission network to balance electricity supply and demand makes discrimination of competing generation companies by vertically integrated companies owning both transmission and generation particularly difficult to detect and regulate. Indeed, international experience shows that the operator[3] which carries out balancing energy operations, needs to be fully independent from generation companies.[4] One option is to separate ownership of the transmission network from generation and let transmission owners carry out balancing energy operations. Indeed, ownership separation of generation and transmission has been successfully practiced in many countries, such as the UK and the Nordic countries. Alternatively, an independent systems operator with no ownership ties to the *Verbundunternehmen* could be introduced. Such independent system operators have, for example, been put in place in some states of the US.[5]

Of these two options, ownership separation of transmission from generation is, in principle, preferable. Introducing an independent systems operator while leaving transmission and generation in the ownership of the *Verbundunternehmen* would entail separation of transmission asset ownership from transmission asset management, which may result in inefficiencies. However, in the case of Germany, transmission and generation are privately owned, so ownership separation of transmission from generation may be difficult to achieve.

1. Brunekreeft, G. and S. Twelemann (2005), "Regulation, Competition and Investment in the German Electricity Market: RegTP or REGTP", *Energy Journal*, Vol. 26, special issue.
2. Monopolkommission (2004), *Sondergutachten der Monopolkommission*.
3. This is referred to as "systems operator", who is in charge of ensuring that services for the efficient operation of the transmission network are provided ("ancillary services"), including balancing energy.
4. See, *e.g.* OECD (2005c); Hunt, S. (2002), *Making Competition Work in Electricity*, John Wiley and Sons, New York; IEA (2001), *Competition in Electricity Markets*.
5. See, *e.g.* Hunt, S. (2002) *Making Competition Work in Electricity*, John Wiley and Sons, New York.

The degree of vertical integration has further risen following liberalisation of energy markets. Ongoing acquisitions of shares in the local utilities (*Stadtwerke*) by the *Verbundunternehmen*, in particular, have been widening scope for incumbents to discriminate against potential competitors. In addition, the acquisitions have been reducing the degree to which local utilities can act as independent purchasers of wholesale electricity and gas. With the high degree of horizontal concentration in electricity generation and wholesale suppliers of gas and the limited scope for retail customers to exert competitive pressure on suppliers, independence of purchasers and sellers in wholesale markets is crucial to ensure that the large incumbent wholesale suppliers are exposed to competitive forces. While the Federal Competition Authority has successively reduced the participation threshold above which it investigates such acquisitions under merger control procedures to 10%, the *Verbundunternehmen* have continued to acquire stakes below the threshold. While unbundling requirements have been raised in the new regulatory framework, with legal and operational unbundling applying to transmission network operators with immediate effect, implementation of this requirement has been deferred until 2007 for the distribution networks, the latest admissible date under EU legislation. Electricity generation companies and wholesale gas suppliers should, as a minimum, be prevented from acquiring further stakes in distribution networks. Divestment of stakes in distribution networks held by electricity generators would be preferable. Operational and legal unbundling for distribution networks should be introduced as soon as possible.

The adverse consequences of the high degree of horizontal concentration are aggravated, in the electricity generation industry, by low interconnection with neighbouring countries, as well as the geographic segmentation of the *balancing energy* market (see Box 5.6). Therefore, interconnection of the transmission grid with neighbouring countries should be strengthened. Segmentation of the market for balancing energy should be overcome to allow for more competition in the market for electricity generation if it is consistent with energy security objectives.

Environmental objectives in energy market regulation could be achieved at lower cost

Environmental objectives play an important role in energy market regulation in Germany. In particular, the government is committed to reaching the Kyoto target for greenhouse gas emissions. Raising renewable energy production and increasing the efficiency of energy consumption play an important role in achieving this objective since the government is also committed to decommissioning every nuclear power plant after 32 years of use.

Most renewable energy production benefits from direct and indirect subsidies for electricity produced from these energy sources. The indirect subsidies result from guaranteed feed-in tariffs, which network operators have to pay to the producers of renewable energy.[43] All feed-in prices are digressive over time and are guaranteed for 20 years. These subsidies are difficult to justify with regard to their impact on reducing emissions of greenhouse gases, as the marginal cost of reducing carbon-dioxide emissions on the basis of these subsidies is considerably higher than the marginal cost of reducing greenhouse-gas emissions through a reduction in the consumption of electricity – for example, via energy saving measures – from fossil-fuel powered generation plants. Indeed, the costs of abating carbon dioxide emission through expansion of photovoltaic electricity generation are about 25 times higher and for wind energy about five times higher than the abatement cost resulting from reducing consumption of electricity produced in, say, gas-fired power plants, taking both the carbon tax and the price of carbon dioxide emission certificates into account.[44] Moreover, the IEA has estimated that the programmed reduction in the feed-in tariffs is smaller than likely efficiency gains in the production of renewable energy in the future. Subsidies to renewable energy should be reduced more quickly over time. While the overall costs of the indirect subsidy inherent in the preferential feed-in tariffs are published by the federal government, the transparency of the overall level of the subsidies could be improved by channelling all subsidies through the government budget, rather than through guaranteed feed-in tariffs.

Subsidies for improved insulation of dwellings also form part of the government's strategy for greenhouse-gas emission reductions. These subsidies are likely not to be the most cost-effective means to achieve greenhouse gas emissions reductions. Since insulation subsidies reduce heating costs, they provide incentives for households to increase ambient temperature in their homes, offsetting part of the emission-reducing effect of the subsidies. In addition the subsidy programmes are likely to entail higher administrative costs. Thus, relying on incentives provided by energy prices to reduce heating energy consumption, for example by raising taxation of carbon dioxide emissions, would be more cost effective, provided potential tenants of dwellings have sufficient information concerning the heating cost efficiency of different dwellings. Indeed, minimum standards concerning information that has to be available on heating efficiency of dwellings have recently been introduced. Subsidies for improving the insulation of dwellings should be abandoned in favour of more reliance on prices to provide incentives for greenhouse gas emission reductions. Adverse consequences on the real income of poor households should be dealt with through the tax and transfer system.

Telecommunications customers can benefit from more competition in the local loop and from alternative cable networking

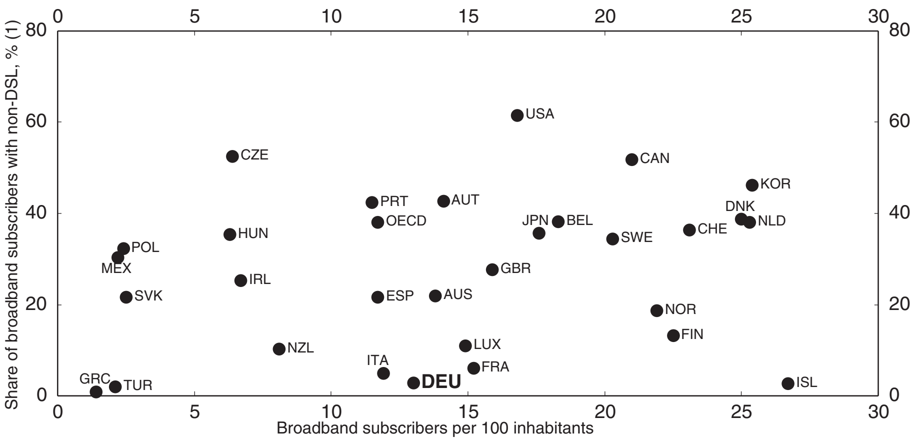
Unlike in the energy sector, liberalisation in the telecommunication sector in 1998 was accompanied by the introduction of a sector regulator and of a regulatory framework requiring *ex ante* price regulation, based on the telecommunications act (amended in 2004, see the 2004 *Economic Survey*). Competition in the telecommunication sector has evolved more favourably than in the energy sector. The number of operators in fixed telephony, for example, has increased significantly.[45] Prices for fixed line telephony are lower than in a majority of OECD countries, and Germany's position compares more favourably than in 2002.[46] Fixed line telephony competitors of the incumbent provider DTAG have increased their market shares, although they remain below competitors' market shares in some other European countries, such as the UK, Austria, the Netherlands and Scandinavian countries.[47]

Introduction of call-by-call and preselection[48] of competing operators have contributed to opening the markets to competitors.[49] Indeed, in the year following extension of call-by-call selection and provider pre-selection to local calls in 2003, prices for local calls fell by 7% on average.[50] However call-by-call and pre-selection of alternative providers for local calls were introduced considerably later than in other European countries, on the grounds that DTAG did not judge the technical conditions to be met for call-by-call selection and preselection at an earlier date, delaying entry of competitors. Delays have in part been caused by systematic appeals against the regulator's decisions by DTAG.[51] Delays in the implementation of decisions by the network regulator should be monitored and further delays prevented. The appeals process has recently been streamlined by reducing the levels of appeal courts to two, which marks progress in this regard.

Take-up of broadband access to the Internet in Germany is low and Germany has been falling further behind with respect to broadband penetration in international comparison.[52] Unlike in other OECD countries, cable TV networks or other technological platforms provide little competition to DSL lines, even though cable TV networks are more widely available than in other countries, with 70% of households connected. Moreover, most DSL lines are provided by the incumbent.

Competition between different technological platforms for broadband, notably through cable TV networks, can provide considerable scope for raising broadband utilisation (Figure 5.6). Fragmentation of cable TV network ownership and ownership of part of the cable TV network by the telecoms incumbent has in the past played a role in slowing investment to upgrade cable TV networks for broadband use. With fragmentation diminishing and the telecoms incumbent having divested its stake in the cable TV network, upgrading investment has risen to some extent recently. A study commissioned by the government has also identified state regulations requiring TV cable network owners to provide certain TV programmes through their networks as one factor limiting the attractiveness of investment to upgrade cable TV networks for broadband use.[53] State regulation on TV cable network content should be reviewed.

Figure 5.6. **Broadband access and technology, June 2005**



1. DSL refers to digital subscriber lines.

Source: OECD, Broadband Statistics.

The incumbent continues to have a dominating position in the provision of access to the local loop[54] and this could potentially limit competition for high-speed Internet access through DSL, as competitors need access to the local loop to provide competing services.[55] Indeed, ensuring competition in access to the local loop is essential for full exploitation of the economic potential of the fixed line telephone network, including broadband access to the Internet.[56]

Resale of local loop connections[57] has become the major means of obtaining access to the local loop, including access to DSL lines, for competitors in many OECD countries. Resale has developed more slowly in Germany than in other European countries, although resale has increased considerably recently after the incumbent introduced resale of DSL lines on a voluntary basis.[58] The Telecommunications Act excludes the option of introducing compulsory resale of unbundled local loops to competitors until 2008.[59] Introduction of compulsory resale of unbundled local loop connections should be accelerated. Moreover, in many cases the incumbent does not provide physical access to local loop connections (collocation) to competitors, further limiting the scope for competition.[60] It should be ensured that the incumbent operator gives competitors access to all of the incumbent's local loop infrastructure.

Legal conditions for *ex ante* price regulation for access to wholesale services by the incumbent are relatively demanding, as, unlike in other European Union countries, the Telecommunications Act stipulates that market dominance on both the wholesale and the related retail market need to be present for the FNA to be obliged to apply *ex ante* regulation in the wholesale market. If market dominance is only present in the wholesale market the FNA has some discretion as to whether it applies *ex ante* regulation or not. This might prevent regulation of wholesale access to the local loop for the provision of DSL from being subject to *ex ante* regulation in the future, once competitors have obtained a larger market share in the retail market.[61] Discretion of the regulator in determining whether *ex ante* regulation should apply may interact with concerns over the independence of the presidential chamber of the FNA from political interference, strengthening the case for improving the credibility of the independence of the regulator. *Ex ante* regulation of network access prices should not be limited to cases in which the supplier also has market power in the end-user market.

Railways reform has raised efficiency but more needs to be done to strengthen competition

Structural reform of the railway sector in Germany began relatively early, in 1994, with the transformation of the railways into a private limited company (*Deutsche Bahn AG*, DBAG), increasing the autonomy of management and subjecting DBAG to private accounting and company laws, although DBAG has remained government-owned. At the same time, the railway network was opened to competing freight and passenger transport providers and a railway regulator was put in charge of ensuring non-discriminatory network access of market entrants to the railway network.

These reforms appear to have contributed to a marked improvement in productivity relative to other European railway systems in the second half of the 1990s.[62] Government subsidies have declined slightly in real terms although they remain higher than in some European countries – such as France – relative to the amount of freight and passenger transport supplied. Further reform steps that were taken included the creation of several subsidiaries of the railways incumbent, which separated transport services from network services. However, the companies continued to be fully owned by the holding company, DBAG. DBAG was granted a large degree of discretion in developing its organisation, leaving the subsidiaries only limited autonomy.[63] Legislation introduced in 2005 to implement EU directives has strengthened managerial separation to some extent, but the holding company DBAG has retained a considerable degree of discretion. For example, the new legislation requires DBAG to set up its corporate governance in such a way that personnel involved in determining network access conditions in the network subsidiary are independent in their decisions from any influence from the holding company and its transport service subsidiaries. However, members of the supervisory board (*Aufsichtsrat*) of DBAG's network subsidiary can at the same time be a member in the executive board of its transport service subsidiary and members of the executive board of the network subsidiary can be members in the executive board of DBAG.[64]

Despite the relatively large number of licensed companies providing rail transport services, competition in railway services has developed slowly, with competitors to the federal government-owned railway operator increasing their market share to close to 10% in 2005.[65] Competitors have been particularly active in commuting passenger services, where competition is limited to the tendering of monopoly service by the states, linked to the payment of subsidies to the operator for the provision of a set service volume and prices.[66] In this market segment, new entrants captured 41% of services tendered by state governments. However, while tendered services have reportedly lead to cost reductions between 20 and 40%, only 19% of the volume of the contracts for commuting services are commissioned through competitive tendering, reducing scope for competition.[67] Use of competitive tendering for all contracts would facilitate the benchmarking of tenders to most efficient provision. Competitive tendering of commuting rail service contracts should be made compulsory.

There have been some cases where discrimination against competitors accessing DBAG's railway network has become apparent. For example, quantity discounts for network access charges as well as for the price of electricity supplied by DBAG's electricity subsidiary were judged to be discriminatory and were therefore reversed by the FCO and the courts, on the grounds that only DBAG's own railway transport operating company was eligible for the discounts. Network access charges, notably for passenger trains, are among the highest in European countries, which may to some extent be explained by the legal requirement that access charges reflect average costs net of subsidies. However, this access charging rule is also likely to reduce incentives to achieve cost reductions. While the government has assigned the responsibility for regulating railway network access to the FNA since January 2006, network access prices continue to be determined by the network services subsidiary of DBAG, subject to subsequent approval by the FNA. The combination of weak managerial separation, as noted above, and assignment of access-pricing to the network services subsidiary is unlikely to result in satisfactory non-discriminatory access. *Ex ante* regulation of network access prices would give more scope to prevent discrimination and – through price cap regulation – provide stronger incentives to generate cost savings in network access provision. *Ex ante* regulation of network access prices in the railways should be introduced. Further reforms should aim at achieving a more effective vertical separation of the network operator from competitive transport services, for example by moving the network operator out of the holding structure.

The federal government is currently considering options for privatisation of DBAG. In particular, consideration is being given whether the integrated holding company should be privatised as a whole or whether ownership separation should be introduced between the railways network and transport services, while privatising only the latter. Careful consideration should be given in weighing efficiency costs and benefits of ownership separation between network services and transport services in the railways.[68] Ownership separation would offer the advantage that, under existing constitutional constraints, full privatisation of the transport services of the incumbent would be possible.[69]

Denial of access to rolling stock by DBAG also is a potential source of discrimination of competitors. Competitors have claimed that DBAG does not make surplus rolling stock available to them. Indeed access to the incumbent's rolling stock is not part of the regulators' responsibilities and there is no legal obligation on the part of the railways incumbent to make rolling stock available to competitors.[70] Experience from other OECD countries suggests that non-discriminatory access to rolling stock is important, as incumbents have an effective monopoly over rolling stock.[71] The railways regulator should oblige the incumbent operator to rent out rolling stock at non-discriminatory conditions.

OECD ECONOMIC SURVEYS: GERMANY – ISBN 92-64-02515-4 – © OECD 2006

There has also been some concern that investment decisions in the railway network may be biased to the disadvantage of those parts of the network which are mainly used by competitors, particularly in commuting networks in which competitors have gained state government contracts. With the new legislation implementing EU directives, competing railway transport operators have been given the opportunity to propose investment projects to the federal government, which were previously only proposed by the incumbent railways operator and state governments, in formal investment planning procedures, helping to overcome discrimination of competitors in the choice of investment projects.

The service sector needs to be more open

Despite some progress in reducing entry barriers, competition in several sectors is held back by sector-specific entry regulation. In the crafts, legislation lowered qualification-related entry requirements (see the 2004 *Economic Survey of Germany*), but most existing businesses remain tied to the requirement of qualification (master) certificates or a track record of professional experience, and in some crafts the traditional master certificate remains compulsory, generating considerable entry costs, which are born by government grants and subsidised loans to some extent. Firm creation in the crafts has risen substantially since the partial deregulation, particularly in those crafts which were deregulated relatively strongly, suggesting that the deregulation has had a substantial impact, although the subsidised self-employment scheme for the long-term unemployed (see Chapter 4) is also likely to have played a significant role.

The remaining entry requirements have been justified on the basis of consumer safety concerns as well as the contribution of these crafts to the supply of traineeships. However, by keeping prices of services relatively high, the master requirement may well reduce the demand for labour, including skilled labour. The qualification requirements have also prevented enterprises from combining services across different crafts. Qualification-related entry requirements in the crafts sector should be abolished.

Entry barriers remain high in public procurement, where the complexity of rules and the participation of business associations in the setting of the rules give an advantage to incumbents over potential market entrants, notably from abroad. While large contracts have to be tendered according to EU rules, procurement contracts are frequently split up in Germany to facilitate participation by SMEs, so that German rules apply. Differences across states in procurement rules further increase administrative costs, reducing market access for foreign market entrants, and thus competition. Some states maintain legislation linking construction procurement to local pay conditions, further limiting competition (see also the 2004 *Economic Survey*).

Efficiency in retailing can be raised further…

While the concentration and price-cost margins in the distribution sector are low in international comparison,[72] productivity growth appears to have been weak (see Table 5.1 and Figure 5.1) and employment growth has been modest.[73] Part of weak observed productivity growth – which is measured in terms of output per worker – may be explained by increasing take-up of part-time employment contracts in the retailing industry, which may have expanded more quickly in Germany than in other OECD countries. According to estimates based on the national accounts, hourly productivity growth in retailing in

Germany could amount to between 1.5 and 2% per year on average. Weak private consumption growth in recent years may also have contributed, by generating overcapacity, which is also likely to have contributed to low price-cost margins.

Actual productivity growth rates are thus difficult to interpret, and the retailing sector in Germany has, as in other countries, undergone substantial change, with less efficient retail chains being driven from the market, and intensified use of information and communication technology. Nonetheless, structural factors can affect productivity growth. In particular, zoning regulation could potentially hold back further productivity gains in retailing, preventing the entry of large surface outlets. Zoning rules are set in federal and state legislation, and these rules have to be followed by municipalities in their planning decisions. Restrictions on the setting-up large scale retailing outlets in Germany aim at securing the development of city centres. In addition they aim at minimising adverse effects such outlets could have on the availability of retailing outlets in local neighbourhoods and on the environment, for example through an increase in traffic. One of the criteria used in practice to determine whether large retailing outlets can be permitted by municipalities can include, under certain conditions, the effect of the outlet in question on turnover in neighbouring municipalities.[74] This could have the unintended effect of protecting incumbent retailers, reducing competition. Federal legislation limits development of large surface retailing outlets above a surface of, as a rule, 700 square meters[75] to locations within urban centres or especially designated areas. In regions bordering countries with more liberal regulation on large retailing, such as the Czech Republic and part of Austria, retailers in Germany appear to have difficulty in competing with large-scale retailers across the border, suggesting that the demand for services of large-scale retailers is not adequately met within Germany.

Evidence from other OECD countries suggests that large surface retailers have boosted the industry's productivity performance, exploiting returns to scale, in part through the use of ICT, raising consumer welfare through lower prices.[76] Indeed, large-surface retailing has contributed to superior retailing industry productivity performance in the US, which in turn has been estimated to account for two thirds of the economy-wide productivity growth gap between the United States and the European Union.[77] The experience in a number of other OECD countries, such as Japan and the Netherlands, also demonstrates the positive effects of less restrictive regulation of the retailing industry on sector performance.[78] Deregulation of large scale retailing outlets in recent years has also noticeably lowered average consumer prices in the Czech Republic.

While zoning regulation aims at striking a balance between urban development and environmental concerns on the one hand and economic concerns on the other hand, easing of zoning restrictions on large-scale retailing could have substantial economic benefits. Consideration should be given to easing restrictions concerning the setting-up of large retail outlets. Adverse effects on the turnover of incumbent retailers should not play a role in decisions to set up large scale retailing outlets.

Prohibitions of pricing below cost may also reduce the degree to which large retail chains may take advantage of scale economies and exert competitive pressure on less efficient competitors in the retailing industry (see above).[79] Indeed, evidence from other OECD countries indicates that rising concentration in the retail industry has been driven by cost advantages of large retail chains, so that rising concentration has boosted productivity growth. Relatively high levels of concentration appear to be consistent with competition owing to relatively low costs of entry in retailing.[80] In the UK the competition authority has reached the conclusion that imposing prohibitions on pricing below cost would on balance not raise consumer welfare.

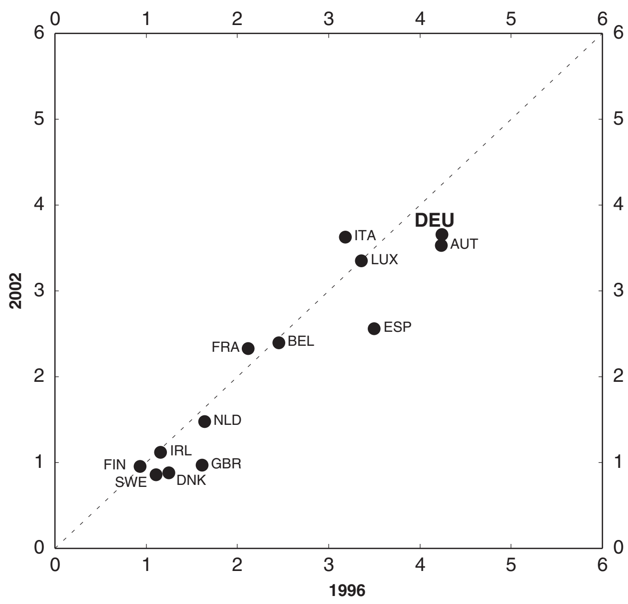
Shop opening hours have been liberalised in recent years, raising the maximum number of shop opening hours per week to 84. Opening hours are still more restrictive than in other European countries, which in some cases set no limits at all, such as the Netherlands, Sweden and the UK. Indeed, experience from countries which have liberalised shop opening hours shows that longer shop opening hours raise employment in the industry as well as consumer welfare, as evidenced in changed shopping patterns.[81] Current plans for constitutional reform foresee that the legislative powers on shop opening will be transferred to the states, most of which have announced plans to give up restrictions on shop opening hours except on Sundays. The states are encouraged to do so.

... while hurdles to competition in professional services need to be lowered

In several OECD countries, including Germany, services that are used as intermediate products by enterprises – notably accounting and legal advice, engineering services and services provided by architects – have experienced fast growth and play an important role in reshaping the organisation of business and helping to generate productivity gains. Sectoral regulation indicators compiled by the OECD show that regulation of professions providing enterprise-near services is among the tightest in the OECD (Figure 5.7). Entry

Figure 5.7. **Sectoral regulation of professional services**[1]

Index 0 to 6, least to most restrictive regulation



1. Accounting, law, engineering and architecture.

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

Box 5.7. **Recommendations for making regulation more competition friendly**

The effectiveness of competition law and competition law enforcement should be raised

- A consumer protection agency should be installed under the roof of the Federal Cartel Office.
- The Cartel Offices' capacity for economic analysis should be strengthened and consideration should be given to increase its staff. The Cartel Office should strengthen the analysis of the likely economic effects of conduct, without emphasising the protection of small firms on grounds of them being small. Fining procedures need to be made more efficient.
- The independence of the Federal Network Agency (FNA) should be strengthened by reducing the degree of discretion the government has in dismissing the chairperson and deputy chairpersons and removing the option of reappointment. The regulator should not be subject to orders by the federal government.

The role of the state in business sector activities should be scaled down further

- The government should accelerate privatisation of its remaining stakes in enterprises, notably the incumbents in the post and telecommunications services. Sub-national governments should be encouraged to privatise the electricity and gas business of local utilities.
- State aid to enterprises should be phased out, except where there is evidence that the aid can offset efficiency losses resulting from market failure.

Administrative opacity should be reduced

- Auditing competencies for the enforcement of safety regulation should be bundled within one agency only.
- Expert groups to asses the regulatory burden for enterprises and households of existing regulation should be established at all layers of government. Mandatory regulatory impact analysis that assesses the costs and benefits of new legislation should be incorporated into the legislative process, both at the level of the federation as well as the states.
- Insurance of work-related accidents and sickness risks should be left to the market.

The effectiveness of the regulation of energy markets needs to be raised further

- Regulation of all electricity and gas network operators should be assigned to the FNA. The FNA should be given more room for deviating from legislated cost accounting rules, increasing the scope for the regulator to draw from its own experience. More room should be created for lowering regulated network access prices, bringing regulatory rates of return on capital into line with the return on investments with similar risk characteristics and improving the quality of cost information. It should be carefully monitored whether network access prices in the energy sector are determined according to the costs of the most efficient providers The powers of the FNA to prevent non-price discrimination of competing suppliers by vertically integrated enterprises should be strengthened.
- Network access services should be more strictly separated from potentially competitive activities. In particular, an independent systems operator for the electricity transmissions network should be introduced, with no ownership links to electricity generation companies. Operational and legal unbundling of distribution networks should be required as soon as possible and wholesale gas suppliers and electricity generation companies should be prevented from acquiring further stakes in distribution networks.

Box 5.7. **Recommendations for making regulation more competition friendly** *(cont.)*

- Interconnection of the transmission grid with neighbouring countries should be strengthened.
- Segmentation of the market for balancing energy should be overcome to allow for more competition in the market for electricity generation, if consistent with energy security.

The costs of achieving environmental targets should be reduced

- Subsidies to renewable energy should be reduced more quickly over time. To improve the transparency of the overall level of the subsidies, the government should consider to channel all subsidies through the government budget, rather than through guaranteed feed-in tariffs.
- Subsidies for improving the insulation of dwellings should be abandoned in favour of more reliance on prices to provide incentives for greenhouse gas emission reductions.

Competition in telecommunications services should be further encouraged

- Delays in the implementation of decisions by the network regulator should be monitored and further delays prevented if necessary.
- State regulation on TV cable network content should be reviewed.
- Introduction of resale of unbundled access to the local loop should be accelerated. The incumbent operator should give competitors access to all of the incumbent's local loop infrastructure.
- *Ex ante* regulation of network access prices should be applied to cases in which the supplier has market power in the wholesale market but not in the retail market.

The conditions for competition in railway services need to be improved

- Competitive tendering of regional rail service contracts should be made compulsory.
- Network access prices should be more effectively regulated, introducing *ex ante* regulation of railway network access charges.
- The incumbent operator should be obliged to rent out rolling stock at non-discriminatory conditions.
- Network services should be more effectively separated from competitive transport services.

Regulation of the liberal professions and crafts needs to be liberalised further

- Legally-set price schedules in the liberal professions should be phased out as soon as possible and should not be replaced by recommended fee schedules. Conduct regulation needs to be reconsidered.
- Qualification-related entry requirements in the crafts sector should be abolished.

Regulatory hurdles hampering consumer welfare improvements in retailing services should be overcome

- Adverse effects of new large-scale retail outlets on the turnover of incumbent retailers should not play a role in decisions to allow development of new large-scale outlets. Consideration should be given to ease restrictions concerning the setting-up of large retail outlets.
- Shop opening hours should be liberalised further.

regulations appear to be relatively strict for accountants, tax advisors, architects and engineers, and the latter are subject to price regulation. Germany also ranks above the average in the OECD with respect to the number of exclusive tasks assigned to these professions.[82] Conduct regulation also appears quite stringent, with advertisement being prohibited for some professions. Membership in professional associations is compulsory. The fact that professional associations are also involved in conduct regulation poses the risk of strengthening the power of incumbents at the disadvantage of new entries. In order to ensure fully market determined price setting, legally-set price schedules should be phased out as soon as possible and should not be replaced by recommended fee schedules. Conduct regulation needs to be reconsidered.

Notes

1. OECD (2002a).
2. No shareholder is allowed to own a larger stake of *Volkswagen* than the state of *Niedersachsen*. Restrictions apply to foreign acquisitions of stakes in the electricity and gas provider *eon*.
3. A very large takeover of a German telecommunications firm in 2000 has led to exceptionally large inflows in Germany in that year.
4. Nicoletti *et al.* (2003).
5. According to OECD estimates. See also Nicoletti and Scarpetta (2005a). For evidence on the substantial effects of competition-friendly product market regulation on employment, see Nicoletti and Scarpetta (2005b). Best-practice regulation is defined as the most-competition-friendly regulation among OECD countries for which data are available in each of the 7 following industries: electricity, gas, rail, telecommunications, post, road freight and airlines.
6. The effects of regulatory reform in the professional services and retailing are estimated assuming that only reforms in the respective sector are carried out. See Nicoletti and Scarpetta (2005a).
7. Cartel offices in the German *Länder* also enforce the ARC. Although overall they play a less important role, they have some influence on the setting of enforcement priorities in their territories. In addition to competition enforcement, the Federal Cartel Office also acts as tribunal in appeals against public procurement decisions.
8. While this arrangement provides an additional guarantee of independent decision making, it also limits the ability of the Cartel Office's President to set priorities in terms of case selection and development of enforcement policies.
9. Horizontal agreements were generally prohibited unless authorised by the Cartel Office or characterised as "unopposed" by the statute. Restrictions in vertical agreements were treated more leniently, and most restrictions were authorised unless found to be unlawful and prohibited for the future. OECD (2004a).
10. The changes were not uniformly greeted with enthusiasm. In addition to defending the soundness of the traditional model which treated vertical restraints more leniently, concerns were raised that abolishing the notification system would reduce the ability of competition authorities to intervene against anticompetitive agreements. Monopolkommission (2003) 7-9.
11. Section 19(3) ARC (establishing market dominance presumptions for one firm (one third of the market); three firms or fewer (50% market share); and five firms or fewer (two thirds of the market).
12. See Section 20(2) ARC. Factors to assess whether certain conduct can be deemed abusive include the ARC's overriding goals of ensuring "freedom to compete" and protecting competitive market structures. In addition, the ARC defines below cost pricing as abuse where it unfairly hinders small and medium firms, and occurs on more than an occasional basis and without objective justification.
13. OECD (2004a).
14. OECD (2005c).
15. For example, the European Commission is reviewing its case law the abuse of a dominant position and developing guidelines which are expected to emphasis to a greater extent the need to engage in economic analysis. The Economic Advisory Group for Competition Policy (an advisory group to

DG Comp's Chief Economist) recently advocated a more economics-based analysis. A recent OECD peer review of the European Commission made similar recommendations. See OECD (2005).

16. See OECD (2004d) and European Commission (2005c), which reports data for 2003. Coal production subsidies in the form of transfers absorb about 0.2% of GDP, which is supplemented by tax exemptions. With coal covering only a small share of primary energy demand, and imported coal being available from a large range of countries, domestic production has been considered unnecessary by the International Energy Agency (IEA) for securing energy supply in Germany. See IEA (2002).
17. Quoted in Hommel and Schneider (2003), pp. 52-90.
18. BMWA (2005).
19. See *e.g.* OECD (2004b, 2004d).
20. World Bank (2005).
21. See Institut für Mittelstandsforschung Bonn (2004).
22. Daten aus Mittelstandsdefinition des Institutes fuer Mittelstandsforschung.
23. For examples see Bayerische Staatsregierung Deregukierungskommission (2003).
24. Bayerische Staatsregierung Deregulierungskommission (2003).
25. OECD (1999).
26. Monopolkomission (2003) and Monopolkommission (2005a).
27. Kuhlmann and Vogelsang (2005).
28. OECD (2004b).
29. See *e.g.* Müller and Wienken (2004), pp. 283-290.
30. See OECD (2003a) and OECD (2004b) for more details.
31. OECD (2004b).
32. In addition, the FCO's rulings were not generally enforceable pending an appeal (this was reversed in 2005) and the FCO's decisions were often overturned in court (see Böge, 2004).
33. These are networks which cover not more than one state and have fewer than 100 000 customers. In the gas industry, these networks cover about 20% of the market, in the electricity industry they cover 10% of the market.
34. Network operators whose access prices exceed the average of costs of a group of network operators with similar structural characteristics (*e.g.* population density) will be required to reduce network access prices.
35. Schmitt (2005), pp. 93-100.
36. IEA (2001).
37. However, in the gas industry, the legislation introduces improved access rules on which stakeholders failed to agree in the last attempt to improve the *Association Agreement* for the gas industry.
38. OECD (2004b).
39. In the forthcoming price-cap regulation regime, the regulator plans to use the costs of the most efficient network provider as a benchmark. If the costs of a network access provider are above the average of costs, the burden of proof that the provider is nonetheless efficient lies with the provider. If costs are below the average but above the costs of the most efficient provider the burden of proof lies with the FNA.
40. Kuhlmann and Vogelsang (2005) and Brunekreeft and Twelemann (2005).
41. Kuhlmann and Vogelsang (2005).
42. European Commission (2005b) and Monopolkommission (2004).
43. Kuhlmann and Vogelsang (2005).
44. According to OECD (2004f), abatement costs implied by photovoltaic and wind energy subsidies amounted to € 1 217 and € 167 per tonne. Carbon taxes applying to gas-powered plants amount to about € 17 per tonne, to which the price of carbon dioxide emission certificates of about € 25 per tonne should be added.

45. European Commission (2005a).
46. See OECD (2003a).
47. European Commission (2005a).
48. Call-by-call refers to allowing consumers to change operator for individual calls, preselection refers to allowing consumers to change operator for all calls following the change.
49. Introduction of call-by-call and preselection for local calls were required by the European Commission already in 2004.
50. Hempell *et al.* (2005).
51. OECD (2004b).
52. Growth of broadband connections has been below the average of OECD countries in 2004. See OECD (2004c).
53. Büllingen *et al.* (2002). Study for the Ministry of Economy.
54. The local loop is the cable linking a household or company to the telephone network.
55. In France, for example, competitors have reached a market share of about 50% and broadband penetration doubled in 2004. See OECD (2005a) and European Commission (2005a).
56. OECD (2004e).
57. Resale of local loop connections refers to the sale of local loop connections purchased by competitors from the incumbent to third parties, allowing the buyer to obtain access to the local loop without being able to modify the services provided through the local loop, whereas various forms of local loop unbundling allow the buyer to make own investments to upgrade services.
58. In the UK, for example, where competitors of the incumbent own a 60% market share in providing DSL services, 50% of DSL lines are provided through resale, and in France 25%, in the second quarter of 2004. See ZEW (2005). In Germany the share was 3.5% in the second quarter of 2004 and 9% in the second quarter of 2005.
59. Before 2008, the Telecommunications Act only allows the regulator to introduce the compulsory resale of local loop connections which are bundled with connection services. (See, *e.g.*, Monopolkommission, 2005) Bundling of access to the local loop puts those competitors at a disadvantage which have built up their own telephone networks, as these competitors need not purchase communication services with the access to the local loop.
60. Monopolkommission (2005b).
61. European Commission (2005a). See also Monopolkommission (2004).
62. See Friebel *et al.* (2004), Efficiency is measured in terms of the weighted average of passenger and freight kilometers. This is controlled for the impact of network size, personnel, long-term country specific productivity trends and the average impact organisational reforms have had in the 11 European countries studied.
63. Lodge (2003).
64. See Booz-Allen-Hamilton (2006) for more details.
65. See Booz-Allen-Hamilton (2006).
66. Since governments provide subsidies for the provision of such services, entry outside contracts offered by state governments does not arise.
67. Gleeve (2003) and Booz-Allen-Hamilton (2006).
68. OECD (2006).
69. If the integrated concern is privatised as a whole, constitutional constrains would only allow privatisation of less than 50% of the railways incumbent.
70. According to the description of the regulator's responsibilities. See Eisenbahn-Bundesamt (2004).
71. Competing service providers are faced with short-term contracts and therefore have limited incentives to invest in rolling stock themselves. Moreover different security standards across countries prevent supply of rolling stock by foreign companies. See OECD (2005d).
72. See OECD (2005d) on international comparisons of concentration indicators in retailing, which however provides data only for 1999.

73. OECD (2005b).
74. If incumbents in neighbouring municipalities can be expected to lose more than 20% of turnover as a result of the construction of a new large retailing outlet permission for the retail outlet to be set up might not be granted in practice. See Bundesamt für Bauordnung und Raumordnung (2000). If a planned large-scale retailing outlet is expected to have a significant impact of retail turnover in a neighbouring municipality, zoning planning needs to be conducted in co-operation with the neighbouring municipality whose retailers would suffer the reduction in turnover.
75. In some cases, the limitations may apply to outlets with a surface of more than 800 square meters.
76. OECD (2003b).
77. OECD (2005d).
78. OECD (2002b).
79. See Monopolkommission (2004), notes that a German retailing chain was prevented from pricing below cost (*Rossmann*) because of the adverse impact of its pricing on smaller retailing chains.
80. OECD (2005d).
81. OECD (2005d).
82. See also Paterson *et al.* (2003).

Bibliography

Bayerische Staatsregierung Deregulierungskommission (2003), Entbürokratisieren, deregulieren, flexibilisieren, Munich.

BMWA (2005), *Wirtschaftliche Förderung, Hilfen für Investitionen und Arbeitsplätze*.

Böge, U. (2004), *Der neue Energierechtsrahmen- Fortschritt, Rückschritt oder Stagnation.*

Booz-Allen-Hamilton (2006), *Privatisierungsvarianten der Deutschen Bahn AG*, Study commission by the Federal Ministry of Finance and the Federal Ministry of Transport, Construction and City Development.

Brunekreeft, G. and S. Twelemann (2005), "Regulation, Competition and Investment in the German Electricity Market: RegTP or REGTP", *Energy Journal*, Vol. 26, special issue.

Büllingen, F. *et al.* (2002), Förderung der Marktperspektiven und der Wettbewerbsentwicklung der Breitbandkommunikationsnetze in Deutschland.

Bundesamt für Bauordnung und Raumordnung (2000), Factory Outlet Center, *Arbeitspapiere 2/2000*.

Eisenbahn-Bundesamt (2004), *Kompetenz und Verantwortng*.

European Commission (2005a), *Annex to the European Electronic Communications Regulation and Markets (11th Report)*.

European Commission (2005b), *Technical Annex to the Report from the Commission on the Implementation of the Gas and Electricity Internal Market.*

European Commission (2005c), *http://europa.eu.int/comm/competition/state_aid/scoreboard/indicators/k9.html*.

Friebel, G., M. Ivaldi and C. Vibes (2004), Railway Deregulation: A European Efficiency Comparison, mimeo, University of Toulouse.

Gleeve, S. (2003), *EU Rail Liberalisation: Extended Impact Assessment, Regulatory Overview of Germany*, Technical Note, December.

Hempell, T., J. Ohnemus, An. Schäfer and M. van Berg (2005), *Benchmark Internationale Telekommunikationsmärkte*, ZEW.

Hommel, U. and H. Schneider (2003), "Financing the German Mittelstand", EIB Papers, Vol. 8, No. 2.

Hunt, S. (2002), *Making Competition Work in Electricity*, John Wiley and Sons, New York.

IEA (2001), *Competition in Electricity Markets*.

IEA (2002), *Energy Policies of IEA Countries, Germany 2002 Review*.

ifo (2005), *Stand und Perspektiven der "New Economy" in ausgewählten Mitgliedsstaaten der EU aus deutscher Sicht.*

Institut für Mittelstandsforschung Bonn (2004), *Bürokratiekosten kleiner und mittlerer Unternehmen – Gutachten im Auftrag des Bundesministeriums für Wirtschaft und Arbeit*, Deutscher Universitäts-Verlag, Wiesbadeb.

Kuhlmann, A. and I. Vogelsang (2005), "The German Electricity Sector – Finally on the Move?", *CESifo DICE Report*, 2/2005.

Lodge, M. (2003), "Institutional Choice and Policy Transfer: Reforming British and German Railway Regulation", *Governance*, Vol. 16/2.

Monopolkomission (2003), Telekommunikation und Post 2003: Wettbewerbsintensivierung in der Telekommunikation – Zementierung des Postmonopols Sondergutachten, No. 39.

Monopolkomission (2004), Wettbewerbspolitik im Schatten "Nationaler Champions", 15, Hauptgutachten.

Monopolkomission (2005a), *Wettbewerbsentwicklung bei der Post 2005: Beharren auf alten Privilegien*, Sondergutachten, No. 44.

Monopolkommission (2005b), *Wettbewerbsentwicklung bei der Telekommunikation 2005: Dynamik unter neuen Rahmenbedingungen*.

Müller, C. and W. Wienken (2004), "Measuring the Degree of Economic Opening in the German Electricity Market", *Utilities Policy*, Vol. 12.

Nicoletti, G., S. Golub, D. Hajkova, D. Mirza and K. Yoo (2003), "Policies and International Integration: Influences on Trade and Foreign Direct Investment", *Economics Department Working Papers*, No. 359, OECD, Paris.

Nicoletti, G. and S. Scarpetta (2005a), "Regulation and Economic Performance: Product Market Reforms and Productivity in the OECD", *Economics Department Working Papers*, No. 460, OECD, Paris.

Nicoletti, G. and S. Scarpetta (2005b), "Product Market Reforms and Employment in OECD Countries", *Economics Department Working Papers*, No. 472, OECD, Paris.

OECD (1999), *Relationship between Regulators and Competition Authorities*, OECD, Paris.

OECD (2002a), *OECD Economic Outlook,*, OECD, Paris.

OECD (2002b), *Product Market Competition and Economic Performance: A Framework for EDRC Review*, OECD, Paris.

OECD (2003a), *OECD Economic Surveys: Germany 2002*, OECD, Paris.

OECD (2003b), "Competition Framework", *Economics Department Working Papers*, OECD, Paris.

OECD (2004a), *The Role of Competition Policy in Regulatory Reform*, OECD, Paris.

OECD (2004b), *Regulatory Reform in Germany – A Necessary Element of Economic and Social Renewal*, OECD, Paris.

OECD (2004c) *OECD Broadband Statistics*, OECD, Paris.

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

OECD (2004e) *Access Pricing in Telecommunications*, OECD, Paris.

OECD (2004f), *Sustainable Development in OECD Countries*, OECD, Paris.

OECD (2005a), *OECD Economic Surveys: France*, OECD, Paris.

OECD (2005b), *The Impact of Structural Policies on Trade-Related Adjustment and the Shift to Services*, OECD, Paris.

OECD (2005c), *Competition Law and Policy in the European Union*, OECD, Paris.

OECD (2005d), "Competition Synthesis Paper", *Economics Department Working Papers*, OECD, Paris (forthcoming).

OECD (2006), *Structural Reform in the Rail Industry*, OECD, Paris (forthcoming).

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

Schmitt, D. (2005), Wie viel und welche (De-)Regulierung braucht die Energiewirtschaftsbranche?, *Zeitschrift für Wirtschaftspolitik*, Vol. 1/2005.

World Bank (2005), *Doing Business*, Washington, DC.

ZEW (2005), *Benchmark* "*Internationale Telekommunikationsmärkte*".

ISBN 92-64-02515-4
OECD Economic Surveys: Germany

Glossary

ALG II	Unemployment Benefit II
ALMPs	Active labour market policies
ARC	Act Against Restraints on Competition
BF	Finance Equalisation System (*Bundesstaatlicher Finanzausgleich*)
BVP	Federal Road Construction Plan (*Bundesverkehrswegeplan*)
CEECs	Central Eastern European countries
DBAG	Deutsche Bahn AG
DPAG	Deutsche Post AG
DF	Disbursement of Funds (*Geldleistungsgesetze*)
DSL	Digital Subscriber Lines
DTAG	Deutsche Telekom AG
ECN	European Competition Network
EPL	Employment protection legislation
FCA	Federally Commissioned Administration
FCO	Federal Competition Office
FDI	Foreign Direct Investment
FH	Investment Aid (*Finanzhilfen*)
FM	Federal motorways (*Bundesautobahnen*)
FNA	Federal Network Agency (*Bundesnetzagentur*)
FPR	Finance Planning Committee (*Finanzplanungsrat*)
GAs	Joint Fiscal Tasks (*Gemeinschaftsaufgaben*)
GDP	Gross domestic product
Ich-AG	Me Inc. (subsidy scheme for the unemployed to take up self-employment)
ICT	Information and communication technology
IEA	International Energy Agency
MFP	Medium-term Finance Plan (*Mittelfristiger Finanzplan*)
NTPA	Negotiated third party access
OFT	Office of Fair Trading (UK Competition Authority)
PES	Public Employment Service
PISA	Programme for International Student Assessment
PPPs	Public-private sector partnerships
PSA	Temporary Work Agencies (*Personalserviceagenturen*)
R&D	Research and development
RegTP	Regulator for Telecommunications and Post
SA	Social assistance benefits
SME	Small and medium-sized enterprise
TWAs	Temporary work agencies
UA	Unemployment assistance benefits
UI	Unemployment insurance
VAT	Value added tax
WOs	Work Opportunities (*Arbeitsgelegenheiten*)

OECD PUBLICATIONS, 2, rue André-Pascal, 75775 PARIS CEDEX 16
PRINTED IN FRANCE
(10 2006 08 1 P) ISBN 92-64-02515-4 – No. 55195 2006
ISSN 0376-6438

Germany

Special Feature: Fostering Product Market Competition

Economic Surveys
Most recent editions
Australia, February 2005
Austria, July 2005
Belgium, May 2005
Canada, June 2006
Czech Republic, January 2005
Denmark, May 2006
Euro area, September 2005
Finland, May 2006
France, September 2005
Germany, May 2006
Greece, September 2005
Hungary, July 2005
Iceland, April 2005
Ireland, March 2006
Italy, November 2005
Japan, March 2005
Korea, November 2005
Luxembourg, July 2006
Mexico, November 2005
Netherlands, December 2005
New Zealand, September 2005
Norway, October 2005
Poland, June 2006
Portugal, April 2006
Slovak Republic, September 2005
Spain, April 2005
Sweden, August 2005
Switzerland, January 2006
Turkey, December 2004
United Kingdom, November 2005
United States, December 2005

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

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

SourceOECD@oecd.org

www.oecd.org

OECD PUBLISHING

ISSN 0376-6438
2006 SUBSCRIPTION
(18 ISSUES)

Volume 2006/8 – May 2006

ISBN 92-64-02515-4
10 2006 08 1 P

9 789264 025158