Chapter 1

Emerging from the crisis

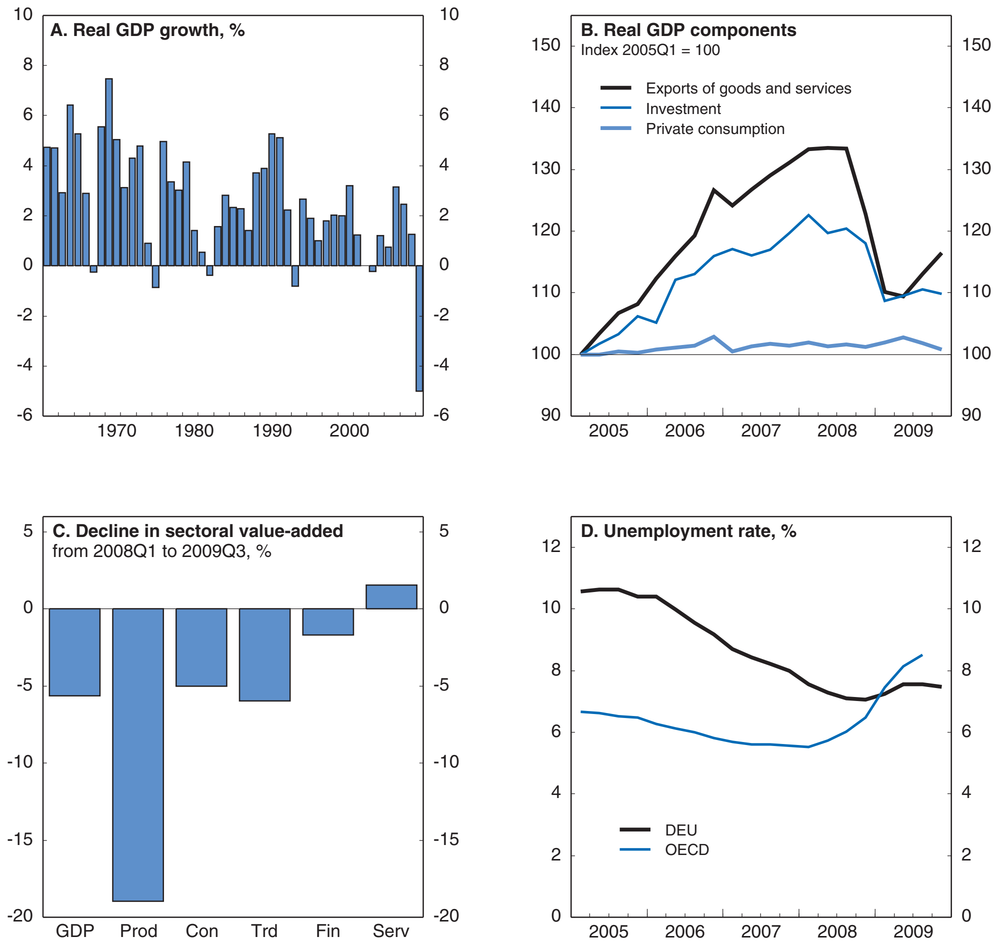
After a sharp fall during the recession, real GDP growth has picked up, but the recovery is expected to be relatively slow. The global crisis has hit the economy mainly through the collapse of world trade, the driving force behind the boom period before the crisis. The challenge going forward is to tackle the damage done by the crisis on the labour market and to public finances. Growth prior to the crisis was mainly export-driven and characterized by the build-up of a large current account surplus. Factors behind this surplus were a rise in corporate and government net lending amid continued high and increasing saving by households. A large part of the capital outflows reflected foreign investments by the banking system. Structural challenges going forward should focus on raising the stability of the banking sector and removing domestic barriers to higher growth.

The economy is coming out of a deep crisis…

The German economy has emerged from a sharp recession. After real GDP fell by more than 6½ per cent from the beginning of 2008, growth resumed in the second quarter of 2009. The pick-up of growth is due to a combination of fiscal stimulus measures, which supported private consumption and investment spending, the inventory cycle, an improvement in financial conditions and a rebound in world trade. Both the extent of the downturn and the swiftness of the rebound have surprised many as they lack historical comparisons. Nevertheless, the level of production still remains 5½ per cent below the pre-crisis levels and the GDP level prevailing at the beginning of 2008 is projected to be reached again only by 2013. Thus, even though real GDP is growing again, the effects of the crisis will be long felt.

This crisis was in many respects different from past ones. *First*, it was by far the deepest in post-war history in terms of lost output, greatly exceeding the previously largest annual output decline which amounted to –0.9% in 1975 (Figure 1.1, panel A). *Second*, it was almost entirely induced by a collapse in world trade, which led to a subsequent drop in non-residential investment, leading some commentators to raise questions about the sustainability of the German export-led growth pattern (Figure 1.1, panel B). *Third*, the downturn was focussed on particular industries, notably manufacturing (Figure 1.1, panel C), and certain geographic regions. Real GDP in the first half of 2009 compared with the same period in 2008 fell by 7.2% in the western *Länder* (without Berlin) and by 4.5% in the eastern *Länder* (including Berlin). The largest output losses occurred in those *Länder* with a large share of export-oriented manufacturing, such as Baden-Württemberg where output dropped by 10.1%. The east German industry, by contrast, is much less export-oriented and its economic structure is to a larger extent characterized by small and medium sized companies, which may be more flexible in adapting to the global economic downturn (Box 1.1). In addition, the financial support of economic development in the eastern *Länder* to balance still existing structural disadvantages had a stabilizing impact. *Fourth*, this recession was accompanied by a severe banking crisis, with the government bailing out several banks. Historical experience suggests that such recessions tend to be longer-lasting than "normal" ones. *Fifth*, the labour market reaction was much more muted than in previous downturns and also compares favourably with the developments in other OECD economies (Figure 1.1, panel D). *Sixth*, this crisis is likely to be associated with a temporarily lower rate of potential GDP growth compared with a non-crisis scenario.

Figure 1.1. **The German economy before and during the crisis**



Note: GDP growth for 1961-91 is for western Germany only. Sectors: Prod: Production excluding construction; Con: Construction; Trd: Wholesale and retail trade, hotels and restaurants and transport; Fin: Financial, real estate, renting and business services; Serv: Public and private services.

Source: Bundesbank; OECD, *Analytical* and *National Accounts Databases*; Statistisches Bundesamt Deutschland.

StatLink http://dx.doi.org/10.1787/815676677027

Box 1.1. **The east German economy 20 years after the fall of the Wall**

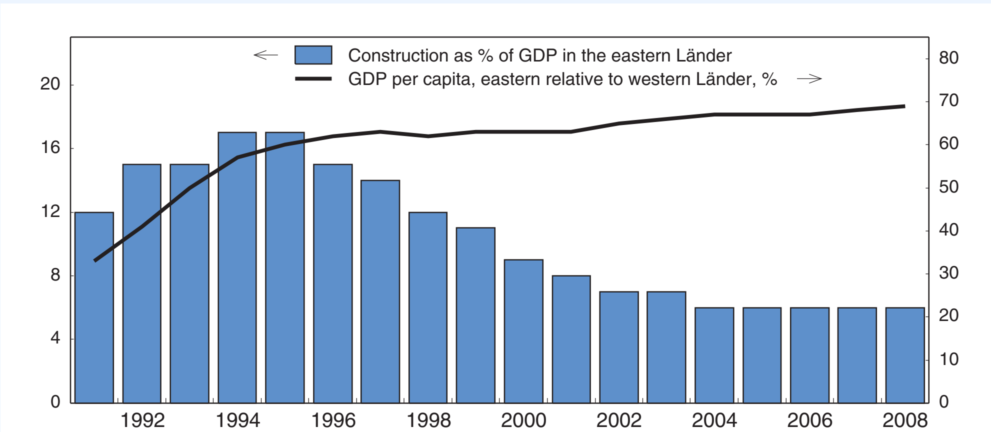
After the rapid catch-up during the early years after unification, the pace of convergence of economic activity in the eastern *Länder* (Brandenburg, Mecklenburg-Western Pomerania, Saxony, Saxony-Anhalt, Thuringia and Berlin) with the western *Länder* has slowed somewhat. GDP per capita has more than doubled from 1991 to 2008, but at EUR 22 840 it still amounts to only 71% of the western *Länder* (Table 1.1).* Saxony has the highest GDP per capita (EUR 22 620) and Mecklenburg-Western Pomerania the lowest among the eastern *Länder* (EUR 21 439).

The convergence process so far proceeded in three phases. Supported by massive financial transfers to rebuild the infrastructure, construction spending rose sharply after reunification and living standards almost doubled within 5 years (Figure 1.2). After the construction boom ended, convergence stagnated from 1996 onwards and only restarted at the beginning of the 2000s. Based on the assumption that convergence rates are maintained at their past average, the per capita GDP in east Germany will reach four-fifths of the level in west Germany by 2020.

Box 1.1. **The east German economy 20 years after the fall of the Wall** *(cont.)*

Hourly labour productivity has increased by 40% since 1991, roughly twice as much as in the west over the same period, but still remains one-third below the levels in the western *Länder*. This is in part a reflection of the different economic structure in the eastern *Länder* with lower productivity sectors accounting for a higher share, notwithstanding substantial convergence with the structures prevailing in west Germany (Ragnitz, 2005). For example, the construction sector is still somewhat larger despite its significant shrinkage following the build-up of overcapacities after the post-unification construction boom. The share of manufacturing in east Germany amounts to 19%, compared with 24% in west Germany and business services also remain behind the west German share. Still, the share of manufacturing in east Germany exceeds the share of other OECD countries, which amounts for example to 13% in the United Kingdom and USA, and 12% in France. The share of exports in total sales in manufacturing amounts to 33% in the eastern *Länder* compared with 46% in the western *Länder*. In addition to the sectoral structure, smaller companies play a larger role in east Germany [only 5% of the 700 largest German companies by revenue are located in the east (Deutsche Bank Research, 2009)].

Figure 1.2. **Economic developments in the eastern Länder**



Note: Based on data excluding Berlin.

Source: Volkswirtschaftliche Gesamtrechnungen der *Länder*, February 2009.

StatLink http://dx.doi.org/10.1787/815687464351

As regards labour input, growth of the labour force remains the main problem as the eastern *Länder* continue to suffer from declines in population, although employment rates compare more favourable with the western *Länder,* despite high unemployment. From 1991 to 2008 population dropped by around 10%, reflecting primarily a lower number of people under 40 years of age due to a drop in births after reunification and emigration to the western *Länder* (the west German population gained 6% over the same period). Notwithstanding some decline since reunification, labour force participation still remains higher in the eastern *Länder* than in the west (at 80% in 2008 *vis-à-vis* 77% in the western *Länder*), primarily reflecting much higher participation rates of women aged 35-55. A larger share of high-skilled women in east Germany, a drop in fertility after unification and better supply of childcare places explain this difference (Grundig, 2008). However, the employment rate declined from 73% in 1991 to 69% in 2008 (compared with an increase by five percentage points to 72% in west Germany over the same period) and the unemployment rate is still around twice as high as in the western part of the country (though the difference has narrowed somewhat recently).

Box 1.1. **The east German economy 20 years after the fall of the Wall** *(cont.)*

Table 1.1. **Economic performance indicators in west and east Germany**

	Eastern *Länder*		Western *Länder*	
	1991	2008	1991	2008
GDP per capita (in EUR)	9 442	22 840	22 030	32 231
Gross value added per hour worked	21.3	30.2	33.4	40.6
Population (in thousands)	18 071	16 509	61 914	65 618
Labour force participation rate (%)	81.5	80.0	70.2	76.7
Employment rate (%)	72.6	69.4	66.6	72.1
Unemployment rate (%)	10.9	13.2	5.2	6.0

Note: East German data including Berlin. Since 2005, employment data are based on the ILO-concept, which is not strictly comparable with the previous years' data.
Source: Destatis, *Volkswirtschaftliche Gesamtrechnungen der Länder*, February 2009.

Demand in the eastern *Länder* still significantly exceeds production with the sum of private and public consumption and gross fixed capital formation amounting to 112% of (east German) GDP in 2006 (Ragnitz *et al.*, 2009). This reflects the transfers from the western *Länder* and the federal government (including the social security contributions) to the eastern *Länder*. The scale of the transfers, however, has declined over time; in 1991, the east German economy's expenditures exceeded production by 72%.

* Data for the eastern *Länder* include Berlin, as a breakdown between west and east Berlin is no longer available in official statistics.

… and the recovery will be slow

Even though the economy is recovering from the severe recession since the second quarter of 2009, actual growth will remain slow until around mid-2010. Investment is lagging due to massive under-utilisation of the capital stock and is expected to contribute to growth from the second half of 2010 onwards. Private consumption is likely to suffer for somewhat longer from the phasing out of the car scrapping scheme and a further rise in unemployment. In addition, the outlook is for low wage growth to restore profitability, which will dampen personal income growth. The economy will continue to be mainly driven by developments in world trade as demand for capital goods picks up and Germany regains the market share that was lost in the downturn. Overall, growth in real GDP is projected to be 1.1% in 2010 (adjusted for the number of working days; Table 1.2). The phasing out of the government's stimulus measures notwithstanding, growth is projected to be stronger in 2011, reaching 1.9%, as private investment picks up and private consumption stabilises. Despite growth above potential (estimated to be 0.8% over the period 2009-11) a sizable output gap will remain even at the end of 2011 which is likely to restrain inflationary forces.

The outlook is highly dependent on developments in the world economy and also on financial markets. In particular, there is a risk that banks restrict credit as the loss burden due to the financial crisis as well as credit losses related to the recession adversely affect their lending capacity. The growth rate of loans to the private sector, notably to non-financial companies, has slowed down significantly. Credit supply factors may play a role as credit standards by German banks as measured by the *ECB Bank Lending Survey* showed a significant tightening since the beginning of the financial crisis and there are reports of reduced credit supply in certain sectors and for large companies. However, cyclical factors

Table 1.2. **Short-term GDP projections**

	2008	2009	2010	2011
	Current prices EUR billion	Percentage changes from previous year, volume (2000 prices)		
GDP at market prices	2 492.3	–4.9	1.1	1.9
Without working day adjustment	2 496.0	–5.0	1.3	1.9
Private consumption	1 408.4	0.3	–1.4	0.6
Government consumption	451.8	3.0	1.2	1.5
Gross fixed investment	472.9	–8.8	0.8	1.3
Public	37.4	7.3	16.1	–14.7
Residential	136.1	–0.6	0.8	0.7
Non-residential	299.4	–14.5	–1.6	4.7
Final domestic demand	2 333.1	–1.0	–0.5	0.9
Stockbuilding*	4.7	–1.0	–0.6	–0.2
Total domestic demand	2 337.8	–2.0	–1.1	0.8
Exports of goods and services	1 176.8	–14.2	8.0	8.1
Imports of goods and services	1 022.2	–8.9	3.0	6.4
Net exports*	154.6	–3.0	2.2	1.2
Unemployment rate		7.4	8.2	8.8
General government budget balance		–3.3	–5.8	–5.2
Government gross financial liabilities/GDP		74.3	79.1	83.0
Output gap		–3.6	–3.2	–2.1
Harmonised index of consumer prices		0.2	0.9	0.8

Note: National accounts are based on official chain-linked data. This introduces a discrepancy in the identity between real demand components and GDP. For further details see *OECD Economic Outlook* Sources and Methods (*www.oecd.org/eco/sources-and-methods*).

* Contributions to changes in real GDP (percentage of real GDP in previous year), actual amount in the first column.

Source: OECD, *OECD Economic Outlook*, No. 86, and Secretariat estimates.

like low credit demand due to the sluggish real economic activity and increased macroeconomic risk appear to be the main explanation for the reduced lending activity (Bundesbank, 2009a). In order to limit the risk of a broad based credit crunch going forward, it should be ensured that banks remain adequately capitalized (Chapter 4).

The crisis will leave permanent potential output losses estimated at 3.9% for Germany, more than the (weighted) OECD average of 3.1%; the unweighted OECD average amounts to 3.9% (OECD, 2010). This is primarily due to higher costs of capital (as risk aversion may return to higher levels than prevailed before the crisis), which reduces the capital-labour ratio, and lower potential employment resulting from an estimated increase in long-term unemployment due to hysteresis effects. In addition, the crisis effects on total factor productivity (TFP) and labour participation can also impact potential output, although they may be partially offsetting as they are affected by opposing forces during downturns (OECD, 2009a). While the crisis itself is not expected to have long-term effects on the growth of potential GDP, this may nevertheless be adversely affected by lower employment growth reflecting population ageing.

Repairing the damage done by the crisis

Preventing the build-up of long-term unemployment

Unemployment has remained surprisingly stable during this recession, both in comparison with history and other countries. This has been due to increased flexibility on the company level that allowed firms to reduce labour input by decreasing working hours, including the subsidized short-time worker scheme (whereby the labour office replaces some of the lost income of employees if they work shorter hours). In addition, skill shortages prior to the crisis may have induced firms to hoard labour. Due to strict protection of regular job contracts those on less protected job contracts, notably temporary work agency workers, lost their jobs first.

Notwithstanding that the burden of adjustment on the labour market has thus been spread unevenly, the overall social impact of the recession has so far been smaller than in many other OECD countries. However, as the reduction in working time has not been sufficient to prevent a marked uptick in unit labour costs, unemployment is likely to increase further as firms adjust their employment plans. On current projections, unemployment could well rise by more than half a million in 2010 (equivalent to 1% of the labour force). Chapter 2 reviews recent labour market developments, suggests reforms to make employment protection legislation less strict and proposes ways to prevent the short-term unemployed becoming the long-term jobless.

Bringing fiscal policy back on a sustainable path

The fiscal situation has worsened substantially during the crisis with the budget deficit set to increase from close to balance in 2008 to above 5% of GDP in 2010. Fiscal consolidation is the key challenge from 2011 onwards as the country needs to prepare for higher expenditures due to rapid population ageing. Fiscal policy will be constrained by the newly enacted fiscal rule, which requires the structural deficit of the federal government budget to decline to under 0.35% of GDP by 2016 and the *Länder* to have balanced structural budgets by 2020. Options for consolidation include raising spending efficiency, cutting expenditures, and broadening the tax base. Chapter 3 reviews these options and proposes measures that will be the least harmful to long-run growth.

The strong growth of the export sector and the current account surplus

Growth prior to the crisis was skewed towards exports…

Germany entered the crisis supposedly better prepared than other countries. Prior to the crisis a number of OECD economies enjoyed strong consumption and investment growth, often related to substantial real estate price increases, lending booms and current account deficits. By contrast, private consumption in Germany was growing very slowly, reflected by a rising household saving rate, and Germany did not experience increasing real estate prices, let alone a housing bubble (Box 1.2). Investment spending was also fairly

Box 1.2. **German house prices – deviating from the international trend**

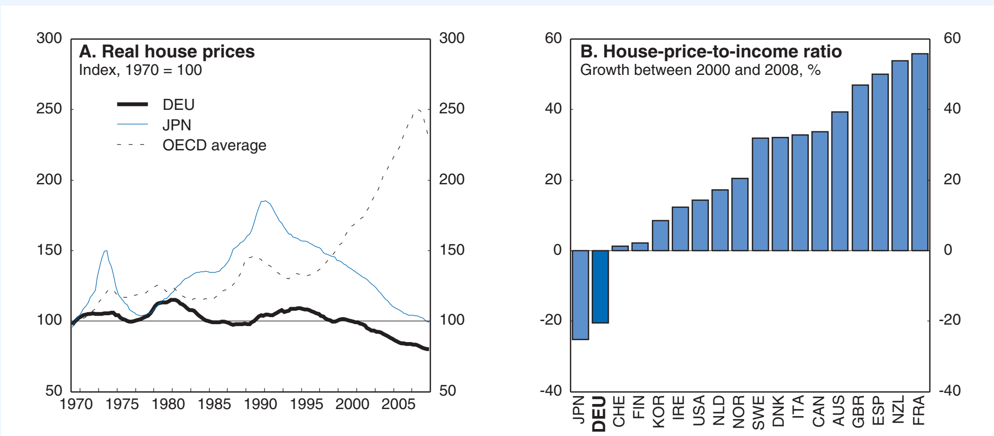
In most OECD countries, a sharp increase in house prices has characterised the period prior to the financial crisis, followed by sharp falls. Germany (along with Japan) stands out as the only OECD country which experienced a fall in prices prior to 2007. While the average increase in real house prices (nominal prices deflated by consumer prices) in the OECD between 2000 and 2008 amounted to around one-third, German real house prices declined by almost one-fifth (real house prices in Japan fell by one quarter). Looking at affordability measures shows the same picture: Germany and Japan were the only two countries which saw marked declines in the house price-to-income ratio (Figure 1.3) and in the house price-to-rent ratio. The decline in German real house prices was not just a short-run phenomenon. In fact, Germany is the only OECD country in which real house prices

Box 1.2. **German house prices – deviating from the international trend** *(cont.)*

have dropped since the beginning of the 1970s. The total decline amounts to 17% (until the end of 2008), while Japan registered a slight increase by 3% and the average real increase in the OECD was 83% over the same period. This fall is solely due to developments since 2000; real prices overall were broadly stable over the prior thirty years.

The difference may be explained by a number of supply- and demand-side factors as well as the institutional framework. On the *supply-side,* the German housing market stands out with the highest price-elasticity of housing supply. As a consequence, the effects of demand shocks on prices are damped and house price volatility is among the lowest in the OECD (Catte *et al.*, 2004). High subsidies for residential construction contributed to a rise in supply, notably after reunification, leading to oversupply by the mid-1990s (and also led to a temporary rise in prices). This, along with substantial emigration, helps to explain why house prices in the eastern *Länder* (where the tax and subsidy-induced construction was most pronounced) have dropped more than in the western *Länder* since 1995. In addition, construction costs have risen less than in other euro area countries over the last years, thereby stimulating supply (Sachverständigenrat, 2006). On the *demand-side*, low population growth relative to other countries damped house price growth. Furthermore, the fall in real interest rates since the mid-1990s was smaller in Germany than in other euro area member countries where rising affordability boosted demand. In addition, the rate of urbanisation was already fairly high in Germany in the early 1970s so that growth in this variable did not contribute as much to house price growth as in several other countries (Kholodin *et al.*, 2007). Finally, *structural* factors relating to the financial system provide some explanation. The liberalisation of the mortgage market during the 1980s and 1990s was more pronounced in other countries than in Germany, which maintained fairly strict requirements on factors like the loan-to-value ratio. Furthermore, the variety of mortgage products (*e.g.* regarding the interest rate structure or repayment options) is more limited, leading to a less "complete" mortgage market (Catte *et al.*, 2004). A much lower share of owner-occupied housing in total housing tenure in Germany compared to other OECD countries may be one consequence of stricter lending standards.

Figure 1.3. **House price developments**



Note: OECD average refers to the group of countries for which data is available from 1970, namely those in the right panel except for Korea and Spain. Refer to Girouard *et al.* (2006), "Recent house price developments", *OECD Economics Department Working Papers*, No. 475 for information on house price concepts.

Source: OECD, *House Prices Database*.

StatLink http://dx.doi.org/10.1787/815702837582

weak, at least in the first half of the 2000s. As a result, household and corporate financial balances were in surplus. In addition, prudent fiscal policy meant that public finances were solid with the general government budget close to structural balance. Growth was driven mainly by net exports as the economy benefitted from global demand. In this sense, the economy enjoyed an export boom, which at least to some extent was driven by exuberant demand from asset-bubble countries. This boom came to an abrupt end when world trade collapsed in the final quarter of 2008 in the wake of the financial crisis, as it did in Japan and other OECD countries.

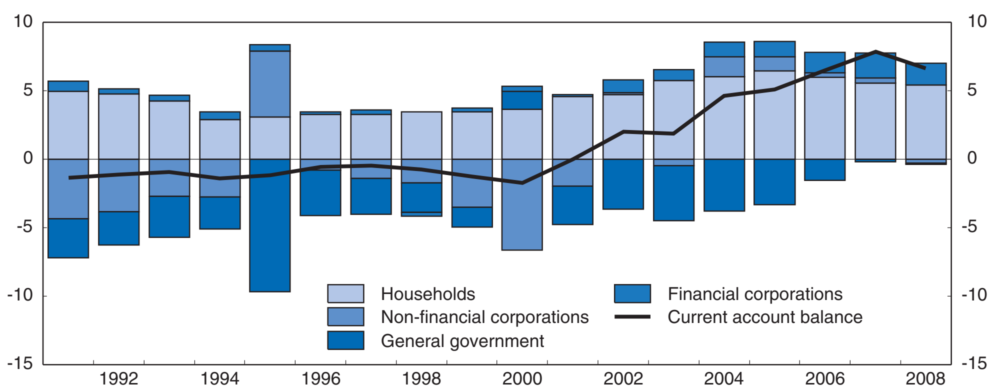
… which was mirrored in a sizable current account surplus

The combination of high external demand and weak domestic demand, notably private consumption, in the years preceding the crisis was mirrored in a large current account surplus which reached almost 8% of GDP in 2007 – the sixth largest among OECD countries. Decomposing the surplus by country shows that more than 60% of the surplus in 2007 was with other euro area countries and 80% was with EU27 member countries. Even though the surplus with the US was the largest in euro terms, it only accounted for around 16% of the total surplus. Within the euro area, the main countries with which Germany had a current account surplus were France, Italy and Spain.

A current account surplus goes hand in hand with a capital account deficit which implies an oversupply of saving relative to investment. In this sense, the surplus since 2000 reflects substantial saving by households and, to a smaller extent, non-financial and financial companies (Figure 1.4). While the private sector surplus partly financed a budget deficit, most of it went abroad as capital outflows, notably after 2005 when government finances improved significantly. This situation differs substantially from the large deficit countries, where capital inflows financed private sector deficits or public sector deficits.

Figure 1.4. **Current account balance and sources of net lending (+)/net borrowing (–)**

% of GDP



Note: General government net borrowing in 1995 includes the debt taken on in that year from the Inherited Debt Fund (6.5% of GDP). Data in 2000 for non-financial corporations and general government includes UMTS licenses (2.5% of GDP). Households include non-profit institutions serving households.

Source: Bundesbank, *Balance of Payments Database* and *Financial Accounts for Germany 1991 to 2008*, June 2009; OECD, *Annual National Accounts* and *Financial Accounts Databases*.

StatLink http://dx.doi.org/10.1787/815707208848

A rise in corporate net lending…

Cyclical and transitory factors

Net saving by the corporate (both financial and non-financial) sector contributed most to the increase in the current account surplus in the first half of the 2000s. The rise in corporate net lending during this period is not a German-specific phenomenon but rather was common in a number of large OECD economies during this period (André *et al.*, 2007). Cyclical and transitory factors, such as financial-sector buoyancy leading to rising profits and higher savings by financial institutions, are one part of the explanation.[1] In addition, a number of longer-term factors exist, which pushed up corporate saving (which contributed most to corporate net lending in Germany since 2000) and lowered fixed capital investment.[2]

Higher corporate profits…

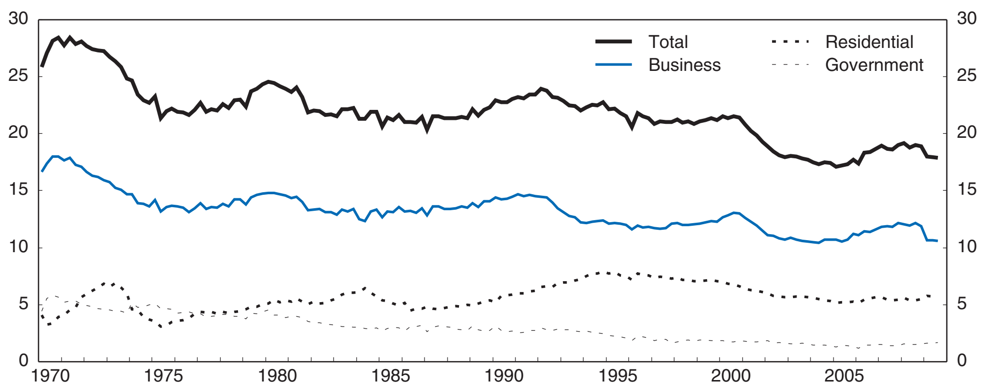
Corporate saving increased substantially due to a shift in income distribution towards profits. Wage moderation led to sustained gains in competitiveness (in particular in the manufacturing sector) and boosted profitability. Between 2000 and 2007, the level of real compensation of employees declined by 1%, while it increased by more than 9% in the average OECD country. Over the same period, the wage share in GDP declined by more than 4 percentage points, while it remained stable in the average OECD country. Lower net interest payments and higher property income (such as dividends received from abroad) also raised profits. Also, dividend payouts in Germany lagged profits (as in several other OECD countries) in the first half of the 2000s compared with the second half of the 1990s.[3] One factor behind this may have been efforts by companies to reduce their debt burden, which had increased sharply in the second half of the 1990s and in particular in the year 2000 (European Commission, 2007).

… and a lower investment ratio

Furthermore, the investment ratio declined in Germany and, despite a sharp increase since 2005, remains today one of the lowest among OECD countries (Figure 1.5). This is

Figure 1.5. **Declining investment**

% of GDP using nominal values



Note: Business and residential refer to private non-residential and private residential investment, respectively. Government includes residential investment.

Source: OECD, *OECD Economic Outlook Database*.

StatLink http://dx.doi.org/10.1787/815741841200

mainly attributable to lower business and government investment. Around half of the decline in the German nominal investment ratio from 2000 to 2005 is due to the relative price effect, which, however, is working also in other countries.[4] In addition, many German firms decided to invest abroad instead of domestically, in particular since 2000, reflecting efforts to regain competitiveness through offshoring. However, this is likely to be a short-run phenomenon, as estimates suggest that in the long-run foreign direct investment by German firms abroad and domestic investment spending are complementary (Bundesbank, 2006). Furthermore, corporate tax rates were among the highest in the OECD prior to the major tax reform in 2008, which may have prevented more domestic investment (OECD, 2008). Government investment also fell as government finances were consolidated and its ratio to GDP is now lower than in many other OECD countries.[5] The residential investment ratio compares more favourably with the OECD average despite marked declines since the mid-1990s (which reflect the adjustment of excess capacity after the post-unification construction boom as well as demographic factors).

… an increase in the household saving rate…

Savings by households have also risen markedly since around 2000, following a period of steady declines in the saving rate during the 1990s (even though the German household saving rate is significantly less volatile than the saving rate in other large OECD countries). This increase reflects an adjustment to a higher equilibrium saving rate, suggesting that this is not a temporary phenomenon (Box 1.3). On a macro-level, estimates suggest that the

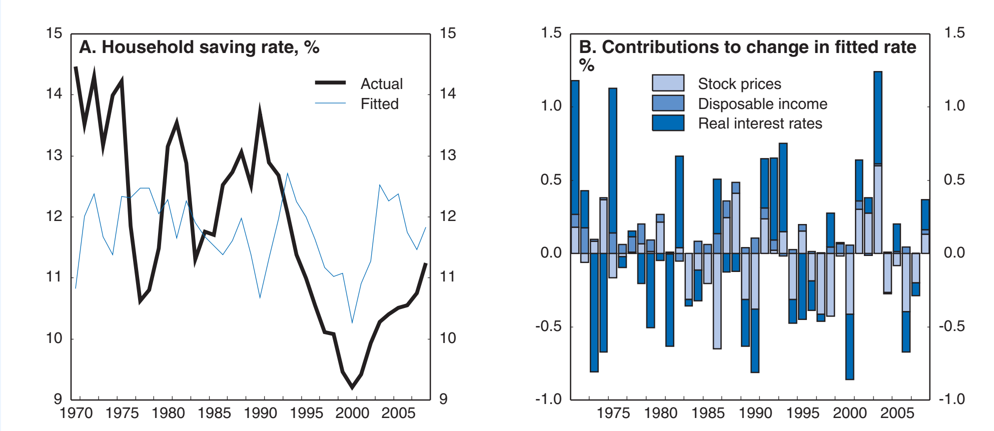
Box 1.3. **Explaining the German household saving rate**

Several explanatory factors have been put forward for the increase in the German household saving rate since 2000. Most of them are country-specific, such as higher precautionary saving because of pronounced labour market uncertainty at least until 2005, adjustment to higher retirement saving in response to a lowering of the pension replacement rate and a widening of the income distribution partly as a result of labour market reforms. To broaden the perspective beyond the individual country level and to identify whether factors common to other industrial countries help explain the behaviour of the German household saving rate, Hüfner and Koske (2010) analyze determinants of saving rates in the G7 countries since the 1970s in a panel co-integration framework. The specification allows for heterogeneity in the long- and short-run parameters across individual countries. Explanatory variables are real per capita disposable household income, real interest rates, inflation, the old-age dependency ratio, liquid liabilities as a ratio of GDP (measuring financial development), the stock of government net liabilities as well as real house and stock prices. Apart from income, interest rates and inflation, asset prices were found to be a significant long-run determinant of household savings in most countries. By contrast, financial development and government indebtedness impacted saving decisions in only a few of the countries considered.

The model is able to explain the recent increase in the German saving rate fairly well, indicating that this is part of an adjustment to a higher equilibrium level (Figure 1.6, panel A). By 2008, the actual saving rate was still slightly below its estimated equilibrium level. Results indicate that the decline in real stock prices in combination with declines in real interest rates pushed up the long-run level of savings in the years 2001-03 and damped it in later years (Figure 1.6, panel B). Higher real household disposable income since 2006 offset some of this damping effect.

Box 1.3. **Explaining the German household saving rate** *(cont.)*

Figure 1.6. **Estimated equilibrium household saving rate and contributions to its change**



Note: The left panel displays the actual household saving rate compared to the fitted value obtained from the estimations in Hüfner and Koske (2010). The bars in the right panel display contributions of different explanatory factors to the change in the estimated fitted value of the household saving rate.

Source: Hüfner and Koske (2010).

StatLink http://dx.doi.org/10.1787/815742324086

Evidence at the individual household level (using data from the *German Socio-Economic Panel*) broadly confirms the relevance of wealth effects, notably for changes in real estate prices. Households that own real estate significantly increase their saving when house prices decline. The evidence for effects from financial wealth is less robust, however. The introduction of the subsidized retirement saving scheme (*Riester-Rente*) in 2001 is found to have increased total saving in those households that participate in this scheme. However, this result only holds for households above a certain income level; for low-income households we do not find that the retirement saving scheme has raised overall saving. Furthermore, precautionary saving motives are found to be significant. For example, households with temporary job contracts save more than others. The point estimates indicate that the saving rate of those households where the household head has a time-limited job contract is around 1 percentage point higher. A further result is that a higher risk of losing a job is significantly associated with a higher saving rate. In addition, the analysis on the micro-level indicates that households in the eastern *Länder* have a declining saving rate during the 1990s (starting from a higher level in the early 1990s and converging to the lower level prevailing in the west), which may have contributed to the fall in the aggregate saving rate in this period. Demographics also play a role in that households reduce their savings until the household head reaches the age of 30 to 35, and then start increasing their savings again, with the pace of increases slowing down as the household head reaches retirement age. However, there is no evidence of dissaving in retirement, a fact that is well-known for Germany.* Also, larger households tend to save less than smaller ones. Given that household size in Germany tends to decline (not least due to fewer births), this may have contributed to the rising aggregate saving rate over the past decade. Finally, being married has a positive impact on saving as has a higher level of education.

* According to Börsch-Supan *et al.* (2001), "The German Savings Puzzle", *Research in Economics*, Vol. 55/1, pp. 15-38, this "German savings puzzle" is due to the fact that the older generation was surprised by the unprecedented income growth during the 1960s and 1970s and ended up being over-annuitized. Habit formation, possibly combined with capital market imperfections, then prevented them from drawing down their unexpected wealth.

loss in household wealth associated with the stock market declines after 2000 and lower real interest rates pushed up household saving while real income developments damped the increase somewhat. Analysis of household level data confirms the importance of wealth in saving decisions and also indicates that uncertainty about future income and job prospects play a role.

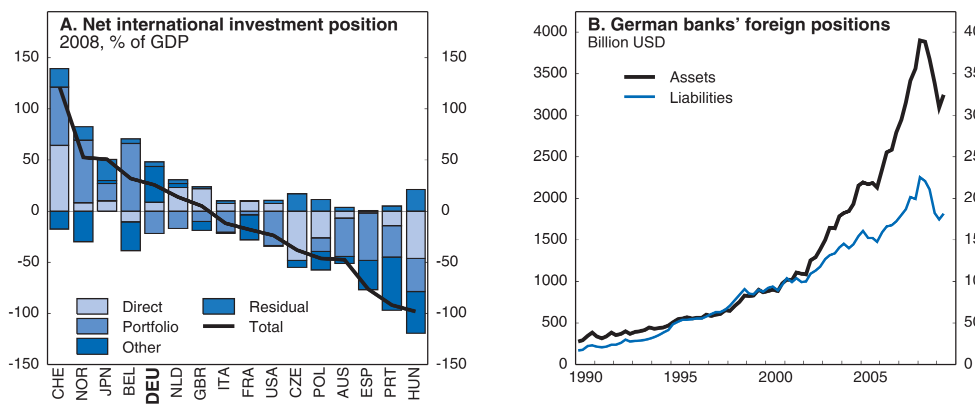
… and a reduction in the budget deficit…

A sharp reduction in the government budget deficit contributed notably from 2005 onwards to the increase in net national saving, and it was not associated with a drop in private saving. The improvement in government finances reflects substantial reductions in government expenditure after Germany came under the EU excessive deficit procedure in 2003.

… led to an improvement in the international investment position

The continuous current account surpluses since the beginning of the 2000s have turned Germany into a major creditor country. The country's net international investment position increased from around 3% of GDP in 2000 to 25% of GDP by 2008 – the sixth largest among OECD countries (Figure 1.7, panel A). To some extent this is a self-perpetuating effect as the returns on the assets have a positive influence on the current account (net factor income accounted for around 30% of the current account balance in 2007). By contrast, revaluation effects through exchange rate changes and asset prices played only a minor role.[6] Part of the capital outflows took place on the company level in the form of outward foreign direct investment, related to outsourcing activities by German companies. The stock of outward FDI increased by 50% between 2000 and 2007, with the new EU countries accounting for one-fifth of this increase. However, the largest part of the capital outflows reflected banks' net lending of capital abroad (Figure 1.7, panel B).[7] The net foreign asset position of the German banking sector has soared since 2000, reaching around 40% of GDP by 2007, the second largest share in value terms after Japan.

Figure 1.7. **Germany's international investment position**



Note: The residual is derivatives and reserve assets.

Source: BIS *Banking Statistics*, December 2009; IMF, *International Financial Statistics;* and OECD, *National Accounts Database*.

StatLink http://dx.doi.org/10.1787/815770582546

Drawing lessons from the crisis

Safeguarding banking sector stability over the short- and long-run

The large net foreign asset position of German banks may help to explain their exposure to structured credit products linked to the US subprime market. According to Bloomberg estimates, German banks account for around 7% of global write-downs on assets related to the US subprime market.[8] Of course, there is no direct causality between capital outflows and investment in such toxic assets, as investments could also have taken place in riskless assets (even though the low interest environment induced "search for yield" behaviour). Japan is a case in point of a country with large current account surpluses and an even larger net international investment position, but with a banking system that largely avoided investments in toxic assets (OECD, 2009b). China also falls into this category even though there the central bank rather than private investors made the investment decisions. Investments in toxic assets would also have been possible with a balanced current account, for example if domestic banks issue bonds, which are bought by foreigners, and invest the proceeds in toxic assets. Overall, this indicates that macroeconomic factors do not suffice to explain the problems of the German banking sector during the crisis but that domestic microeconomic factors, which are reviewed in Chapter 4, are also playing a prominent role. Policymakers face short- as well as long-run challenges to promote financial stability. In the short-run, more active measures are needed to ensure the adequate capitalization of banks. In the longer-run, structural reforms should take place to improve the efficiency of the banking system. This includes reforming the *Landesbanken* and other measures to raise the efficiency of German banks. In addition, the deficiencies in banking regulation and supervision need to be addressed.

Removing domestic barriers to higher growth

The volatility of GDP growth over the last years – the strong upswing in 2006/07 followed by the significant downturn in 2008/09 – has drawn attention somewhat away from the mediocre underlying potential growth rate. Between 1998 and 2008, potential growth averaged around 1.2%, around 1 percentage point lower than the OECD average. With respect to GDP per capita Germany ranked only 14th in the OECD in 2008 (OECD, 2010). One important obstacle to higher potential growth are domestic growth barriers. They adversely impact growth foremost, but not exclusively, in the non-tradable goods and services sectors. The challenge going forward is to remove these barriers, thereby broadening the growth drivers and ensuring that exports remain competitive. Improving economic dynamism and increasing the attractiveness of Germany as a location for investment through structural reforms would also contribute to a reduction of external imbalances. To this end, the policy framework needs to become more conducive to innovation and structural change to allow for a broader diversification of value added and to encourage companies in all sectors to move up the value chain in order to avoid a direct competition with low-cost emerging markets. While many reforms have been put in place already, more needs to be done to boost potential growth in sectors serving domestic demand. Product market regulation needs to be eased to strengthen competition; the innovation framework needs to be improved to ensure a continuously high level of R&D spending as well as its sectoral broadening; the ongoing reform of the education system should continue so that it can supply a larger pool of highly qualified and flexible workers; and migration policy needs to become more favourable to the immigration of high-skilled workers in order to prevent the emergence of skilled labour shortages. Chapter 5 provides an in-depth analysis of these issues.

Other areas of structural reform, which were reviewed in previous *Surveys,* are the improvement of labour market performance, notably with regard to raising work incentives for second-earners and mothers, addressing the lack of competition in network industries, ensuring the sustainability of healthcare financing and raising public sector efficiency. Annex 1.A1 reviews the progress in these areas since the last *Survey* was published.

Notes

1. The output gap in Germany widened by around 2¾ percentage points during the cyclical downturn from 2000 to 2004. André *et al.* (2007) estimate that a larger negative output gap by 1 percentage point is associated with an increase in corporate net lending by ½ per cent of GDP.
2. Corporate net lending is calculated in the national accounts by subtracting investment (and other capital expenditures) and adding net capital transfers received to gross saving. Gross saving is equal to undistributed profits plus fixed capital consumption. It is calculated by subtracting dividends paid from profits after tax. Thus, everything else equal, lower investment and higher profits raise corporate net lending while higher dividend payouts lower it. See André *et al.* (2007) for more details.
3. For the US and UK, share buybacks were increasingly used to channel funds to shareholders (since they involve the exchange of cash against equity, they do not affect national accounts gross saving while the payout of dividends would). Although share buybacks have become more common among euro area firms since the late 1990s, they still account for a smaller share of operating income than in the United States (ECB, 2007).
4. The fall in the relative price of investment goods over the long term reflects the growing importance of computers, semiconductors and software in combination with their rapidly falling prices starting in the 1980s. The implication is that firms over this period were able to increase real investment with lower nominal outlays.
5. Cross-country comparisons of the government investment ratio, however, need to take the overall relationship between the private and the public provision of investment into account. Shifts in the boundaries between public and private investment may also impact the interpretation over time. For example, the drop in Austria's public investment ratio since 1999 (to levels below Germany now) is related to the outsourcing of government real estate and highways from the government budget (Bundesbank, 2009b).
6. While the trend appreciation of the euro since the beginning of the decade had a negative effect on the net international investment position, developments in asset prices had a positive effect (Bundesbank, 2008).
7. The granting of standby credit (for example those granted by domestic banks for their foreign domiciled SIVs that invested in US structured credit products) are not included directly in the net international investment position.
8. Hans-Werner Sinn described the combination of a high trade surplus and investments in toxic assets abroad as "selling Porsches against Lehman Brothers certificates" ("Falsches Geschäftsmodell", *Wirtschaftswoche*, 22 June 2009, p. 38).

Bibliography

André, C. *et al.* (2007), "Corporate net lending: A review of recent trends", *OECD Economics Department Working Papers,* No. 583.

Bundesbank (2006), "German foreign direct investment (FDI) relationships: Recent trends and macroeconomic effects", *Monthly Bulletin*, September.

Bundesbank (2008), "Germany's international investment position since the beginning of monetary union: developments and structure", *Monthly Bulletin*, October.

Bundesbank (2009a), "Developments in lending to the German private sector during the global financial crisis", *Monthly Bulletin*, September.

Bundesbank (2009b), "The development of government investment", *Monthly Bulletin*, October.

Catte, P. *et al.* (2004), "Housing markets, wealth and the business cycle", *OECD Economics Department Working Papers,* No. 394.

Deutsche Bank Research (2009), "Aufbruch Ost – Die Wirtschaftsentwicklung in den östlichen Ländern", *Aktuelle Themen* 458.

ECB (2007), "Share buybacks in the euro area", *Monthly Bulletin*, May.

European Commission (2007), "Country study: Raising Germany's growth potential", *Occasional Papers*, No. 28, February.

Grundig, B. (2008), "Why is the share of women willing to work in east Germany larger than in west Germany? A logit model of extensive labour supply decision", *ifo Working Papers*, No. 56.

Hüfner, F. and I. Koske (2010), "Explaining household saving rates in G7 countries: Implications for Germany", *OECD Economics Department Working Papers*, No. 754.

Kholodin, K., J.-O. Menz and B. Siliverstovs (2007), "What drives housing prices down? Evidence from an international panel", *DIW Discussion Papers,* No. 758.

OECD (2008), *OECD Economic Surveys: Germany*, OECD, Paris.

OECD (2009a), *OECD Economic Outlook No. 85*, OECD, Paris.

OECD (2009b), *OECD Economic Surveys: Japan*, OECD, Paris.

OECD (2010), *Going for Growth*, OECD, Paris.

Ragnitz, J. (2005), *Zur Diskussion um den Produktivitätsrückstand Ostdeutschlands, in: Untersuchungen des IWH im Rahmen der Strukturberichterstattung und der Fortschrittsberichterstattung-Ost*, IWH Halle.

Ragnitz, J., S. Scharfe and B. Schirwitz (2009), *Bestandsaufnahme der wirtschaftlichen Fortschritte im Osten Deutschlands 1989-2008*, Gutachten im Auftrag der INSM – Initiative Neue Soziale Marktwirtschaft GmbH Köln, ifo Institut, Dresden.

Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung (2006), *Widerstreitende Interessen – Ungenutzte Chancen: Jahresgutachten 2006/2007*, Wiesbaden.

ANNEX 1.A1

Progress in structural reform

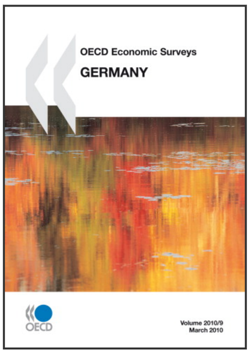
This annex reviews action taken on recommendations from previous *Surveys*. Recommendations that are new in this *Survey* are listed in the relevant chapter.

Recommendations	Action taken
Improve labour market performance	
Reduce average effective tax rates on labour income of second earners. Consider replacing the joint income tax assessment for spouses by individual income tax assessment and consider introducing contributions for healthcare co-insurance of non working spouses.	Even though from 2010 onwards the wage tax takes into account the actual relation between the incomes of the first- and the second-earner for the calculation of the marginal burden (*Faktorverfahren*), the negative incentive effects of the joint income taxation framework for total household income remain.
Continue with plans to increase childcare places, while resisting temptations to subsidise mothers staying at home. Consider introducing a voucher system for childcare. Lower regulations for the set-up of childcare facilities to encourage more private supply.	Childcare places are being expanded significantly and a legal claim for a place in a day care facility will be introduced by 2013 (the aim is the provision of childcare places for 35% of under-3-year-olds). However, a subsidy for mothers raising their children at home will be introduced.
Consider phasing out the supplementary benefit layer between unemployment insurance benefits and unemployment benefit II (UB II). Refrain from creating a large scale secondary labour market (workfare).	No action taken.
Ease employment protection legislation for regular job contracts by replacing the court route for dismissals for economic reasons with a general severance payment.	No action taken.
If a minimum wage is deemed necessary to counter the negative effects of monopsonistic labour demand, it should be set on a nationwide basis at a sufficiently low level that will not lead to job losses (and which should be determined by an independent commission of experts).	No action taken (but it will be evaluated until October 2011 whether the existing regulations for sectoral minimum wages are harmful for labour market outcomes).
Raise employment rates for older workers by phasing out the subsidized part-time employment scheme for older workers (*Altersteilzeit*) and carefully monitor whether the lengthening of unemployment benefit duration for older workers is having adverse effects on labour supply.	The subsidised part-time employment scheme for older workers (*Altersteilzeit*) expired by the end of 2009.

Recommendations	Action taken
Improve competition in product markets	
Enhance competition in the energy sector, for example by strengthening market integration with neighbouring countries, considering stronger separation of transmission system operation and potentially competitive services, merging market areas across networks of different owners and reviewing the capacities of the regulator.	Several auction offices were founded and put into operation, thereby extending exchange capacities with neighbouring countries. Market coupling, which will further optimise market integration with neighbouring countries, is expected on the western borders for the second half of 2010. A specific regulation (Power Station Connection Ordinance) stimulates the construction of new power plants and thus fosters competition on the market for electricity generation. Enlarging generation capacities is accompanied by legislation to strengthen the grid, *i.e.* by a new *Energy Transfer Expansion Act*). This regulation also allows for increased exchange capacities as required by the internal market. In accordance with European regulation unbundling has already been implemented to a large extent. The coalition agreement envisages explicitly allowing the option of unbundling to counter uncompetitive markets.
Raise competition in the railway sector, for example by fully privatising the transport service subsidiaries while retaining state ownership of the tracks, by making tendering of regional railway services compulsory and strengthening the role of the regulator. Lower restrictions on intercity bus services.	To ensure competition on the railways, the *Third Act amending Railway Regulations* was passed to implement the EU Directives of the 1st Railway Package. This involves improvements with regard to non-discriminatory access to railway infrastructure, the structure of the railways (path allocation and infrastructure pricing independent of railway undertakings) and strengthening competition oversight. The government envisages privatizing the transport service subsidiaries while retaining state ownership of the infrastructure. In addition, it intends to liberalize intercity bus services,
Make domestic service markets in the liberal professions and crafts more open to competition by phasing out legally-set price schedules. Abolish qualification-related entry requirements in the crafts sector.	Competition has been strengthened in the chimney sweep industry.
Make health care financing more sustainable	
Improve healthcare financing, for example by making sure that surcharges are flat and not income-dependent, by tax-financing any surcharges for low income earners, by reconsidering free co-insurance of spouses and by including private insurers in the new financing system based on the central health fund.	Currently, the decision on how to design possible surcharges (flat or income-dependent) is up to the social health insurers against the backdrop of increased competition in the health system. The new government is planning to introduce employee's contributions that are independent from income, with tax financed social adjustment. A governmental commission will develop steps for a reform of health care financing in the first half of 2010.
Enhance competition based on healthcare provision, for example by ensuring a systematic and independent evaluation of the quality of new forms of care, and by monitoring whether new tariffs generate the desired savings or are used primarily to attract high income earners with low morbidity-risk.	The introduction of various elective tariffs, including new forms of health care provision, offers more choice for the insured and gives leeway for insurers' competition. The social health insurers are obliged by law to report regularly on the results of elective tariffs, notably on efficiency and savings.
Enhance competition in the pharmaceutical sector, for example by closely monitoring outcomes of enhanced possibilities for insurers to engage in rebate agreements, by replacing fixed with maximum prices, and by relaxing the requirement that pharmacies can only be owned by a pharmacist who has to work personally in one out of a maximum of four branches he/she is allowed to own.	The savings resulting from rebate agreements are reported on a regular basis in the official statistics (from July 2008). Pharmaceutical prices are not fixed by law but set by the pharmaceutical companies or negotiated between companies and health insurers. The instrument of internal reference pricing (*Festbeträge*) defines the maximum level of reimbursement by the social health insurers. The new government has announced a review of pharmaceutical regulation.

Recommendations	Action taken
Make the education system more efficient	
Increase participation in early childhood care and education and enhance its quality, for example by developing common funding standards across localities to ensure more equitable treatment of children from socially disadvantaged backgrounds and by upgrading training of educators to the tertiary level.	The federal government, the *Länder* and the municipalities have agreed on creating child care places for an average of 35% of children under three years of age until the year 2013. The Law on Child Fostering (*Kinderförderungsgesetz – KiföG*), which came into effect on 16 December 2008, intends to foster need-based and high-quality care supply for children under the age of three years. With the *Action Programme Child Day Care* (*Aktionsprogramm Kindertagespflege*), the federal government promotes the professionalization and qualification of child day care in Germany in the next years, aiming at qualifying day care mothers and fathers nationwide in accordance with the professionally recognized 160-hour curriculum. The federal government established the *Forum for Early Childhood Education* (*Forum Frühkindliche Bildung*) to support and complement the *Länder* in their educational task.
Improve teacher quality, for example by holding schools and teachers accountable for the progress of students and by making greater use of financial incentives for good teaching.	Some *Länder* have introduced performance-based elements in teachers' compensation packages.
Reduce stratification by delaying the first tracking decision until after age 10, by offering the *Hauptschule* and the *Realschule* tracks in one school type and by increasing permeability between education tracks in practice.	Some *Länder* have started to combine different tracks in one school type.
Make tertiary education more attractive and responsive to labour-market requirements by increasing universities' input flexibility and by overcoming the free-rider problem between *Länder* in the financing of university education.	Some *Länder* gave universities the right to set tuition fees. Universities are allowed to allocate 60% of all study places at their discretion.
Widen access to university, ensuring that non-academic tracks of secondary education prepare better for entry to university.	In all *Länder*, individuals who have completed a tertiary type-B programme were given the right to study all subjects at all higher education and individuals who have completed a 2-year apprenticeship were given the right to study subjects that are related to their professional qualification at all higher education institutions provided they have at least 3 years of work experience and pass an entrance exam or successfully complete a probationary period. The *Länder* are allowed to keep *Länder*-specific pathways in addition to these common ones (or introduce new ones), which have to be accepted by the remaining *Länder* after one year of successful study.
Preserve past achievements in fiscal policy and improve public sector efficiency	
Reform the fiscal rule along the lines of the Stability and Growth Pact and supplement it with multi-year expenditure ceilings.	The new constitutional budget rule, which has passed *Bundestag* and *Bundesrat* as the most important element of the second stage of federalism reform, corresponds with the provisions in the preventive arm of the Stability and Growth Pact, incorporating the principle of a balanced budget without net borrowing over the course of a business cycle.
Strengthen the decision powers of the inter-governmental Finance Planning Committee.	The Finance Planning Committee was replaced by a stability council responsible for budgetary surveillance of the federal government and the *Länder*. The council assesses the financial situation of the governments based on pre-defined indicators and can demand a proposal for fiscal consolidation from the government if the indicators point to budgetary distress.
Use economic projections from independent forecasters as the basis for fiscal targets.	No actions taken.
Consider strengthening the tax autonomy of the *Länder* by allowing them to levy a surcharge to the income tax, which would not be taken into account in the fiscal equalization scheme.	The issue of tax autonomy for sub-central government levels was discussed by the recent federalism reform commission II and rejected by the federal government and the majority of the *Länder*. It is currently not under consideration.
Go further in cutting statutory corporate tax rates and avoid differentiation of base-broadening measures by company size.	No actions taken.
Consider lowering or abolishing the local trade tax and raising real estate taxation. Do not abolish the inheritance tax.	The average municipal tax rate of the real estate tax was increased.

Recommendations	Action taken
Phase out inheritance tax advantages for small and medium-sized enterprises (SMEs).	The inheritance tax was reformed recently. Since taxation is mainly based on the status of the heirs, there are no significant special rules depending on the size of the respective enterprise. A tax exemption of EUR 150 000 for every kind of enterprise shall diminish administrative burden for the heirs as well as for the tax administration.
Phase out exemptions from energy taxes for energy-intensive industries.	Currently under investigation
Increase tax collection efficiency by considering the introduction of self-assessment of taxpayers, reviewing the current application of the reduced VAT rate and by centralizing corporate tax collection at the federal level.	A scientific study on "Legal and administrative implementation of self-assessment in the field of corporation tax and trade tax" is planned.
Re-design inter-governmental transfers so as to reduce the disincentive effects for states to develop their own tax base and tax revenue collection efforts. Compute equalisation transfer positions of the states on the basis of notional rather than actual revenue.	No actions taken.
Re-allocate administration of tax revenues, which accrue exclusively to the federal government, or are shared between the different layers of government, from the *Länder* to the federal government.	A process in this direction has been introduced for car taxation and insurance tax.



From:

OECD Economic Surveys: Germany 2010

Access the complete publication at:

https://doi.org/10.1787/eco_surveys-deu-2010-en

Please cite this chapter as:

OECD (2010), "Emerging from the crisis", in *OECD Economic Surveys: Germany 2010*, OECD Publishing, Paris.

DOI: https://doi.org/10.1787/eco_surveys-deu-2010-4-en