



Federal Ministry
of the Interior

**Annual report of the Federal Government
on the status of German unity in 2012**

(Part A)

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Annual report of the Federal Government on the status of German unity in 2012

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Part A: Report

I. Equivalent living standards in all parts of Germany

The Federal Government is committed to its policy goal of ensuring equivalent living standards throughout Germany. Demographic changes and budget-cutting are important elements of the framework in which policy-makers, public administration and the private sector will be operating in the coming years.

Since reunification, eastern and western Germany have become increasingly integrated. But there is still more to be done to overcome the economic divide in Germany along the former internal border. In addition to the economic and labour market challenges in the context of demographic change which form the focus of this report, strengthening social cohesion and studying the East German communist regime remain important tasks.

A concrete example is the fund established this year on East German orphanages from 1949 to 1990, which is helping to shed light on a significant aspect of injustice under the communist regime. A report presented by the Federal Government and the governments of the eastern German states in March 2012 documents the abuses committed against children and young people under the GDR's youth welfare system and how the victims continue to suffer as a result. Established on 1 July 2012, the fund is jointly operated by the Federal Government and the governments of the eastern German states. The €40 million fund is intended to offer assistance and support to those still suffering from their experience or in case of reduced pension claims.

The project of rebuilding infrastructure, the main focus over the past two decades, has made excellent progress. The German Unity infrastructure projects are now largely up and running. Since 1991, in eastern Germany roughly €82 billion has been invested in federal railways, trunk roads and waterways, as well as in local roads and commuter rail under the Community Transport Financing Act (GVFG). This means that nearly 36% of total investment went to eastern Germany, while the population of eastern Germany makes up about 20% of Germany's total population and its area is about 34% of Germany's total area. These figures are evidence of the federal efforts starting in 1990 to overcome the lack of adequate transport infrastructure in eastern Germany.

The economy of eastern Germany has been thoroughly overhauled in the past two decades and is now largely made up of internationally competitive small and medium-sized companies. Even 22 years after reunification, however, the eastern German states are still marked by many shared structural features and challenges and

have not yet caught up to the level of the western German states. At the same time, differences in regional economies and sector specializations have begun to emerge, along with differences caused by demographic factors. So viewing the area between the Baltic Sea and the Erzgebirge mountains as a single economic region is less and less helpful; western Germany is not homogeneous either.

The eastern German states have made impressive economic progress over the past two decades. During that time, it should be noted that the western states did not remain at the level of 1990, but also saw major economic growth, partly due to the unification process. The eastern states have to catch up with this growth as well. A major achievement of German reunification was the successful transformation of a centrally planned economy into a social market economy and the integration of the eastern states into the federal system of government and law.

These developments become obvious when comparing living conditions and the economies of eastern and western Germany. Macroeconomic indicators such as per capita gross domestic product, unemployment rates and the level of capital stock still serve as important standards for orientation. They show that the eastern states have come closer to the high level of economic output and social welfare in the western states, though the difference between them remains significant. But comparing average indicators between east and west is increasingly inadequate to capture the unique aspects of development in eastern Germany, in particular when looking at specific strengths and weaknesses of the developments so far. For this reason, it makes sense to take a broader view, not only comparing the established economic indicators but also making more nuanced observations in order to enable a more precise comparison of living conditions.

In the process, structural connections having a major influence on the processes of economic convergence will be examined: for example, whether the almost total lack of larger companies and headquarters as a result of the transformation process after reunification has had a negative impact on growth, innovation or entry into foreign markets. Another important standard for comparison is regional development, which helps in making more precise and nuanced statements about the economy, quality of life and happiness of local citizens.

This report therefore considers issues of economic and labour market convergence while keeping an eye on regional differences.

Any comprehensive examination of the development of the eastern states must also include demographic change, which has a variety of impacts on almost every area of

life, such as labour markets and rural development, and creates challenges for the educational and social welfare sectors. At first glance, the shrinking population in eastern Germany has positive aspects: In combination with economic growth, it has made it easier to find jobs and training places. This is part of the reason that unemployment in eastern Germany has fallen. On the other hand, many regions that have lost a significant proportion of their population are finding it very difficult to maintain adequate public services and retain skilled workers.

Demographic change must be viewed as an opportunity for modernizing our society. The transition to a smaller and older population requires new thinking, new structures and forms of organization, and a new understanding of community and responsibility to society and every individual.

Ensuring the provision of vital services means more than just providing essential local services; it also means creating the conditions for an attractive, family-friendly environment, social networks and community participation. Quality of life and social cohesion are the "glue" holding together viable communities in rural and structurally weak regions. It is also crucial for companies and investors to find efficient and relevant infrastructure in the regions. The federal, state and local governments therefore have special responsibility for the provision of vital services.

In the policy process, it is still necessary for the Federal Government to provide impetus, assist and advise the eastern states. Policy for these states is a task for Germany as a whole, with a focus on continuing and optimizing the funding policy for eastern Germany.

II. The process of economic convergence in eastern Germany in the context of demographic change

Due to its specific economic structure, Germany, especially eastern Germany, has weathered the financial and economic crisis of recent years fairly well. Even under these difficult conditions, the small and medium-sized companies of eastern Germany have proved competitive.

The economic indicators for eastern Germany show what has been achieved as well as the challenges that remain: Per capita GDP is now 71% of that in western Germany.¹ The per capita GDP of eastern Germany (including Berlin) is 80% of that of

¹ According to the latest revision of the national accounts for the new economic sector statistics WZ 2008, the per capita GDP for eastern Germany was somewhat lower at 71% of western GDP. How-

the poorer western German states (Lower Saxony, Rhineland-Palatinate, Schleswig-Holstein, Saarland and Bremen).

In eastern Germany, industry accounts for nearly 20% of value-added, much more than in other major industrial nations such as France, the U.S. or the U.K. Productivity, i.e. GDP per worker, was up from about 25% – 30% of the western level in 1991 to roughly 79% in 2011. The export rate for the eastern states is 34%, the same level as in western Germany in 1998 (western Germany today: 46%).

The labour market has improved in recent years: The average annual unemployment rate for 2011 was 11.3%, the lowest since reunification. Employment and especially employment subject to social insurance contributions continued to increase. Average unemployment is higher than in the western states, but there are major regional differences. Some eastern regions have lower unemployment rates than certain regions in western Germany (cf. Section II.3.1).

Economic, labour-market and other challenges in the eastern states are already showing the impact of demographic change. The shrinking and ageing of the population started especially early in eastern Germany, with dramatic effect. The number of young people looking for training places in eastern Germany is already noticeably smaller. These trends are also increasing competition for skilled workers. A lack of skilled workers could hobble companies' ability to expand, so in the coming decades, maintaining the labour supply will remain a key challenge at every policy level.

Given the special conditions in eastern Germany, responsible policy to overcome current and future demographic challenges must be nuanced and forward-looking. We must do everything we can to make better use of the existing potential of our society; at the same time, we must encourage targeted immigration for skilled workers. This strategy is the key to remaining globally competitive in the future. Policy-makers and industry are equally called on to plan for the future and make sure Europe remains an attractive place for business and industry in a globalized world.

Promoting economic growth in eastern Germany must continue to be a priority. The most important component is investment incentives, which help companies invest and grow. As the investment allowance expires, investment incentives are concentrated on the joint federal/state programme to improve regional economic structures (GRW). It is especially important to secure maximum funding from the EU Structural

ever, back-calculations are available only to 2008, so for comparison with earlier years, the national accounts figures based on the previous WZ 2003 would have to be used. According to the national accounts figures prior to the revision, eastern German per capita GDP was 73% of western GDP in 2010.

Fund and under the rules for regional support in the coming funding period 2014–2020.

Over the long term, the predominance of smaller companies and businesses must change, i.e., today's small and medium-sized enterprises must grow faster. Innovation plays a key role in self-sustaining economic growth and employment. The dense network of academic institutions which has been successfully developed will have to grow further through close cooperation between public-sector research and private-sector technology transfer in order to capitalize on research-generated knowledge in the form of innovations and marketable products or services.

Eastern Germany has so far successfully built on traditional regional strengths in technology. In addition to classic fields such as the chemicals industry and mechanical engineering, eastern Germany has more recently developed special strengths in various new fields, such as microelectronics, health care and biotechnology. Eastern Germany has long been a pioneer in the field of renewable energy and thus is in a good position to benefit from the new energy strategy adopted by the Federal Government.

A successful strategy for promoting economic growth in eastern Germany must be oriented on eastern Germany's potential and specific strengths: promoting research, the sciences, innovation and investment on the principle of reinforcing existing strengths.

Successful examples of cluster promotion can be found in car manufacturing and the chemicals and plastics industries, where cooperation and networking are used to overcome the disadvantages of the predominance of smaller companies. Attracting international investment in a targeted way also helps create jobs and strengthen international networks.

Eastern Germany's attractiveness as a place to do business has a key role in the future economic development of the region. In the context of demographic change, such attractiveness is also measured in terms of factors addressed to potential employees, such as options for child care, ability to combine family and career and not least salary levels.

The report next looks at the development and current status of German unity and describes the challenges that remain in each area. Current programmes are briefly mentioned in the relevant sections and described in more detail in Part B. Each section describes the current situation and analyses the potential; depending on the

concrete policy challenge, it may also describe action that needs to be taken.

II.1 Economic convergence: A question of definition

Key measures of economic convergence are per capita GDP and regional unemployment rates. These measures provide an important basis for policy decisions. There are structural differences throughout Germany, as a comparison between urban and rural areas in western Germany shows. Comparisons at state level are not always useful, because very different patterns of growth have developed in the east (and the west), and state-level statistics say little about development successes at the local level. In some cases, average figures covering all of eastern Germany hide hopeful developments in successful regions. This report therefore draws comparisons at the regional level as well, in order to reveal differences in the convergence process at this level.

In doing so, it is important to use additional indicators to show achievements in the convergence process in a more nuanced way in order to yield a more expressive picture. The aim is to determine where the eastern German states still need special support in order to make further progress towards convergence.

II.2 Economic growth, innovation and the labour market

II.2.1 Economic situation

The strong recovery of the German economy following the 2008/2009 recession continued into 2011; price-adjusted GDP growth was 3%,² while the budget deficit and public debt shrank.

Measured in GDP, the eastern German economy grew significantly in 2011, although it still lags behind the more prosperous regions of western Germany: In 2011, price-adjusted GDP growth in eastern Germany (including Berlin) was 2.5%, behind the national average of 3%. So convergence between the old and new federal states has made progress in recent years. Compared to the 1990s, progress has slowed considerably, which is normal for the convergence process. Productivity of the eastern German economy was, on average, about 79% of that of the western Germany economy.

Revision of the national accounts

In 2011, the Federal Statistical Office conducted a major, regularly scheduled revision of the national accounts to bring them into line with the new classification of

² Source: Federal Statistical Office, www.vgrdl.de

economic sectors (WZ 2008 instead of WZ 2003)³ and to include new data sources, especially in the service sector. Revised figures at state level were published first for the years 2008 to 2011.⁴ The revision has also affected this report: Longer-term comparisons can be made only on the basis of the old economic sector statistics WZ 2003, while the most recent figures are based on the new classification of WZ 2008. The report will indicate when data based on WZ 2003 are used.

Revisions of the national accounts are normal and regularly scheduled technical adjustments in the European framework to improve statistical quality in describing the structure and size of the economy. The state results after the revision are sometimes different from the previously published data and are not entirely comparable due to differences in methodology.

The revision for the years 2008 to 2010 affected GDP at state level much more than at federal level, in particular the eastern states (2008: -2.5% for Brandenburg, -6.5% for Thuringia, in current prices), Berlin (+5.7%), Bavaria (-4.3%) and Hamburg (+6.9%). The differences in the eastern states can be attributed above all to the lower proportion of value-added in the service sector found in the course of the revision. By contrast, the revision raised the proportion of value-added from industry in eastern Germany much more than in western Germany, largely due to the construction industry and to the energy and water sectors. The new figures thus underscore the structural differences between eastern and western Germany, especially the weak service sector in the east.

According to the revised figures, in 2009 the drop in growth was greater in both east and west: -5.5% rather than -5.1% in western Germany (adjusted for inflation) and -3.0% rather than -2.6% in eastern Germany including Berlin. In 2010, the positive growth rates hardly changed: 4.0% rather than 3.9% in western Germany (adjusted for inflation) and 2.1% rather than 2.2% in eastern Germany including Berlin. So the latest revision of national accounts confirmed the economic growth trends and the success achieved. In 2010, per capita GDP in eastern Germany and Berlin fell by about two percentage points to 71%; in comparison to the poorer western German states, it fell by only 1.4 percentage points to 83.4%. So the difference resulting from the revision was relatively small and does not justify a fundamental reassessment of the overall economic trends in eastern Germany.

³ <http://www.destatis.de/DE/Publikationen/Verzeichnis/VerzeichnisAktuell.html>

⁴ Statistical offices of the Federation and the states, revision of the accounts of the states, July 2012.

Growing structural and regional differences

Structural differences between eastern and western Germany are the main reason for their continuing differences in economic strength. The eastern German economy mainly consists of small and medium-sized enterprises (SMEs) and has few large companies or corporate headquarters. The lack of large companies in particular tends to depress average productivity and thus incomes in the eastern states. Also apparent are sectoral differences related to less research-intensive and less internationally oriented eastern German companies. A major reason for lower growth rates is the fact that the eastern German economy is less export-oriented, as exports have been a significant driver of economic growth in Germany in recent years. For example, foreign sales of eastern German industrial production were an average of 32.3% of total revenue, while the figure for western Germany was 45.9%.⁵

Competitive small and medium-sized companies – the *Mittelstand* – have become established in eastern Germany, with regional specialization in the different states, in some cases with traditional roots. Since 1990, eastern German companies have become much more able to assert themselves in the global marketplace, as demonstrated by the export rate for manufactured goods, which has grown from about 12% in the mid-1990s to nearly 35% today. In European comparison, eastern Germany is thus near the top.

Despite structural deficits, a competitive industrial base has developed in recent years. The manufacturing sector has grown rapidly, by 10.6% in 2011 (WZ 2008), clearly demonstrating the remarkable industrial recovery following a precipitous drop in industrial value-added after a year of global economic crisis in 2009 and since the rebuilding of eastern Germany began. Regional and sectoral specializations are forming, for example car manufacturing and the chemicals industry as well as new industries such as microelectronics.

A comparison of the eastern German states over the past 20 years shows similar levels of per capita GDP. Regional differences in development become apparent only when differentiating between city centres, suburbs and rural areas. Eastern German cities such as Leipzig, Erfurt, Potsdam and Magdeburg have advanced to become centres of industrial development and services as well as research and development. These trends are confirmed by per capita GDP and incomes: For example, in 2009 per capita GDP in Leipzig was €26,302, compared to €17,007 in the district of Sächsische Schweiz-Osterzgebirge, a rural area on the border to the Czech Republic.

⁵ See IHW (Institute for Economic Research), *Wirtschaft im Wandel* (Economy in transition), May 2012.

Gross salaries and wages per worker show a similar picture: In Leipzig, the average wage is €24,013, compared to €21,482 in the district of Sächsische Schweiz-Osterzgebirge.

However, the eastern German cities are not yet driving the economy, as a comparison to their western counterparts shows: Leipzig's per capita GDP of €26,302 is only 59% of Nuremberg's (€44,424). Comparisons of rural areas in east and west can be surprising: Per capita GDP in the district of Sächsische Schweiz-Osterzgebirge (€17,007) is 79% of that of the district of Holzminden in the western state of Lower Saxony (€21,590), indicating that, when it comes to rural areas, convergence between east and west is much further advanced.⁶

As eastern Germany continues to catch up, regional differences – as in the example of Leipzig and Sächsische Schweiz-Osterzgebirge – will most likely continue to grow.

Despite its current health and forecast of moderate growth in 2012, the eastern German economy is facing major challenges. Innovation as a key source of further economic growth must be strengthened through closer cooperation between public-sector research and private-sector technology transfer. Demographic change and the related shrinking of the labour supply also demand tailored solutions to ensure the supply of skilled labour. And eastern German companies must continue to grow and focus more on markets beyond their home regions.

II.2.2 Priorities for promoting growth in eastern Germany

Promoting economic growth in eastern Germany remains a key task of the Federal Government. The most important component is investment incentives, which help companies invest and grow. When the investment allowance expires at the end of 2013, the joint federal/state programme to improve regional economic structures (GRW) will be the main national instrument to promote economic growth in the region. Together, the federal and state governments assist poorer regions unable to manage structural changes on their own or facing special regional challenges.

The main objective of the GRW programme is creating or securing competitive jobs in poorer regions by promoting commercial investment, investment in local, business-relevant infrastructure and measures to help small and medium-sized companies become more competitive.

⁶ Source: IWH report *Wirtschaftlicher Stand und Perspektiven für Ostdeutschland* (Eastern Germany's current economic status and future prospects), 2011, Chapter 13.

- The promotion of commercial investment is aimed at easing the structural changes necessary for growth and directly improving local incomes.
- Improving efficient local, business-relevant infrastructure is important for attracting companies and to make poorer regions more competitive.
- Measures to help small and medium-sized companies become more competitive, such as regional development strategies, regional and cluster management, activate existing regional potential for growth.

About six-sevenths of the GRW support goes to the eastern states. In 2011, GRW funds totalling €1.628 billion (federal and state funding as well as co-financing from the European Regional Development Fund) were provided to the eastern states, creating 17,000 jobs and securing 69,000 more.

As in previous years, this funding was also able to stimulate investment of €5 – 6 billion regularly in the eastern states, or about half of the annual investment in the manufacturing sector. The latest evaluations have also shown the positive impact of the GRW programme on economic opportunities for people in poorer regions. Companies receiving support increased the number of their employees by 4.6% and raised wages by 6% a year, a very positive development, and companies in eastern Germany grew the most.

Innovation is an important source for further economic growth in eastern Germany. The dense network of academic institutions which has been successfully developed will now have to grow further through close cooperation between public-sector research and private-sector technology transfer. It is important to make sure that research-generated knowledge is turned into innovations and marketable products or services.

II.2.2.1 Solidarity Pact II and EU structural policy

As part of the Solidarity Pact II, under Section 11 (3) of the Financial Equalization Act, the eastern German states (including the city-state of Berlin) receive supplementary federal grants for special infrastructure needs resulting from the division of Germany and to compensate for underfunded local governments. For the period 2005–2019, roughly €105 billion will be provided from the first basket of funds. The supplementary federal grants are designed to decrease over time. Since 2009, they have decreased in regular increments of €700 to €800 million each year and will end in 2019 with a final payment of €2.1 billion. In 2011, the eastern states (including Berlin) received about €8.0 billion from the first basket of funds.

The Federal Government has also agreed to spend an additional €51 billion over the same period for rebuilding eastern Germany, in order to boost the process of economic convergence. As the federal and state governments agreed in November 2006, priority will be given to investment and innovations in the private sector, transport, housing and urban development, remediation of environmental contamination and site restoration. From 2005 to 2010, a total of about €31 billion was paid out of the second basket of funds. Thus, within six years the Federal Government paid 60% of its obligations from the second basket of funds under the Solidarity Pact II.

EU structural policy is aimed at helping poorer regions reduce competitive disadvantages and catch up with more prosperous areas. The eastern German states will receive more than €15 billion for this purpose in the current funding period from 2007 to 2013. This money can be used to promote company investment, innovation, workers and training as well as for urban development and infrastructure improvement. In this way, the funding makes a valuable contribution to the successful rebuilding of eastern Germany and thus to growth, prosperity and employment.

The negotiations over the next period of structural funding from 2014 to 2020 entered the decisive phase this year. The Federal Government is working to ensure that poorer regions in all of Germany remain eligible for structural funding support.

Here it is necessary to distinguish between two different things: first, the EU structural funds, which can be used to pay for measures to promote economic growth; and second, EU legislation on state aid for regions, which provides the framework for fair economic promotion, for example by setting the rates of aid. Both areas are very important for the future aid policy for eastern Germany.

With regard to the EU structural funds, the Federal Government is a strong advocate for the interests of the eastern states when it comes to issues concerning the future level of funding, the inclusion of all regions of eastern Germany in effective structural support, the preservation of commercial support for small and medium-sized businesses in particular, and recognition of the special demographic challenges.

The eastern states will most likely no longer qualify for the highest level of aid in the next funding period, because their per capita GDP will exceed the limit of 75% of the average of the 27 EU member states. So a balanced and appropriate solution for the transition is needed. The European Commission has suggested providing for a safety net of at least two-thirds of the cohesion funding from the previous funding period. Germany welcomes this suggestion, as it corresponds to the joint proposal by the German states and the Federal Government Commissioner for the New Federal

States. In this way, an active economic, innovation and employment policy could continue which does justice to the socio-economic situation of the eastern states and ensures that the convergence process continues.

It is important to make sure that the safety net also covers "phasing-out regions", those just over the 75% cut-off for the period 2007–2013 solely as a result of EU enlargement to 25 member states. These regions will also continue to need support to catch up in economic and social terms.

It is also important to remember that no other region in Europe is as hard hit by demographic change as eastern Germany. According to a study by the ZEW economic research institute,⁷ the major decline in the proportion of the active working population in eastern Germany will most likely have a negative impact on economic growth in the coming years, resulting in significant pressure to adapt. EU structural funds could help manage the transition and use it as an opportunity. The Federal Government Commissioner for the New Federal States therefore supplied this study to the European Commission and the European Parliament and called for paying more attention to the demographic factor in designing and funding future EU structural policy.

Because structural fund support is so closely tied to policy on state aid for regions, an effective and balanced transitional solution is also needed for the latter with regard to regions which will no longer be eligible for the highest level of support. The same reasons for including the phasing-out regions in the safety net of the EU structural funds apply to the transitional solution for state aid for the regions. The level of economic development in eastern Germany is not heterogeneous enough to justify significant differences in aid.

In general, the Federal Government is working to ensure that an effective level of support is maintained. For this reason, the highest rates of aid should not be reduced by more than ten percentage points from their current levels, and the disparity between support given to regions receiving the highest level of aid (especially in eastern Europe) and future transitional regions (such as the eastern German states) should not be excessive. The Federal Government is working to make sure that the difference reflects actual economic differences and to avoid distorting competition in the immediate border area. Germany is therefore calling for a difference of no more than 15 percentage points between the highest rates of aid.

⁷ *Demografie und zukünftige EU-Strukturfondsförderung* (Demography and future EU Structural Fund support), Centre for European Economic Research (ZEW), Mannheim, 2011, commissioned by the Federal Government Commissioner for the New Federal States.

In addition, the Federal Government is working to introduce investment incentives for large companies in the transitional regions and in normal regions receiving support. Like other member states, Germany is certain that it would help the EU in the global competition to attract business investment if there were incentives for large companies to settle not only in the least developed regions of the EU. And large projects costing more than €500 million should also be eligible for support. Large companies in particular can promote growth and help develop small and medium-sized businesses, for example by awarding subcontracts.

II.2.2.2 Prospects for rural areas

Rural areas in the eastern states are among the worst affected by shortages of skilled labour and by demographic change. Various studies have shown that few other regions in Europe are as strongly affected by demographic change as the rural areas on the periphery of eastern Germany⁸ (cf. Section II.5, p. 56).

Developing and promoting vital and attractive rural areas is an important strategy goal, at both national⁹ and European level (in particular the reform of the Common Agricultural Policy and EU cohesion policy and structural funds). The Federal Government believes it is necessary to pay attention to specific regional needs and strengthen initiative in the regions. A wide variety of policy fields and levels are affected, and programmes and measures need to be coordinated between ministries and subject areas.

The Federal Government's 2012 progress report on the development of rural areas, authored by the interministerial working group on rural areas led by the Federal Ministry of Food, Agriculture and Consumer Protection (BMELV) takes this policy approach. With its three action areas of the economy and employment, vital services and rural infrastructure, nature and the environment, the progress report points out possibilities for developing rural areas in an attractive way; it also lists current federal measures, which affect regions in the eastern states in particular, in the areas of the economy, employment, infrastructure and vital services.¹⁰

⁸ See also the Federal Government's 2012 demographic report (p. 170 et seqq.) and the strategy report (p. 31 et seqq.) of the Federal Government.

⁹ See the Federal Government's demographic strategy (2012), *Fortschrittsbericht der BReg. zur Entwicklung ländlicher Räume* (Federal Government progress report on the development of rural areas) (2012); Action plan *Daseinsvorsorge zukunftsfähig gestalten* (Ensuring the future of the provision of vital services) (October 2011); model region *LandZukunft* (Rural future); *Initiative Ländliche Infrastruktur* (Rural infrastructure initiative); model project *Stadt-Land-Partnerschaften: großräumig-innovativ-vielfältig* (Urban-rural partnerships: large scale-innovative-diverse); model project *Überregionale Partnerschaften* (Interregional partnerships).

¹⁰ See the federal initiatives and model projects listed in Footnote 7.

This policy approach is the same as the Common Strategic Framework proposed by the European Commission for all EU funds for the period 2014 to 2020. The aim is to strategically link all EU funds¹¹ to improve communication and decision-making strategies among the actors at the different policy levels to ensure a more consistent implementation of policy in rural areas, thereby ensuring appropriate social and technical infrastructure as well as vital services, also in the eastern German states, at a time of tight budgets.

Promoting agriculture and rural areas

Development in rural areas depends especially on the local economic prospects. Agriculture and forestry are increasingly high-tech and need skilled workers. Together with other mostly small and medium-sized enterprises, this economic sector ensures economic growth and jobs in rural areas. Agriculture and forestry are often the only remaining industries, especially in poorer rural areas of eastern Germany, and are thus especially important for rural development.

In general, the structural transformation caused by reunification is largely completed and robust operating structures have formed in eastern German agriculture. Most of the roughly 24,400 agricultural enterprises, with about 5.5 million hectares under cultivation (see Table 1) are economically viable and employ about 148,000 people. Nonetheless, a capital-intensive wave of modernization can be expected above all in eastern German agriculture (especially in animal husbandry), resulting in a need for skilled workers to ensure that enterprises are competitive and that agricultural production is sustainable.

¹¹ The European Regional Development Fund (ERDF), the European Social Fund (ESF), the Cohesion Fund (CF), the European Agricultural Fund for Rural Development (EAFRD) and the future European Maritime and Fisheries Fund (EMFF).

Table 1: Indicators of structural change in eastern Germany's agricultural sector

Criterion	The eastern states			
	1991 ³	2003 ³	2007 ³	2010 ³
Agricultural holdings by legal personality				
Individual enterprise ¹⁾	17,722	23,544	23,412	17,723
Partnership	.	3,236	3,235	3,204
Legal person	3,941	3,302	3,433	3,528
Total	21,663	30,082	30,080	24,455
Size of holdings by legal personality (in 1,000 ha)				
Individual enterprise	456.6	1,380.4	1,467.3	1,463.7
Partnership	.	1,249.3	1,245.4	1,236.8
Legal person	4,825.7	2,922.4	2,852.1	2,846.6
Total	5,282.3	5,552.2	5,564.8	5,547.2
Holdings 5 hectares or more by area				
5–10 ha	2,085	3,554	3,541	3,452
10–20 ha	2,068	3,705	3,725	3,729
20–50 ha	1,924	3,646	3,687	3,694
50–100 ha	1,066	2,419	2,350	2,354
100 ha or more	4,015	8,841	9,033	9,027
Total enterprises ²⁾	11,158	22,165	22,336	22,256
of which:				
100–200 ha	843	2,644	2,636	2,547
200–500 ha	628	3,086	6,624	3,228
500–1,000 ha	631	1,574	1,902	1,789
1,000 ha or more	1,908	1,537	1,507	1,463
Size of holdings 5 ha or more (in 1,000 ha)	5,159.1	5,532.2	5,544.4	5,543.3
Average size ²⁾ (ha per holding)	462.4	249.6	248.2	249.1

Note: Due to changes in methodology, in particular the raising of lower limits, data from 1991 are not entirely comparable with data for later years. The same applies to data from 2010 with regard to previous years.

1) 1991: Holdings owned by natural persons (including partnerships)

2) Holdings of 5 hectares or more

3) 1991, 2003, 2007 results of that year's survey on the structure of agricultural holdings; 2010 results of the agricultural census.

Source: Federal Statistical Office, Federal Ministry of Food, Agriculture and Consumer Protection.

The privatization of state-owned farmland and forests continues. In 2011, a total of 42,770 hectares of farmland and 5,933 hectares of forest were sold, of which 2,211 hectares and 3,180 hectares, respectively, were sold under the terms of the Compensation and Corrective Payments Act (EALG). Since 1 July 1992, a total of 704,813 hectares of farmland and 542,325 hectares of forest have been privatized. By 31 December 2011, about 315,437 hectares of farmland and 66,044 hectares of

forest remained in the possession of the Land Utilization and Management Company (BVVG).

The future of the EU's Common Agricultural Policy (CAP)

In the current funding period of 2007 to 2013, European agriculture and rural areas receive support primarily from two EU funds:

- the European Agricultural Guarantee Fund (EAGF) for direct payments and market measures, known as the first pillar of the CAP. In 2011, direct payments for the entire EU amounted to about €40 billion, including about €5.4 billion for Germany (with about one-third of that amount going to the eastern states). On average, in Germany direct payments make up about 40% of farmers' income;
- the European Agricultural Fund for Rural Development (EAFRD), known as the second pillar of CAP. For the funding period of 2007 to 2013, Germany will receive about €9.1 billion from the CAP via the EAFRD. Of that amount, about €4.7 billion, or 52%, will have gone to the eastern German states.
- Much of the required co-financing comes from the federal and state governments under the joint programme for the improvement of agricultural structures and coastal protection (GAK). With additional national funds, Germany has a total of about €18.4 billion available for funding in the second pillar for the period 2007 to 2013; about €6.7 billion of this amount is for the eastern German states.

In the current negotiations on the CAP for the funding period after 2013, the European Commission proposals to reduce or cap direct payments are especially relevant for eastern Germany. According to these proposals, direct payments (other than for greening components) above a certain limit would be cut, although the costs for paid labour would be counted. For historical reasons, there are many large agricultural enterprises in eastern Germany, so they would be especially affected by such reduction and capping.

For this reason, the Federal Government opposes capping and considers it impossible to justify. The proposed arrangement would also require a great deal of bureaucratic effort, would be problematic for reasons related to the World Trade Organization and would be incompatible with the principle of decoupled direct payments. In particular, it would contradict the basic idea that the direct payments are also intended as compensation for agriculture's contribution to the common good. In the

Federal Government's view, all agricultural enterprises should be allowed to farm equally, regardless of their size, type of production or legal personality.

Recognition for eastern Germany as a transitional region in the European Agricultural Fund for Rural Development (EAFRD)

From 2014, the eastern German states will no longer qualify for the highest level of EU funding (Objective 1: Convergence funding). Together with the regions affected, the Federal Government insists that the EAFRD should provide the same co-financing for all regions that will no longer be eligible for Convergence or Phasing-Out funding as under the transitional provision of the structural funds European Regional Development Fund (ERDF) and European Social Fund (ESF).

In view of the strategic linking of the EU funds proposed by the European Commission and supported by the Federal Government and the state governments, similar conditions should apply to all funds within the Common Strategic Framework (cf. COM (2011) 615 final). This is in the interest of consistent policy implementation in the regions and of integrated regional development.

II.2.2.3 Strengthening enterprise investment and innovations

Innovations are the foundation for truly sustainable growth and prosperity. Their economic significance is demonstrated by the fact that the share of R&D- and knowledge-intensive economic sectors has grown sharply since the mid-1990s and now accounts for nearly half of economic production.

Figure 1: Knowledge-intensive industries in eastern Germany¹²



¹² *Wirtschaft & Markt 2011* and own additions. Basic geodata: Federal Agency for Cartography and Geodesy, cartography: Regional online information system RISO 2012.

The excellent public research infrastructure that has grown up in the eastern states since reunification provides an excellent starting position. With 30 universities, 55 universities of applied sciences and nearly 200 non-university research institutes, eastern Germany has a dense network of educational and research institutions. They have very good material resources and outstanding achievements as evidenced by Dresden Technical University's ranking as "elite university" in the third round of this year's excellence initiative for federal and state institutions of higher education. The good infrastructure is also reflected in the quality of research results and innovation, where the east does not lag behind the west. The quality of research is demonstrated not least by the fact that three out of the 15 top clusters chosen in Germany are located in eastern Germany (see Section II.2.2.8, p. 32). But even aside from these flagships, specialized clusters have formed, such as the centres for optics and surface technologies in Jena and for automotive supply technology and medical technology in Magdeburg.

II.2.2.4 Private-sector application of R&D

Such success cannot hide the fact that there are still major structural differences between eastern and western Germany precisely in the field of research and innovation: Industry still invests too little effort in innovation. Western Germany has 9.1 staff in R&D for every 1,000 workers, more than twice as many as eastern Germany with 4.5 staff per thousand workers. In absolute terms, only one in ten workers in eastern Germany and Berlin is employed in R&D.¹³ And eastern German investment in research is only 7.9% of all German investment in research.¹⁴ This relative weakness in research is due to the predominance of small and medium-sized enterprises (SMEs) in eastern Germany. Large companies can invest much more in R&D, while smaller companies simply cannot afford certain research projects. Distinguishing between the different industries and company sizes, it is apparent that eastern German manufacturing is less technology oriented. This, together with the predominance of SMEs, accounts for the weakness in R&D. Calculations show that east-west differences in R&D intensity can be fully explained by sectoral differences in the economic structure and by differences in the size of enterprises. So the challenge for eastern Germany is further structural development towards greater technology orientation in manufacturing and to larger enterprises with central or strategic functions especially in the field of R&D.¹⁵

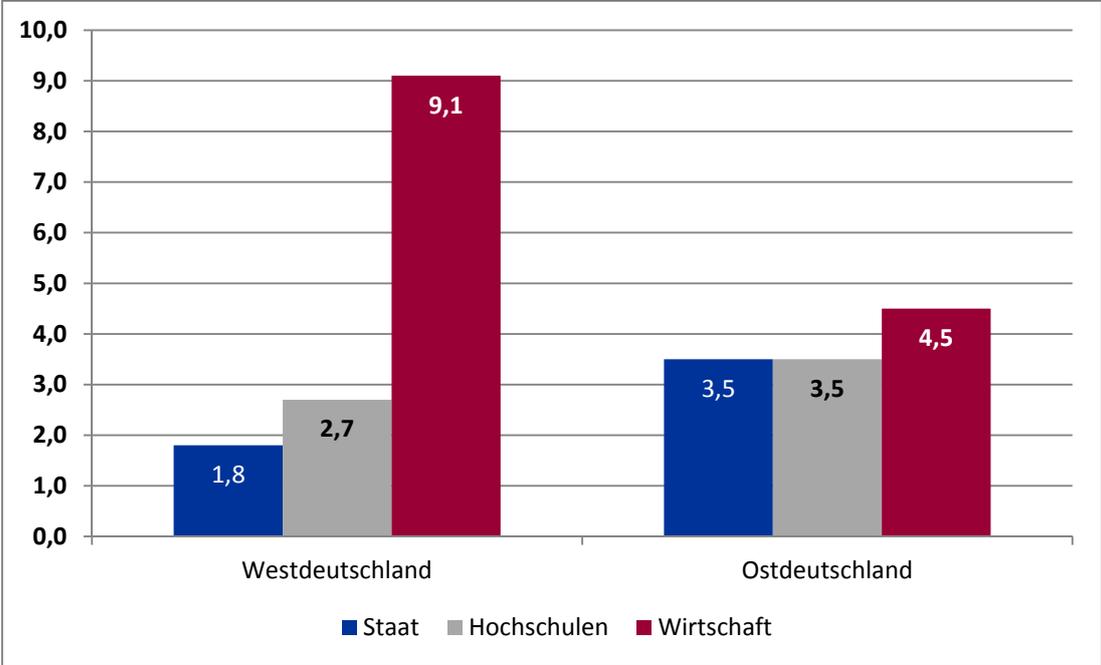
¹³ *Bundesbericht Forschung und Innovation 2012* (Federal report on research and innovation, 2012), p. 485.

¹⁴ Euronorm, R&D data 2007 to 2010, p. 35.

¹⁵ Source: IWH report *Wirtschaftlicher Stand und Perspektiven für Ostdeutschland* (Eastern Germany's current economic status and future prospects), 2011, p. 66.

The relatively large share of R&D workers in the strong public research infrastructure described above compensates somewhat for industry shortcomings in this area (see Section II.2.2.5, p. 29).

Figure 2: R&D staff per 1,000 workers (2009)

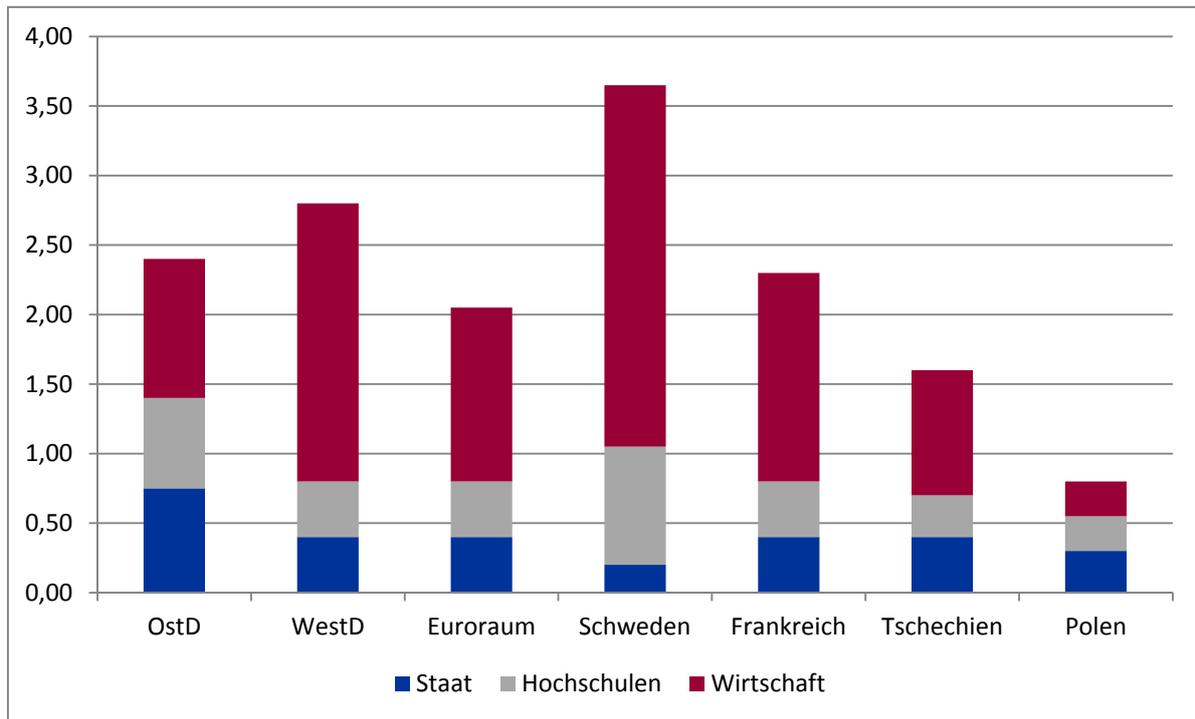


Source: Federal Statistical Office, Ostdeutscher Bankenverband e.V. (registered association of private banks in eastern Germany)

In eastern Germany, higher public-sector spending partly makes up for lower private-sector investment. Thus, in 2009 overall research intensity in eastern Germany (including investment in higher education and government spending) was 2.4% of GDP. Though this figure is much lower than the 2.9% of GDP in western Germany, it is above the European average (2.1% of GDP).¹⁶ Comparison with countries like Poland and the Czech Republic, which have even lower rates of investment in research, relativizes the eastern German "deficit" even further.

¹⁶ For all figures given here, see Infoport1/2012, Ostdeutscher Bankenverband.

Figure 3: R&D expenditure as a percentage of GDP (2009)



Source: Federal Statistical Office, Eurostat, Ostdeutscher Bankenverband e.V.

In order to increase innovation in eastern Germany, instruments are needed to compensate for the disadvantages resulting from the predominance of SMEs. Cooperation between companies and research institutes could help. And strengthening innovation management within companies could activate further unused potential.

This is the approach taken by the Federal Government's innovation initiative for the eastern states. Under the heading *Unternehmen Region* (Regional endeavour), five different funding programmes of the Federal Ministry of Education and Research address different stations in the innovation process, paying attention to the special nature of innovation in eastern Germany.

- *Innovation forums* promote building up or reorienting regional innovation networks. Funding of up to €85,000 has been provided to 144 innovation forums.
- The programmes *Innovative regionale Wachstumskerne* (Innovative regional growth cores) and *Wachstumskern-Potenzial* (Potential growth core) are intended to strengthen profit-oriented regional alliances with joint technology or problem-solving platforms with a unique selling point. So far, 42 growth cores with more than 840 individual three-year projects (budget to 2014: €250 mil-

lion) and 22 potential growth cores with more than 80 individual two-year projects (budget to 2014: €37.2 million) have received funding.

- The programme *Zentren für Innovationskompetenz. Exzellenz schaffen – Talente sichern* (Centres for innovation competence: creating excellence, securing talent) aims to establish international high-performance research centres which will set standards through their excellent research, entrepreneurial strategy and innovative approaches to promoting young talent, using a bottom-up approach. There are now 15 centres attracting talented researchers from Germany and other countries (budget to 2016: €244 million).
- The programme *InnoProfile* or *InnoProfile-Transfer* is intended to strengthen the capacity for innovation in eastern German regions through collaboration between young researchers and regional enterprises. About 42 groups of young researchers have received funding from the *InnoProfile* programme (budget to 2013: €157 million).
- The programme *ForMaT* provides encouragement for overcoming the division between market-driven industrial research and knowledge-driven public-sector research. The programme's budget of €60 million to 2012 has covered three rounds of funding so far.

Since 2008, the programme *Spitzenforschung und Innovation in den Neuen Ländern* (Top-level research and innovation in the new federal states) has provided further incentive to strengthen the capacity for innovation, build successful research collaborations and support universities in defining their profiles. To this end, the programme supports subject-oriented networks between universities, research institutes and private companies. For the 17 initiatives selected so far, funding totalling €217 million to 2014 is available.

For the coming years, *Unternehmen Region* plans greater interregional strategic networking and cooperation between competence regions and locations having a high scientific and market potential. In this way, self-sustaining processes already under way are to become more dynamic and lasting. To take advantage of the potential for development and innovation in eastern Germany, the programme *Zwanzig20 – Partnerschaft für Innovation* (Twenty20: Partnership for innovation) started in August 2012. With Federal Government funding of up to €500 million for the period 2013 to 2019, this programme is intended to promote research collaborations.

II.2.2.5 *Zentrales Innovationsprogramm Mittelstand*

The *Zentrales Innovationsprogramm Mittelstand* (Central innovation programme for SMEs) provides support for small and medium-sized businesses resulting in new products, processes or technical services. Development may take place in-house, using own staff (ZIM-SOLO) or in collaboration with other businesses or research institutions, such as universities or Fraunhofer institutes (ZIM-KOOP). The programme also supports the development and management of innovative networks (ZIM-NEMO). Support from ZIM helps SMEs finance research projects, thereby intensifying their involvement in the development of new products and more efficient processes. In many cases, cooperation in networks can make up for size-related disadvantages.

Since mid-2008, more than 18,500 applications for funding were approved, amounting to more than €2.3 billion to spur investment of €6.5 billion in research and development. The programme reached 9,600 enterprises. Collaboration with research institutions has since tripled, and 2,000 enterprises are active in networks receiving funding. About €500 million for ZIM funding is included in the 2012 federal budget. This money will encourage further industry investment in R&D, having positive effects on the market and employment in the medium to long term. According to a study by the Halle Institute for Economic Research (IWH), from 2009 to 2011 alone, ZIM projects created and secured roughly 70,000 jobs.

Forty per cent of ZIM funding goes to eastern Germany, which is thus overrepresented in the demand-oriented programme. ZIM is not restricted to particular technologies or sectors. Most projects are by SMEs in production and materials technology, measurement and sensor technology and information and communications technology (accounting for more than 55% of all funded projects in eastern Germany). As a result, increased research activities not only increase the companies' competitiveness but also speed up the solution of technological challenges. Cooperation with research institutes is the most-requested project form by companies. So the Central Innovation Programme plays a major role in greater cooperation between research and business and in increasing technology transfer.

II.2.2.6 External non-profit industry research facilities

After reunification, many of the research departments of state-owned combines (*Kombinate*) were privatized as independent entities, in some cases as non-profit limited liability companies (gGmbH) but often as registered associations (e.V.). There are approximately 60 of these non-profit industry research facilities, which are extremely important for economic development in eastern Germany. The small to very small companies which dominant the economic landscape are often unable to conduct the research and development necessary for new products and services because they lack the financial and/or personnel resources. This is exactly the gap filled by the non-profit industry research facilities. They develop research from academic and other research institutions as well as from SMEs themselves so that it can be turned into concrete applications. The non-profit industry research facilities also initiate and run networks. As reliable and innovative industry partners, they can convey the needs of SMEs to the research institutions. So companies as well as academic and public-sector research institutions benefit from their research and development competence.

The technology-neutral programme *Innovationskompetenz Ost (INNO-KOM-Ost*, Innovation competence east) (2009–2013) supports research and development by these non-profit industry research facilities in order to provide long-term stimulus for the process of economic convergence in eastern Germany. The objective is to strengthen innovation, increase competitiveness and thus provide long-term stimulus for the process of economic convergence in eastern Germany. The programme is strictly oriented on market applications of funded R&D results and at the same time on ensuring preparatory research at the funded facilities. Funding is available for expenditures on the following:

- preparatory research projects focusing on basic research findings with an eye to their industrial or commercial application, with anticipated broad possibilities of application by small and medium-sized enterprises;
- market-oriented R&D projects from the detailed planning stage to completion with the aim of creating new or better products, processes or services. Transfer activities for application-ready research are also eligible for funding.

The programme component offering subsidies for investment in technical infrastructure (*Investitionszuschuss technische Infrastruktur*) was first tested as a model project in 2009 and became a regular element of the programme in 2012. It is intended

to help improve the scientific-technical infrastructure of these facilities substantially and make them more competitive.

Funding from the *INNO-KOM-Ost* programme is awarded through a competition. In 2011, the programme provided 545 projects with total funding of about €57 million. The funding is effective and efficient. Despite the economic crisis, from 2008 to 2011 the non-profit industry research facilities increased their staffing by about 10%; the number of staff involved in R&D rose by about 13%. Each euro in funding brings, on average, 15 euros in turnover at the research facilities and in third companies within five years.

In their coalition agreement, the governing parties stated that the non-profit industry research facilities should be evaluated in order to determine, in consultation with the state governments, which of them should be added to the ranks of research organizations receiving regular federal and state funding (in particular the Fraunhofer Society and the Leibniz Association).

The Commission of Experts for Research and Innovation (EFI) advocates in principle basic funding for non-profit industry research facilities having a key role in knowledge and technology transfer.¹⁷ However, it opposes forcing these facilities to become integrated into the jointly funded research organizations.¹⁸ Further, the state governments have said they are not capable of financing such integration to a significant degree (they would have to bear all the costs for five years). It is therefore being checked whether this provision of the coalition agreement can be fulfilled some other way. A possible solution might be restructuring the funding landscape based on the evaluations of the non-profit industry research facilities and again extending the *INNO-KOM-Ost* programme.

¹⁷ EFI report 2010, p. 71 et seqq.

¹⁸ EFI report 2010, p. 72.

II.2.2.7 Horizon 2020: The EU Framework Programme for Research and Innovation

The European Union is working to become a union of stability and innovation; the key is research, technology and innovation. Horizon 2020, the EU's future framework programme for research and innovation, covers the funding period from 2014 to 2020 and has special significance in this context. Horizon 2020 rests on three pillars: Excellent Science, Competitive Industries, and Better Society. With regard to the possible participation of eastern Germany, various aspects of the planned programme will be especially important:

- First, the programme provides for extensive participation by small and medium-sized enterprises. The Federal Government supported this orientation of the programme, not least with eastern Germany's economic structure in mind.
- One focus of the pillar Better Society will be health, demographic change and well-being. In view of the rapid demographic change in eastern Germany, the Federal Government also actively supported this focus. But the other planned policy priorities of Horizon 2020 also cover technology fields in which eastern Germany has special strengths, such as information and communications technology and renewable energy (see also Section II.2.4).
- Horizon 2020 is also intended to create suitable instruments to promote marketable activities. For example, demonstration projects and the production of prototypes will be eligible for funding for the first time in order to overcome the "Valley of Death" in which European key technologies so often struggle for survival. A possible example of an application eligible for funding would be a pilot facility for the industrial use of brown coal as a raw material for chemicals production.

II.2.2.8 Clusters/networks

The eastern Germany continues to be made up largely of small and medium-sized enterprises (SMEs). No major companies (international groups or DAX 30 companies) are headquartered in eastern Germany. This is detrimental to international competitiveness, export, innovation and research capacity. Greater cooperation in clusters,¹⁹ networks and collaborations can make up for these shortcomings, take advantage of and strengthen the special regional potential of the eastern states.

¹⁹ Michal E. Porter defines a cluster as a geographic concentration of companies, specialized suppliers, service providers, companies in related sectors and affiliated institutions (such as universities,

In its funding policy for eastern Germany, the Federal Government has for many years already given special weight to support for networks. In the meantime, a number of very successful networks have developed in eastern Germany, providing significant impetus in their various industries. Support for clusters comes from the GRW (see Section II.2.2, p. 14) and a variety of funding programmes aimed above all at increasing innovation capacity. These include the programmes under *Unternehmen Region* (see Section II.2.2.4, p. 25), such as the programmes *Innovative Regionale Wachstumskerne* and *Spitzenforschung und Innovation in Ostdeutschland*. Technology-neutral programmes such as ZIM (see Section II.2.2.6, p. 30) and *INNO-KOM-Ost* (see Section II.2.2.5, p. 29) also play an important role.

The success of this funding is demonstrated by the successful performance of eastern German contestants in the Federal Government's top-level cluster competition. Three eastern German initiatives were chosen in January 2012 by an international jury as winners in this competition, a flagship of the high-tech strategy: CoolSilicon (energy efficiency in microelectronics), Solar-valley Mitteldeutschland (Solar valley central Germany; photovoltaics) and the BioEconomy cluster, which focuses on using non-food biomass to produce materials, chemicals, fuel and products made of new materials.

Especially in new industries, greater collaboration can be an important factor in establishing competitive structures. Clean tech is one such industry which was successfully established in eastern Germany, which now has special expertise in this area. In order to better utilize such special potential and to help companies in these industries grow, the Federal Government Commissioner for the New Federal States launched the clean tech initiative for eastern Germany in autumn 2011. This initiative is intended to link the many promising approaches in the various clean-tech segments and establish lasting structures for cooperation within the industry.

In order to take better advantage of the eastern states' potential overall, state government funding should increasingly include partners beyond state borders if doing so makes sense to enhance research and economic strengths within the state. This will help utilize the structures built in the meantime effectively and profitably.

II.2.3 Productivity and unit labour costs (competitiveness)

Structural change in eastern Germany towards an internationally competitive economy has made noticeable progress in recent years. Thanks to global economic

standards authorities and industrial associations) which collaborate in certain areas while competing and cooperating with each other.

growth from 2004 to 2008, eastern German industry and the private service sector enjoyed a period of steady and high growth. Industry, as the most important driver of growth, made significant progress on productivity in recent years; in 2011, productivity was about 82% of western Germany's.²⁰ If one includes the energy industry, this figure rises to an impressive 87.5%. Productivity in other sectors and industries lagged behind, so that overall productivity in eastern Germany in 2011 was just 80% of the western German level.

Eastern Germany's lower productivity is due above all to the sectoral structure; another reason is the predominance of SMEs. In the manufacturing sector, for example, larger companies are under-represented, and there are fewer jobs requiring higher qualifications than in the west. Enterprises are, on average, smaller than in the west, also for historical reasons. In addition, the larger they are, the less productive eastern German companies are in comparison to their western counterparts: In 2008, productivity of very small and small enterprises was about 80% of the western level; in medium-sized enterprises it was about 75%; and in large enterprises productivity was only 67% of the western level. But lower productivity in the east is also due to the fact that companies are only production sites or branch locations; the lack of company headquarters means fewer of the positions that contribute the most value-added, such as marketing, research and development.

Unit labour costs, which are an important indicator of competitiveness, have largely evened out between eastern and western Germany at the macroeconomic level. Unit labour costs in eastern German industry are about 11% lower than those in western Germany.

II.2.4 Sunrise industries (clean technology, etc.)

Despite considerable success, the process of industrial growth has been hindered by specific structural factors that have already been mentioned, in particular the lack of large companies and independent company headquarters in eastern Germany.

To reduce structural disadvantages like these, new and innovative industries and technologies that have not yet become established are being promoted along with established industries such as mechanical engineering and car manufacturing. In this way, value-added along the entire production and supply chain, research and development and above all executive and management functions are to be strengthened for the long term.

²⁰ According to WZ 2003; eastern states including Berlin.

In recent years, the photovoltaic industry has enjoyed high growth rates and a broad value-added process. But the industry has come under pressure from cheap Chinese imports. Many companies were forced to restructure and some had to file for bankruptcy. The European photovoltaic industry is petitioning to open anti-dumping proceedings in order to investigate whether the Chinese competition is receiving unfair government subsidies.

The field of renewable energy continues to be an important manufacturing sector in eastern Germany. In 2011, the Federal Government Commissioner for the New Federal States launched a clean technology initiative for eastern Germany aimed at expanding intersectoral and interregional networks and raising the industry's profile outside the country. The initiative is intended to help develop sunrise industries related to environmental protection and regenerative energy sources. Eastern Germany today is a major global player in clean tech, for example in the field of wind energy. Forty per cent of Germany's wind turbines are in eastern Germany. Germany Trade and Invest GmbH (GTAI), the federal foreign trade and inward investment agency, is helping increase awareness of and seek investors in clean tech in eastern Germany (see Section II.2.6).

Examples of other interesting new fields with good prospects for development:

- Microelectronics: Germany's information and telecommunications (ICT) industry is the European leader in terms of revenues, range, growth potential, research and qualified staff. The Berlin-Brandenburg capital region and the high-tech region of "Silicon Saxony" are two locations where the ICT industry is strongly represented.
- Biotechnology: About 150 out of the total of 650 biotechnology companies in Germany are located in eastern Germany. The largest number are in the Berlin-Brandenburg region (about 87 companies) and in the "Bio-Saxony" cluster in Leipzig and Dresden (more than 60 companies with about 1,500 employees). This is an excellent environment for investing in medical (70% of companies), industrial (20% of companies) and agricultural biotechnology activities (10% of companies).
- Health-care industry: Intensive networks between companies and research institutes make this growing industry and cross-sectoral technological applications increasingly competitive. The German health-care market is very attractive and offers major growth opportunities. Germany's health-care sector employs four times as many people (approximately 4.4 million) as its very suc-

cessful auto industry. In eastern Germany, the roots of this large industry can be found in the Berlin-Brandenburg capital region and in the states of Saxony-Anhalt, Thuringia and Mecklenburg-Western Pomerania.

- Optoelectronics: Eastern Germany's optical industry is concentrated in two regions: Jena, Thuringia, and the Berlin-Brandenburg region. Activities in the two regions are optimally coordinated and both regions can demonstrate an efficient network including private-sector, academic and government actors. The private sector is active in advancing research in this field, which is rounded out by university-level programmes tailored to industry needs.
- Nanotechnology: Especially in Saxony, Saxony-Anhalt, Berlin and Thuringia, many innovative companies with solid research backgrounds have grown out of the traditional manufacturing industry in these regions. In Berlin, medical research has already reached the level of nanotechnology. About 40 nanotechnology companies there are developing analytical tools, nanobiotechnology and nanomedicine and their interface with optics.

Environmental remediation: For more than twenty years, the federally owned Lausitz and Central-German Mining Administration Company (LMBV) has been successfully remediating environmental damage caused by large-scale lignite mining. The federal and state governments have in principle approved a new administrative agreement on lignite mining remediation for the period 2013–2017 with a budget of €1.2 billion. Lignite mining remediation continues to create new and demanding jobs in the affected regions, both with the LMBV directly and with its subcontractors. Employees work in a variety of areas, from engineering-technical tasks to sustainable environmental technologies. The ongoing remediation by the LMBV has made the Lausitz region and central Germany more attractive.

II.2.5 Attracting international investment

Making the economy of eastern Germany more international is a central challenge for the coming years and a key to establishing self-sustaining economic growth. Tapping into the large and rapidly growing international markets is necessary for economic growth and ongoing innovation. Both the large markets of the western European countries and the dynamic markets of central and eastern Europe are the focus of a strategy for making the eastern German economy more international, where eastern Germany has some catching up to do. For example, the export rate in 2010 was

34.1%, well below the level of western Germany, at 47.5%; the number of international companies is also lower than in comparable western regions.

The Federal Government is supporting the internationalization of the eastern German economy with targeted measures, including marketing eastern Germany as a good place to invest, targeting potential investors, promoting exports and helping SMEs in particular enter international markets.

Germany Trade and Invest (GTAI) is largely responsible for attracting investors to eastern Germany. Targeting potential investors with a special focus on eastern Germany and marketing eastern German investment sites and their strengths are important priorities of GTAI. The Federal Government Commissioner for the New Federal States contributes €5 million annually to the GTAI budget to help make sure these priorities are implemented. The GTAI lists its special activities to target investors for eastern Germany separately in its catalogue of measures; these activities are coordinated with the relevant states in the expert advisory board for the new federal states.

The GTAI statistics on acquisition clearly show the success of its special efforts to attract investment to eastern Germany: In 2011, GTAI handed over to the economic development agency for the eastern states 33 investment projects worth more than €220 million and projected to create 1,446 jobs. Thus again in 2011, the largest share of international investment attracted by GTAI went to the eastern states.

In addition to providing institutional funding for GTAI, the Federal Government Commissioner for the New Federal States also supports other projects to attract investors and help eastern German companies enter key international markets. An annual budget of €1 million is available to contribute to measures taken by the economic development agencies of the eastern German states. These are additional priority measures that could not be taken without federal assistance. These projects typically focus on the most important sources of direct foreign investment and on the special technological and economic strengths of the different eastern German regions which are ready for involvement by foreign companies. In recent years, projects helping eastern German companies gain a footing in important international markets have also become more significant.

These projects supplement the support received by eastern German companies to promote exports, in particular under the federal programme to enter foreign markets, and strengthen foreign exports from eastern German companies.

II.2.6 The Bundeswehr as an economic and social factor

In the course of its reorientation and despite the end of compulsory military service, the Bundeswehr continues to play a key role in integrating eastern and western Germany. Even as a volunteer military force, the Bundeswehr remains firmly anchored in society. Decisions on the location of future Bundeswehr bases were made with the aim of ensuring its presence in every German state.

After the fundamental decision on reorientation was made in 2011, the implementation plan approved by the Federal Minister of Defence in June 2012 defines when which organizational elements will be restructured. At the same time, the dates for closing Bundeswehr sites were set. Only a small proportion of sites to be closed are located in the eastern states.

The newly created commands heading the major organizational elements below the ministry level make eastern Germany more significant for the Bundeswehr. With its new commands and superior federal authorities for the other major organizational elements, the Bundeswehr is creating clear divisions of responsibility, reducing overlaps and eliminating redundancies.

Out of the five military operations commands, three are located in eastern Germany. In October 2012, the headquarters of the army, air force and navy took up their work in Strausberg, Berlin-Gatow and Rostock, respectively.

Other important Bundeswehr commands in the eastern states are the Joint Operations Command in Potsdam and the new Logistics Command to be created in Erfurt. Further, from autumn 2012 the Bundeswehr Planning Office in Berlin-Köpenick will help determine the future of the German armed forces.

The Bundeswehr is an important factor in the eastern states also when it comes to support for high-performance sport. The Bundeswehr provides funding for up to 744 elite athletes in 15 disciplines, three of which have training centres in eastern Germany: Frankenberg, Frankfurt (Oder) and Oberhof. Including the group in Berlin, there are currently about 260 athletes and national trainers in Olympic summer and winter sports at these locations.

II.3 Labour market developments

II.3.1 Labour market and employment

The good economic development in 2011 had a positive effect on the eastern German labour market. Employment and employment subject to social insurance contributions continued to rise, and the demand for workers remained high. In addition, structural change and labour market reforms have led to steady growth in training and job opportunities in eastern Germany in recent years.

In August 2012, the number of unemployed in eastern Germany was about 869,000, or 10.3% (western Germany: 6%). The annual average for 2011 was about 950,000 unemployed persons. The unemployment rate of 11.3% (2010: 12%) was the lowest average rate in twenty years. Of persons registered as unemployed, about 245,000 received assistance from the government employment agencies under the Social Code, Book III, and about 705,000 were helped by the job centres under the Social Code, Book II. The number of persons unemployed for more than 12 months continued to fall: In the reporting year, this number was about 323,000,²¹ slightly less than in the previous year. Unemployment among persons under age 25 was 10.1% in 2011 (western Germany: 5%).

Some states now have lower unemployment rates than similar states in western Germany. For example, Thuringia with an average unemployment rate of 8.8%, Saxony (10.6%) and Brandenburg (10.7%) are ahead of Bremen, with its average rate of 11.6%.

However, regional differences are obvious and yield a more nuanced picture of the labour market in eastern Germany. While some cities, such as Jena, Potsdam and Dresden, have rates under 10%, others such as Magdeburg and Leipzig each have unemployment rates of 11.4%.

In 2011, the number of employed persons rose to about 6.4 million.²² Eastern Germany has thus seen steady growth in employment since 2005, despite the economic and financial crisis, of 7%. However, this trend does not affect all of eastern Germany equally, instead reflecting the ongoing economic restructuring there. While employment in the primary sector has fallen sharply, employment in other areas has risen.

²¹ The number of long-term unemployed includes only plausible monthly figures from job centres of approved municipal agencies. As a result, for 8,338 unemployed persons in eastern Germany, no information on the length of unemployment was recorded, leading to a lower figure for long-term unemployed.

²² IAB Establishment Panel Survey for eastern Germany, results of the sixteenth wave 2011, p. 5.

The growth in employment in 2011 occurred largely in manufacturing, construction and health care and social services (each +3%).

The good news is that the rise in employment has led the number of employees required to pay social insurance contributions to increase by 99,000 over the previous year to 5.39 million.²³ More than two-thirds of employees work full-time. Employment has become more flexible in recent years, above all part-time and temporary employment.

II.3.2 Demographic change in the labour market

In eastern Germany, the processes of demographic change are already having a stronger effect than in western Germany. The dramatic drop in the birth rate in the early 1990s and the emigration of mainly younger people have reduced the size of the labour force, which is especially apparent in rural areas. According to estimates by the federal and state statistical offices, by 2015 the number of 15- to 25-year-olds in eastern Germany will be almost 40% less than in 2008.²⁴ At the same time, life expectancy continues to rise steadily, so that younger age cohorts are increasingly smaller in comparison to the larger, older age cohorts, resulting in an older overall population and potential labour force. The working-age population (20- to 65-year-olds) in eastern Germany will thus continue to shrink and age.²⁵ This effect will be reinforced when older workers begin retiring in larger numbers than can be compensated for by the younger age cohorts.²⁶ The accelerated demographic change in eastern Germany is therefore putting pressure on employers.²⁷

II.3.3 Areas of action

In view of demographic change, then, the positive trends in the labour market are facing new challenges for restructuring the economy and ensuring the supply of labour in eastern Germany. At the same time, given the continuing high unemploy-

²³ Employment statistics of the Federal Employment Agency for 2011, as of June 2012.

²⁴ Federal and state statistical offices, *Demografischer Wandel in Deutschland – Bevölkerungs- und Haushaltsentwicklung im Bund und in den Ländern* (Demographic change in Germany: Population and budget trends at federal and state level), volume 1, 2011, p. 23.

²⁵ See *Entwicklung der Bevölkerung von 2009 bis 2060* (Population trends from 2009 to 2060), 12th coordinated population projection, eastern Germany and Berlin, upper limit of the median population, Federal Statistical Office, 2010, and Johann Fuchs, Markus Hummel and Gerd Zika: *Demografie prägt den ostdeutschen Arbeitsmarkt* (Demographics is leaving its mark on the eastern German labour market), IAB summary report 21/2009.

²⁶ Dr Iris Pfeiffer, Kai Gramke, Susanne Heinzelmann, Dominik Fischer: *Gemeinsame Fachkräftestudie Berlin-Brandenburg* (Joint Berlin-Brandenburg study of skilled labour) 2010, p. 34.

²⁷ See Holle Grünert and Ingo Wiekert: *Nachwuchskräfteerkrutierung in Zeiten demografischer Umbrüche. Reaktionen von Betrieben in Sachsen-Anhalt und Niedersachsen* (Recruiting younger workers at a time of demographic upheaval. Reactions of employers in Saxony-Anhalt and Lower Saxony), 2010, pp. 20–24; and Pfeiffer, 2010, p. 17 et seqq.

ment, further efforts are needed, especially in the poorer areas of eastern Germany, to integrate disadvantaged groups in the labour market and increase the employment chances of less-skilled workers.

II.3.3.1 Active labour market policy

Active labour market policy measures in eastern Germany help improve individual job-seekers' chances of finding work and reduce regional disparities. Here, the emphasis is on activating measures which help open employment opportunities in the general labour market in eastern Germany. To ensure that active labour market policy instruments continue to be used effectively and efficiently, the Federal Government reorganized the set of instruments with the part of the Act to Improve Opportunities for Integration in the Labour Market which entered into force in April 2012. This Act is intended to accelerate integration in the labour market, in particular employment subject to social insurance contributions, to strengthen decision-making authority and flexibility at local level and to use funding instruments in a more targeted way, in order to better accommodate regional differences in labour markets. For this purpose, the number of instruments was reduced, similar instruments were combined, the room for discretion was increased and greater individual support was permitted.

The Federal Government gives priority to those active labour market policy measures which integrate job-seekers successfully and permanently in the labour market as well as fight and prevent unemployment.

Funding instruments concentrate on measures to take up dependent employment or self-employment, on promotion of continuing vocational education and training, choice of occupation and vocational training as well as placement services. Given the disproportional number of long-term unemployed covered by the Social Code, Book II, job creation measures have a certain significance in eastern Germany, with about 92,000 participants on average in 2011. Such measures are much less needed today than in the 1990s, when several hundred thousand measures were carried out, sometimes with structural policy aims, to soften the impact of sudden job losses and stabilize the eastern German labour market.

With its programme of public-service jobs, the Federal Government has developed an innovative approach to integrate the long-term unemployed more effectively in the general labour market through an intensive activation phase lasting six months or more, followed by placement in an additional job in the public interest as needed. During the employment phase, which lasts a maximum of 36 months, participants receive additional coaching to help make the transition to a regular job. This model

project is widely applied in eastern Germany, offering about 19,300 approved positions and many times that number of eligible recipients.²⁸

II.3.3.2 Skilled workers for the eastern German labour market

The overall positive economic development means that employers are willing to hire. The rising demand for skilled workers is increasingly accompanied by difficulties in filling job openings. In 2011, the demand for workers was higher than ever before, with 394,000 new hires. However, a high number of jobs – 23% – went unfilled. Shortages are felt above all in R&D-intensive areas of manufacturing and in business services.²⁹ And small enterprises find it especially difficult to find skilled workers. According to the Federal Government, neither eastern Germany nor Germany as a whole is experiencing a widespread shortage of skilled labour, but there are shortages in particular occupations, sectors or regions.³⁰

However, this situation can be expected to worsen in the coming years, as the eastern German labour force will begin to shrink sooner and more dramatically than that in western Germany due to demographic change resulting from the drop in the birth rate and emigration following reunification. With the special challenges in eastern Germany in mind, the Federal Government carried out a skilled-labour initiative for eastern Germany as set out in the Coalition Agreement. In addition to testing and promoting innovative, regional approaches in sectors with a high potential for growth and employment, discussion forums were conducted with representatives of the eastern German states, chambers of commerce, trade and industry and social partners on the issues of creating and sustaining a welcoming climate, human resources development in SMEs and tools to improve career marketing. The results are being assessed in close consultation with the initiative's partners.

In June 2011, the Federal Government adopted its skilled-labour strategy, describing the goals and measures in the following fields of action: activating and securing employment; balancing family and career; educational opportunities for all from the very start; qualification, basic and advanced training; and integration and targeted immigration. The innovation office *Fachkräfte für die Region* (Skilled workers for the region) was set up to support regional activities. In addition, a competence centre for

²⁸ Federal Office of Administration statistics, 2 July 2012.

²⁹ IAB Establishment Panel Survey for eastern Germany, results of the sixteenth wave 2011, pp. 44–48.

³⁰ Compare e.g. IAB Research Report 8/2012: *Unvollkommene Ausgleichsprozesse am Arbeitsmarkt. Analysen zur Arbeitskräftenachfrage auf Basis des IAB-Betriebspanels und der IAB-Erhebung des Gesamtwirtschaftlichen Stellenangebots* (Incomplete convergence processes in the labour market: Analyses of the demand for skilled labour based on the IAB Establishment Panel Survey and the IAB survey of job openings in the overall economy).

securing skilled labour³¹ was created to assist SMEs in particular in recruiting skilled workers, with best practices, studies and human resources strategies published for example on the competence centre's website. Lastly, a job monitor helps depict the current and future labour supply and demand more accurately. With its help, additional steps can be taken to ensure the supply of labour.

Occupational training for young people

In this context, there is a special focus on the target group of young people. During the reporting period, the average annual unemployment rate for young people in 2011 was low (10.1% for those under 25, 6.5% for those under 20).

Although the rate of school-leavers without a secondary general school certificate (*Hauptschulabschluss*) is disproportionately higher than in western Germany,³² the training situation of young people improved last year. The statistics for eastern Germany at the end of the occupational training year 2010/2011 were as follows: The number of traineeships and apprenticeships rose by 6.5% over the previous year to a total of 94,349. The increase was due entirely to growth in the number of in-house traineeships and apprenticeships (+11.8%). At the same time, however, the number of applicants sank by 5% to 89,971, closing the statistical gap in the training market.³³ So it is possible to assume that the eastern German training market has improved.

The number of in-house training positions in eastern Germany rose in the training year 2010/2011 by 8,100 to 76,700, while the number of external training positions fell by 11.8%, in part due to the end of the training position programme for eastern Germany and in part because the government employment offices responded to the improved economic situation and smaller number of applicants (due to demographic factors) by initiating fewer external training opportunities.

The number of training contracts concluded in eastern Germany in 2010/2011 was again lower: 84,500, or 7,200 fewer than in the previous year (-7.8%). However, this is not an indication of a worsening labour market but rather reflects the smaller numbers of school-leavers as a result of demographic factors.

³¹ See www.kompetenzzentrum-fachkraeftesicherung.de

³² Compare Federal Statistical Office, *Schulen auf einen Blick* (Schools at a glance), 2012, p. 34. In Mecklenburg-Western Pomerania 13.8% of pupils in the same year left general-education schools without a school-leaving certificate; in Saxony-Anhalt this figure was 12.6%, in Berlin 10.5%, in Brandenburg 9.8%, in Saxony 9.5% and in Thuringia 8.6%. The figure for Germany as a whole is 6.7%.

³³ The difference between the number of registered applicants who have not yet found a traineeship or apprenticeship and the number of registered traineeships or apprenticeships which are still vacant.

In the current occupational advising year 2011/2012, as of July 2012 about 80,000 training positions had been reported to the Federal Employment Agency, an increase of 1,700, or 2.1%, over the previous year. At the same time, about 83,500 applicants have contacted the training placement service of the Federal Employment Agency for help in finding a training position, 1,900 or 2.3% more than the year before.

Good-quality school education and thorough occupational training in the dual system are the foundation for well-trained young workers. They ensure that young people have the necessary job skills and lead to early attachment to a particular region. It is important to help young people choose careers that match their skills and interests while also meeting the needs of regional labour markets. Young people transitioning from school to training need tailored assistance to become integrated in the training and labour market. Comprehensive orientation for pupils in all educational pathways with the necessary breadth of substance can help expand their training opportunities and satisfy employers' rising standards.

One example of successful efforts to ensure the supply of younger workers is the interregional project *Netzwerk SCHULEWIRTSCHAFT Ostdeutschland* initiated by the Federal Government Commissioner for the New Federal States in conjunction with the Confederation of German Employers' Associations. This network helps young people in education and training in order to improve practical career orientation. The individual network projects focus on three main themes: getting high achievers interested in career opportunities in their home regions; helping disadvantaged low achievers and getting them interested in occupations in the fields of mathematics, informatics, natural sciences and technology (MINT occupations). Successful projects are further developed and put on a more permanent footing, while tested approaches are applied at regional and interregional level. In this way, the network takes advantage of synergies for young people, schools and enterprises in the eastern states. This interregional project is an example of changed conditions in the labour market. Many companies are aware of the shrinking supply of younger workers and are trying a variety of approaches, such as creating their own training programmes, working more closely with schools and employment agencies, etc., to deal with the shortage of younger workers.

Employment potential of women

Given the need for skilled workers throughout Germany, increasing the number of women in employment is an important factor in stabilizing the labour market. The aim is to increase women's participation in the labour market over their entire working lives, both quantitatively and qualitatively. Eastern Germany has traditionally had

more women in employment than western Germany (2010: 70.8% in eastern Germany compared to 69.3% in western Germany). While more women in western Germany interrupt periods of employment to have children and return to work part-time, women in eastern Germany tend to interrupt employment for shorter periods before returning to work full-time. This is reflected in the much higher rate of women in full-time employment (2010: 66% compared to 51.4%).³⁴ And in contrast to western Germany, jobs requiring social security contributions are about equally distributed among men and women.

For this reason, fewer are in part-time work in eastern Germany (34%) than in western Germany (48.6%). In western Germany, 56.2% of women said they worked part-time in order to take care of children, others in need of care or other family obligations (eastern Germany: 23.4%); in eastern Germany, 49.4% of women said they worked part-time only because they could not find a full-time position (western Germany: 13.5%). So they are not working part-time by choice.³⁵

While in 2010 women in eastern Germany worked fewer average hours per week than men (33.5 hours compared to 38.3 hours), they worked more than women in western Germany (29.3 hours).³⁶

In about 15% of eastern German couple households, women are the primary income earners, compared to 9% of western German couple households; in 37% of eastern German couple households, both partners contribute about the same amount to household income, compared to 21% of couple households in western Germany.³⁷

Higher levels of child-care use for children under age three are also likely to play a significant role in this positive picture of women's employment. Almost half of all children in eastern Germany attend day care or are looked after by a childminder (2010: 49%); in western Germany, only one in five children is (2010: 20%). In absolute figures, about 150,000 children under three attended day care or were looked after by a childminder in 2010. This infrastructure gives people with family obligations greater freedom in balancing family and career and is thus an important factor in choosing where to live and work.

³⁴ Federal Statistical Office, *Erwerbstätigkeit von 20- bis 64-jährigen Frauen 2010 in Deutschland* (Employment of 20- to 64-year-old women in Germany, 2010), Wiesbaden, 2012.

³⁵ See Susanne Wanger, *Ungenutzte Potentiale in der Teilzeit: Viele Frauen würden gerne länger arbeiten* (Unutilized potential in part-time employment: Many women would gladly work longer hours), IAB summary report 9/2011; Federal Statistical Office, *Erwerbstätigkeit von 20- bis 64-jährigen Frauen 2010 in Deutschland* (Employment of 20- to 64-year-old women in Germany, 2010), Wiesbaden, 2012.

³⁶ Source: Federal Statistical Office based on the microcensus.

³⁷ Source: Brehmer/Klenne/Klammer 2010: WSI discussion paper no. 170.

In order to better utilize women's labour potential, gender stereotypes must be further reduced, traditional occupational images relativized and the work/life balance improved. The Federal Government is helping the state and local governments expand child-care options for under threes by providing €4.6 billion up to 2013 and €845 million annually from 2014 on. Together with social partners, it also promotes family-friendly working time models.

In March 2008, the Federal Government in cooperation with the Federal Employment Agency and other partners launched the action programme *Perspektive Wiedereinstieg* (Re-entry prospects) with total funding of €30 million from the Federal Government and the European Social Fund. The programme is intended to help men and women who have not worked for several years for family reasons resume promising careers.

Employment potential of older workers

It is also important to make better use of the potential of older workers to expand the potential labour force. According to the Institute for Employment Research (IAB), nearly one in three workers in eastern Germany is age 50 or older.³⁸ Thus one in four eastern German workers is employed with predominantly older co-workers, while in western Germany the comparable figure is only one in eight.³⁹ The proportion of workplaces with predominantly older staff increased by 9% within only three years.

As a result of demographic change, the proportion of older workers in employment subject to social insurance contributions is rising, while the proportion of young people from 15 to 25 fell by 4.2%, also due to longer time spent in education. Similar findings apply to the changing age structure of employees in eastern German enterprises.⁴⁰

As the labour force ages, enterprises must take steps to encourage and maintain individual capacity for work. This includes age-appropriate workplaces, health management and work organization or further education for older workers. In 2011, about one in five eastern German companies offered measures for older workers, above all further education. The Federal Government supplements these efforts, for example by offering advising for SMEs as part of the initiative *Neue Qualität der Arbeit* (INQA, new quality of work).

³⁸ Vera Dahms, Marek Frei, Monika Putzing: IAB Establishment Panel Survey for eastern Germany, results of the sixteenth wave 2011, 2012, p. 24.

³⁹ Ibid., p. 26 et seqq.

⁴⁰ IAB Establishment Panel Survey for eastern Germany, results of the sixteenth wave 2011.

Employment potential of foreign skilled workers

In addition to making better use of domestic employment potential, the German economy must also recruit foreign skilled workers to meet its labour needs. Since May 2011, EU citizens from Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, Slovenia and the Czech Republic have not needed a work permit to take up employment in Germany. This has led to a moderate rise in the number of skilled workers moving to Germany.

The Federal Government has also taken a number of measures to give foreign skilled workers easier access to the labour market. The Act to Improve the Assessment and Recognition of Foreign Professional Qualifications entered into force on 1 April 2012. Despite good occupational training in their home countries, some foreigners may have not had their training recognized in Germany, so they did not qualify as skilled workers in Germany. The new Act makes it easier for new immigrants and persons of foreign origin living in Germany to have their qualifications and professional degrees assessed.

Further, the introduction of the EU Blue Card on 1 August 2012 brings changes to EU immigration law, making it easier for university graduates and those with similar qualifications to immigrate to Germany. A university-level degree and proof of an employment contract paying a gross annual salary of at least €44,800 is necessary. For highly skilled workers in areas with labour shortages, the annual salary must be at least €35,000. This includes all engineering fields, university graduates and equivalent skilled workers in information and communications technology and physicians. To ensure that foreigners are not paid less than Germans in comparable positions, it is necessary to check that working conditions are equivalent. Other improvements benefit foreign students and recent graduates, foreigners in occupational training, self-employed workers and entrepreneurs. In addition, a six-month work permit was created to enable foreigners to look for work, which makes it easier for SMEs to find foreign workers.

Another element that shows that qualified foreign professionals are welcome in Germany is the new website www.make-it-in-germany.com, part of a joint federal campaign to attract skilled workers. The website is addressed to foreign university graduates and informs them about living and working in Germany.

As eastern Germany has a relatively low proportion of foreigners, while the number of foreign students at eastern German universities is growing, these universities are playing a greater role as regional motors within the project *study and work* by inform-

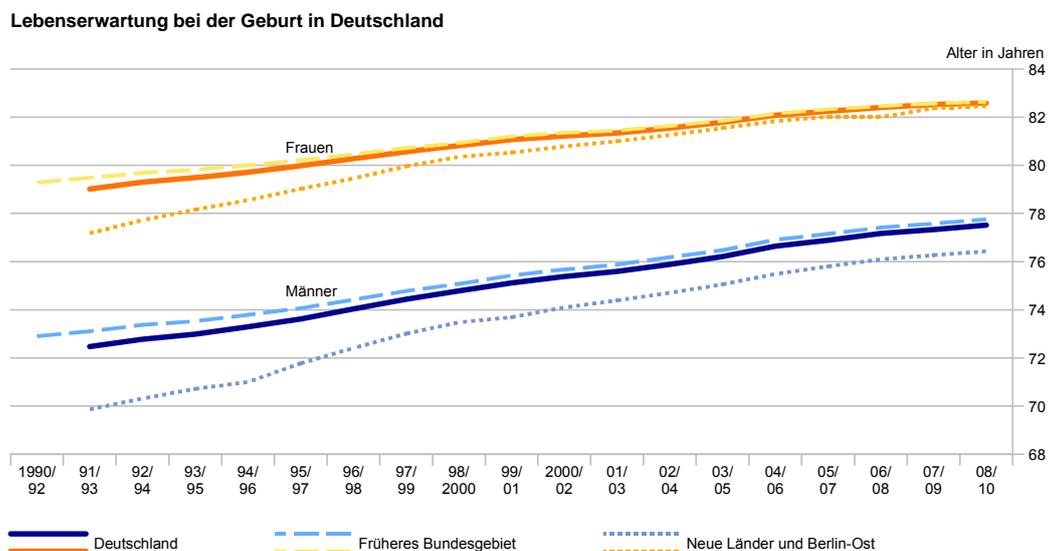
ing foreign students about their options to stay and work in eastern Germany and helping them in their transition to employment.

II.4 Prosperity (life expectancy/income/assets/purchasing power)

II.4.1 Life expectancy trends

Life expectancy in Germany has steadily risen. Average life expectancy at birth has developed as follows:

Figure 4: Life expectancy at birth in Germany



Source: Federal Statistical Office

The figure shows that life expectancy in eastern and western Germany has steadily converged. Women in eastern and western Germany now have nearly the same life expectancy. With a life expectancy of 76.43 years, men in eastern Germany have not quite caught up to their counterparts in western Germany, who have a life expectancy of 77.76 years.

II.4.2 Income situation of private households

After German reunification, the goal of German economic policy was to harmonize living conditions in eastern and western Germany with the help of rapid, broad-based wage convergence. In 1991, the income of eastern German households was about 56% of that of western German households.⁴¹ The following years saw a steady

⁴¹ IWH, *Ostdeutschlands Transformation seit 1990 im Spiegel wirtschaftlicher und sozialer Indikatoren* (Eastern Germany's transformation since 1990 as reflected in economic and social indicators), 2nd edition, 07/2010.

process of economic convergence, fuelled by a construction boom, which brought personal gross incomes in eastern Germany much closer to those in western Germany. By 1996, disposable household income in eastern Germany was already more than 80% of the western German level. From 1997 to 2003, however, economic growth slowed, as did growth in eastern German household income. But in the same period, the income of western German households continued to show strong growth, once again widening the income gap with eastern Germans. In 2008, the income of private households in eastern Germany was only 75% of the income of western German households.

With regard to wages and salaries, the increasing demand for skilled workers in certain industries has not yet resulted in noticeable convergence on collective bargaining policy. According to data of the Institute for Employment and Research (IAB), the average gross wage in 2011 rose to €2,350, so the rate of convergence has remained at about 80% since the mid-1990s. The predominance of SMEs means that average wages are lower. Larger enterprises in eastern Germany pay more, and the rate of convergence is about 90%. This corresponds to the collective bargaining coverage of eastern German enterprises. While 90% of enterprises with more than 250 employees are bound by the terms of collective bargaining agreements for their sector or enterprise or follow them voluntarily, this is true of only about 55% of small and very small enterprises. Overall, three-quarters of all employees in eastern Germany are paid according to collective bargaining agreements.

Gender-based differences in pay are smaller in eastern Germany: The unadjusted gender pay gap is 25% in western Germany and only 6% in eastern Germany. The gender pay gap remained relatively constant between 2006 and 2010, varying only between 24% and 25% in western Germany and between 5% and 6% in eastern Germany.⁴²

During the course of the year, more sector-specific minimum wage levels were declared binding under the Posted Workers Act. These minimum wage levels apply to all workers in a certain sector, regardless of whether the employer has headquarters in Germany or abroad. In addition to options for setting sector-specific minimum wages under the Posted Workers Act, in 2011 the Temporary Employment Act was amended, so that the Federal Ministry of Labour and Social Affairs can set a minimum wage for temporary workers on the basis of a joint proposal from the parties to a collective agreement on temporary employment. On this basis, the first minimum

⁴² See Federal Statistical Office, *Verdienststrukturerhebung* (Structure of earnings survey). Due to changes in the data situation, statistics for the years 2006 to 2010 are not comparable with those before 2006.

wage differentiated by regions was set effective 1 January 2012. Overall, four million employees in 12 industries are covered by generally binding minimum wages or wage floors. In three industries (waste disposal, specialized mining of hard coal, roofing) a nation-wide minimum wage applies, while the remaining industries allow for wage differences between eastern and western Germany or additional regions.

In conclusion, it should be noted that even in the case of greater convergence between earned income, disposable income will remain below the western level for the foreseeable future, because investment income is lower in eastern Germany as eastern Germans own less property and have fewer financial assets.

II.4.3 Provision for old age

Retirement pensions continue to follow the principle that pensions in both eastern and western Germany are linked to the development of wages and salaries, so that pensioners may participate in economic growth as expressed in the development of pay. The factors for calculating pensions in east and west are converging at the same pace as employee pay in the east is approaching that in the west. A protective clause for eastern Germany was added to this mechanism in 2004 which states that the current factor for calculating pensions in the east is to be adjusted at least as much as the current level of pensions in the west rises.

As part of a longer-term policy discussion, the Federal Government is considering whether to standardize the calculation of pensions in east and west. The differences persisting two decades after reunification are often a cause of dissatisfaction in eastern Germany. A solution acceptable to the various expectations and interests in east and west which is fair to both young and old and creates general satisfaction is not yet in sight. Particularly on this issue, however, broad consensus among all stakeholders is crucial to its acceptance. On the other hand, the current system has proved useful, because the special pension law provisions compensate for the lower average wage level in eastern Germany when calculating pension amounts: The earned income of eastern pensioners on which the earnings points are based is multiplied by a factor reflecting the difference between average pay in the east and west (preliminary factor for 2012: 1,1754). This ensures that, upon reaching equivalent income conditions and thus the same factor for calculating pensions even for the contribution periods before equivalent income conditions were achieved, an average earner in eastern Germany receives the same pension as an average earner in western Germany.

The pension adjustment mechanism defined in the Unification Treaty has brought significant pension increases for pensioners in eastern Germany for many years, because the disposable net pension amount in the east was still about 40% of that in the west in 1990 and has risen substantially since then. Although wages in eastern Germany rose rapidly at the beginning, since the mid-1990s the convergence process has slowed noticeably. Following the pension adjustment on 1 July 2012, the current factor for calculating pensions in the east is €24,92, or about 89% of that in the west, €28.07.

The reduction of the compensation needed which began with the pension adjustment in 2011, i.e. the sum of pension reductions not carried out for 2005, 2006 and 2010, continued under the pension adjustment in 2012 and has kept the current factors for calculating pensions from being more radically adjusted. The pension adjustment in 2012 was able to end the compensation needed for eastern pensions, though not for pensions in the west.

Poverty in old age is not a widespread problem in eastern or western Germany. However, this is likely to change, especially in view of the long periods of unemployment experienced by many eastern Germans following reunification. But it is not possible today to estimate the extent of future poverty in old age, which largely depends on long-term economic, employment and income trends as well as individual employment and savings behaviour. This applies equally to eastern and western Germany.

II.4.4 Purchasing power

Purchasing power of consumer households is defined as the net income of private households available for consumption, including government transfers such as pensions, unemployment and child benefits. Purchasing power is shown directly at the consumer's place of residence and is thus an important indicator for the regional consumption potential of the local population.

According to the market research company GfK, purchasing power in Germany rose in 2011 by an average €499 per capita compared to 2010. So in 2011, the average citizen had purchasing power of about €19,700 to spend on consumption, rent or living expenses, among other things. For 2012, another rise of about 2% is forecast, so that every citizen will have an average of €20,000 to spend. It should be noted, however, that the calculation of purchasing power operates on the assumption of nominal values, i.e. it is not adjusted for inflation. The Federal Statistical Office announced

that consumer prices rose by 2.3% in 2011, driven above all by sharply higher prices for household energy and fuel, so that real purchasing power did not grow very much.

Comparison by states shows that Bavaria continues to lead, with purchasing power of €21,326, followed by Hamburg, Hesse and Baden-Württemberg. The eastern states are again at the bottom of the list. With a per capita purchasing power of €17,808, slightly more than in previous years, Berlin is in eleventh place, followed by Brandenburg with a purchasing power of €17,606. Berlin and Brandenburg are thus about 10% below the national average and yet significantly ahead of Thuringia, Saxony, Mecklenburg-Western Pomerania and Saxony-Anhalt, which all have a similar purchasing power about 16% below the national average. However, these results are relativized when the significant regional differences in cost of living are taken into account. According to a study by the Ifo Institute in Dresden,⁴³ goods and services cost about 5% less in the eastern states than in the west, reducing differences in purchasing power but not fully compensating for them.

Table 2: German states ranked by purchasing power, 2011⁴⁴

Ranking der Bundesländer nach Kaufkraft 2011

Rang 2011	Bundesland	Kaufkraft 2011 je Einwohner / Jahr in €	Kaufkraftindex je Einwohner*
1	Bayern	21.326	108,3
2	Hamburg	21.320	108,3
3	Hessen	21.187	107,6
4	Baden-Württemberg	21.000	106,7
5	Schleswig-Holstein	19.969	101,4
6	Nordrhein-Westfalen	19.921	101,2
7	Rheinland-Pfalz	19.649	99,8
8	Niedersachsen	19.169	97,4
9	Saarland	18.593	94,5
10	Bremen	18.019	91,5
11	Berlin	17.808	90,5
12	Brandenburg	17.606	89,4
13	Thüringen	16.509	83,9
14	Sachsen	16.457	83,6
15	Mecklenburg-Vorpommern	16.456	83,6
16	Sachsen-Anhalt	16.421	83,4

Quelle: GfK Kaufkraft® 2011, © GfK GeoMarketing

*(Bundesdurchschnitt=100)

⁴³ See Ifo Dresden report, 2/2010, *Regionale Preisunterschiede in den alten und neuen Bundesländern* (Regional price differences in eastern and western Germany). Dr Rupert Kawka.

⁴⁴ See www.gfk.de

II.5 Demography

II.5.1 Demographic change and challenges to be addressed

In the 22nd year of German unity, the debate over the development of the eastern states is dominated by demographic change: the impacts that are already visible and those that are forecast for the future. Years of emigration to the west and low birth rates in the 1990s, combined with rising life expectancy in eastern Germany, have created a demographic situation that is unique in Europe. Although every state is affected by changes in population composition, demographic change in Brandenburg, Mecklenburg-Western Pomerania, Saxony, Saxony-Anhalt and Thuringia has very specific characteristics.

For Germany as a whole, population changes appear less spectacular: At the end of 2011, about 81.8 million people lived in the Federal Republic. That was about 700,000 fewer than 2002, a moderate reduction of less than 1%. Looking at the eastern German states, demographic change has been much more dramatic: From 1990 to 2008, the population of eastern Germany fell by 11.7%. This trend will continue in the coming years.

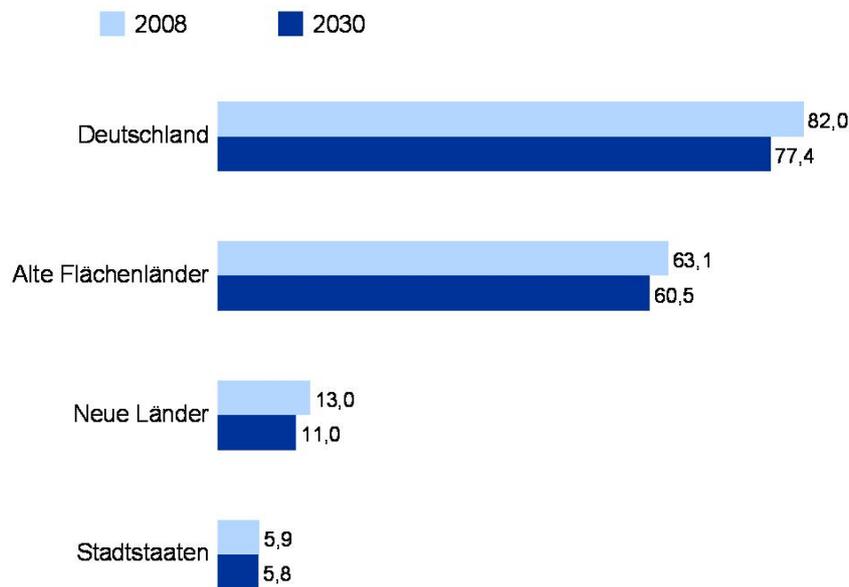
After reunification, for time birth rates in eastern Germany dropped by half, which has had a strong and lasting impact on the population structure, as the children who were not born then are not around today to have their own children. This phenomenon, known as the demographic echo effect, will further accelerate the shrinking of the eastern German population in comparison to that of the west. From 2008 to 2030, the number of live births in Germany as a whole will fall, by about 10% in the western states and by more than one-third in the east. This number will fall the most in Thuringia and Saxony-Anhalt: about 40%.

According to the Federal Statistical Office's 12th coordinated population projection (Variant 1-W1: Lower limit of the median population),⁴⁵ the population of the Federal Republic of Germany will fall by about 5.7% from 2008 to 2030. Over the same period in the eastern states (not including Berlin), the population is expected to shrink by 15% overall, with variations between the individual states: The population in Saxony-Anhalt is expected to shrink by 21.2%, in Thuringia by 18.7%, in Mecklen-

⁴⁵ Different variants of the population projection are produced, showing how the population and age composition change depending on assumptions about birth rates, mortality and migration within a certain defined period. See <https://www.destatis.de/DE/ZahlenFakten/GesellschaftStaat/Bevoelkerung/Bevoelkerungsvorausberechnung/Aktuell.html>

burg-Western Pomerania by 15.2%, in Saxony by 13.3% and in Brandenburg by 10.5%.

Figure 5: Population by state, 2008 and 2030



¹ 2030: Ergebnisse der 12. koordinierten Bevölkerungsvorausberechnung (Variante Untergrenze der „mittleren“ Bevölkerung).

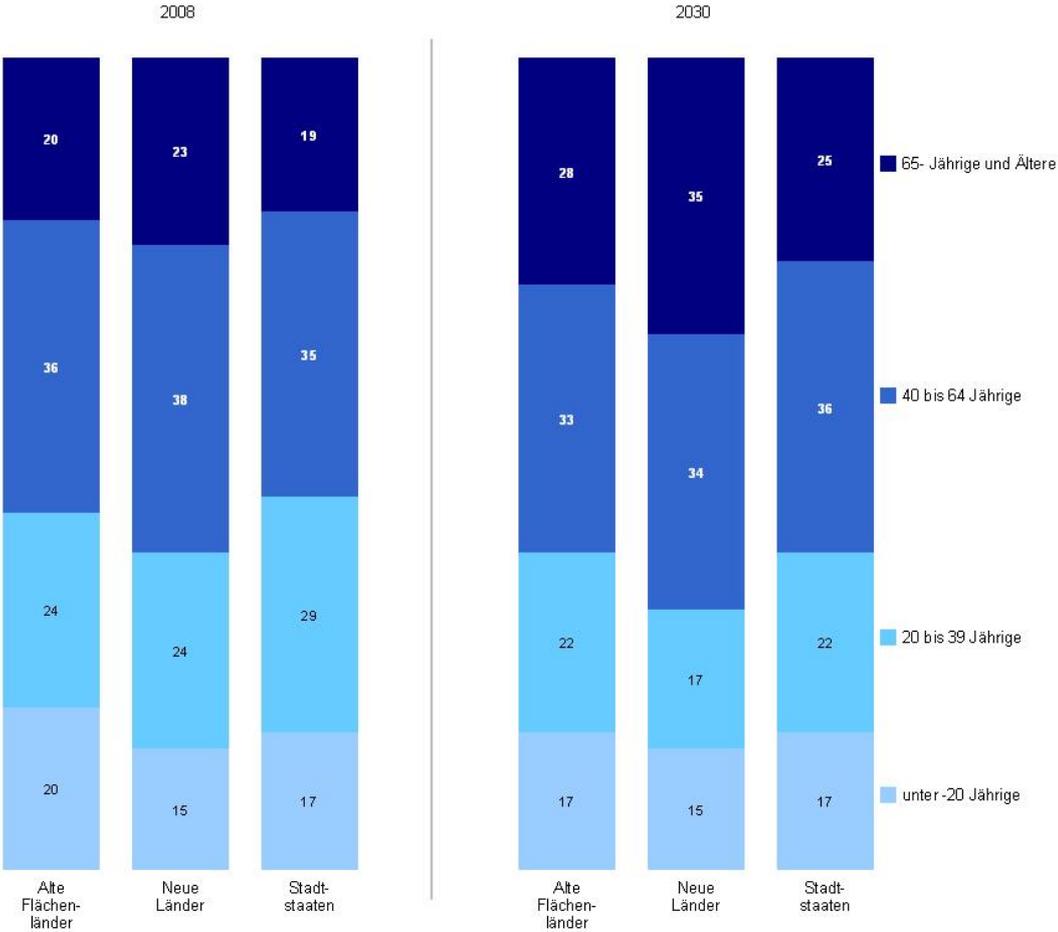
Source: Federal Statistical Office

In retrospect, internal migration in Germany is characterized by steady migration from the eastern to the western states. This has a special impact on demographic trends in eastern Germany, which in this way has lost more than a million residents since reunification. In recent years, however, this emigration has noticeably slowed, indicating positive economic growth and better opportunities for work and occupational training. East-to-west migration will slow further as the younger and especially mobile population shrinks. There is also significant migration within the eastern states. Current studies and surveys show that many eastern Germans are considering returning to their home regions, which could benefit some cities.

The shrinking and ageing of the population are accompanied by a noticeable shift in the composition of the population. In 2008, persons over age 65 and over made up 20% of the total population; by 2030, this group will grow to about 29% of the total. At the same time, the share of those aged 20 to 64 will shrink from 61% to 54%, while the share of those under 20 will fall from 19% to 17%.

Due to the emigration of so many young people, in eastern Germany the proportion of persons aged 65 and over will grow from 23% in 2008 to 35% in 2030. Every third person living in eastern Germany will then be over 65. The share of persons under 20 will remain constant at 15%, while the group of 20- to 64-year-olds so important to the labour market is projected to fall from 62% to 51%. The large postwar age cohorts will retire, while the working-age population will be noticeably smaller.

Figure 6: Age groups as per cent of total population



1 2030: Ergebnisse der 12. koordinierten Bevölkerungsvorausberechnung (Variante Untergrenze der „mittleren“ Bevölkerung).

Source: Federal Statistical Office

The population declines in eastern Germany are accompanied by increasing urbanization. Although migration to western Germany has slowed, eastern Germans continue to move from rural areas to smaller and larger urban centres in eastern Germany. Young women in particular are moving to cities and metropolitan areas, due to women's greater desire to take up employment and the often better quality of life for families in urban areas. As it becomes more and more difficult to organize the provision of goods and services in rural areas, an emerging trend of older population

groups moving to urban centres is also apparent. This geographical redistribution is aggravating the demographic situation in the regions left behind.

Demographic change is changing social framework conditions and creating new challenges for government and policy-makers at every level. Eastern Germany is especially affected. For this reason, all the eastern states have made demographic change the basis of regional-specific strategies. They have developed their own solutions and tools, with different areas of concentration. Their shared goal is to organize growth, prosperity and a good life for all generations in a shrinking and ageing society.

II.5.2 The Federal Government's demographic strategy

The Federal Government has made demography a central policy task for the current legislative term and beyond. A comprehensive report on demographic change in Germany was produced in October 2011. As a pilot project for an overarching demographic strategy, a plan of action was drawn up to ensure the provision of vital services in a time of demographic change. This plan of action was coordinated by the Federal Government Commissioner for the New Federal States and adopted by the regional conference of the heads of the eastern state governments on 6 October 2011.

These reports provided the basis for the Federal Government's demographic strategy, "Every Age Counts", adopted by the cabinet on 25 April 2012. With its demographic strategy, the Federal Government has set the course for cooperation on demographic policy between different federal ministries and levels of government with the aim of giving individuals the opportunity to develop their potential in line with their living situation and age, of preserving growth, innovation and prosperity as well as maintaining social cohesion in our country.

The demographic strategy focuses on areas in which demographic change has a direct impact: family, work, age. The strategy also includes measures to ensure growth, preserve government's capacity for action and strengthen regions especially affected by demographic change. State and local governments, social partners and other civil-society institutions will work with the Federal Government to develop the demographic strategy's areas of action in further detail. To do so, the Federal Government has initiated a dialogue process.

The Federal Government will create an interdisciplinary and cross-level demography website to accompany its demographic strategy. The website will offer information

about demography at federal and state level, present successful projects and innovative solutions and enable a wide-ranging dialogue.

II.5.2.1 Ensuring the provision of vital services: A central challenge in the eastern states

Ensuring the provision of vital services under the conditions of demographic change and growing financial constraints is a major challenge especially for eastern German communities: They must ensure the appropriate basic provision and accessibility of vital services for a shrinking and ageing population.

The plan of action drawn up jointly by the Federal Government Commissioner for the New Federal States and the eastern states themselves underscores the political will to work together at federal and state level to find solutions to support and strengthen rural and poorer regions.

Traditional structures and standards of service provision oriented on population growth are not very helpful for regions with a significantly shrinking population. So it is not possible to update planning approaches from past decades when making concrete plans for the future provision of vital services. In this way, demographic change is forcing a process of renewal. A smaller and older population requires different structures and forms of organization, and a new understanding of community and responsibility to society and every individual.

The provision of vital services is a core task of local governments. But it means more than just providing essential services; it also creates the conditions for an attractive, family-friendly environment, social networks and community participation. Quality of life and social cohesion are the "glue" holding together viable communities in rural and structurally weak regions.

The Federal Government Commissioner for the New Federal States together with the governments of the eastern German states has addressed demographic change with the pilot project "Provision of Vital Services 2030: Innovative and Modern: A Response to Demographic Change". In the first phase, which was completed in autumn 2011, new approaches for viable service structures were developed in six model regions. These approaches will be tested in practice until the end of 2013 and are intended to provide greater insights into shaping the legal framework at federal and state level.

In its demographic strategy, the Federal Government is giving special priority to helping regions which are especially affected. As part of its ministerial and funding policy,

it will support the development and implementation of new ways to provide vital services tailored to specific regions. These include innovative mobility strategies to ensure participation and access to the necessary services. The following two areas are mentioned as examples:

The *Initiative Ländliche Infrastruktur* (Rural infrastructure initiative) is intended to strengthen small and medium-sized communities as anchors for the provision of vital services in rural areas and collaboration between communities. Local people must become more involved in organizing the provision of vital services in the individual regions. Their ideas and commitment can lead to creative, practical and efficient local solutions, greatly helping to keep rural areas attractive places to live. The Federal Government supports measures to implement these goals, for example through its development assistance programme *Kleinere Städte und Gemeinden – überörtliche Zusammenarbeit und Netzwerke* to promote cooperation and networks between smaller cities and communities.

II.5.2.1.1 Act on Care Structures in Statutory Health Insurance

The Act on Care Structures in the Statutory Health Insurance (*GKV-Versorgungsstrukturgesetz*), which entered into force on 1 January 2012, creates the conditions necessary to ensure that enough doctors will be available to ensure the provision of local medical services as needed, especially in rural areas. The Act initiates measures to make rural areas more attractive for doctors and to pay greater attention to the needs of patients in rural areas.

Planning outpatient care needs will be further developed and made more flexible. The new law gives the states more rights to participate. Instruments to ensure care provision are being expanded and additional targeted funding is being provided.

The compensation of doctors under contract is being regionalized and made more flexible to address the different care structures in rural areas and population centres. The system of compensation provides new incentives to encourage doctors to practise in underserved areas. In future, higher compensation may be paid for certain services and for services by certain service providers depending on the region. Compensation will be subject to less rigid standardization so that eligible individual services and combinations of services receive the attention they deserve. The Panel Doctors' Association now has the possibility to give special support to collaboration between doctors, such as networks between doctors' surgeries, to encourage networks of care.

In order to overcome barriers between in- and outpatient care, a new area of care is being gradually introduced: outpatient specialist care. This area of care includes serious illnesses with a special pathogenesis, rare illnesses and highly specialized treatment.

The Act also provides for the following instruments to ensure the provision of medical services:

- The expansion of mobile care (e.g. branch surgeries) will continue to receive support.
- The partners to the federal covering agreement are to draw up a list of recommendations to make better use of the possibility of delegating services in order to reduce doctors' workloads.
- Compensation of doctors under contract is to give greater consideration to telemedical services so that telemedicine will become an important component of medical care, especially in rural areas.
- The panel doctors' associations will have the option of setting up a structural fund to provide flexible financial incentives encouraging doctors to practise in underserved areas or those with special needs.
- Cities, municipalities and counties will, with the consent of the panel doctors' association, be able in certain justified cases to operate their own facilities to provide direct medical care.

Supplementing the Act, the First Ordinance Amending the Regulation Governing the Licensing of Doctors provides measures for the targeted recruitment and support of medical students. In particular, increasing the number of hospitals at which students can complete their internships is intended to ensure a more balanced regional distribution of future doctors. This will help hospitals attract and retain future doctors at an early stage. Other measures are aimed at emphasizing general medicine already during medical studies, to encourage more doctors to engage in further education in that field and later go into practice as primary care physicians.

II.5.2.1.2 Long-term care insurance

The Federal Government's aim is to develop and reorient the long-term care insurance so that persons in need of care can live independently and with dignity as far as possible, even under the conditions of demographic change. With this in mind, on 28

March 2012 the Federal Cabinet adopted a draft Act to Reorient the Long-term Care Insurance. The German Bundestag passed the Act on 29 June 2012. XX

The Act provides for the following important measures to ensure the future of long-term care:

- Patients with dementia will receive more outpatient benefits during a transitional period starting 1 January 2013 until a new definition of need for long-term care is introduced. In future, they will also be entitled to in-home care, in addition to basic care and assistance with household chores. Facilities offering day and night care will receive funding to hire additional carers, improving the quality of care and the working conditions for nursing staff.
- Persons in need of care and their family members will be able to claim benefits more flexibly, choosing care by treatment or by length of time. A model project will investigate whether to offer specialized care services for patients with dementia, in addition to the nursing services currently offered.
- To reinforce the principle of rehabilitation over nursing, the long-term care insurance funds will be obligated to provide applicants with a separate recommendation for rehabilitation along with the notification of benefits.
- Family members will find it easier to take a break from providing care because benefits will continue to be paid at 50% during short-term care. And pension contributions will be paid on behalf of carers who look after more than one person in need of care for less than 14 hours per person. To help family members find relief with others in the same situation, funding for self-help is being increased and self-help organizations will be more involved in the areas of assessment and quality.
- Alternative living situations, especially assisted living, will be eligible for funding, so that persons in need of care do not have to be institutionalized if family members are not able to provide care.
- To pay for these measures, the contribution to long-term care insurance will be raised by 0.1% effective 1 January 2013.

Despite these measures, the long-term care insurance will still cover only part of the costs of long-term care, so private provision remains an important part of planning for the future and will be eligible for government subsidies.

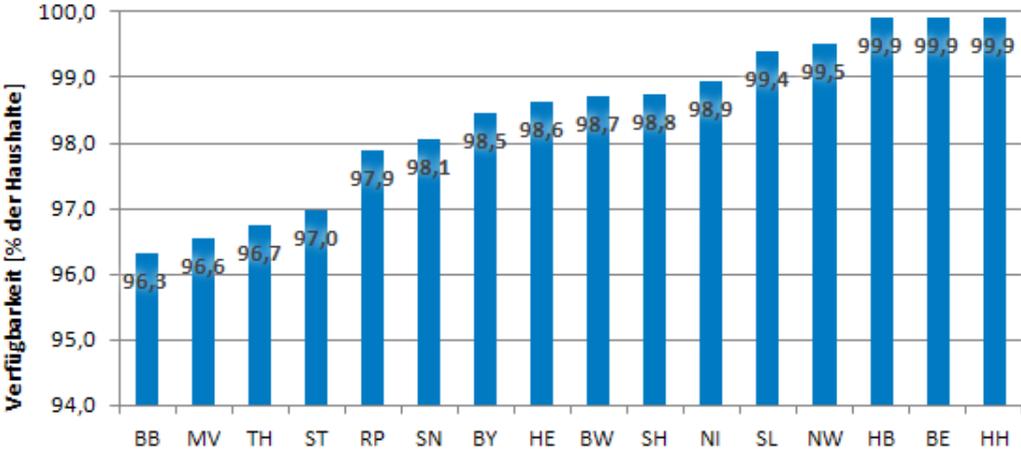
In addition, an expert advisory council is currently preparing the introduction of a new definition of need for long-term care which is intended to give more consideration to the situation of persons whose ability to manage everyday tasks is limited, such as those with dementia. The degree of independence in carrying out activities or managing various areas of life will play a central role in the new definition.

II.5.2.2 Broadband

Access to high-capacity broadband networks makes it possible to exchange information more rapidly and is thus a prerequisite for further economic growth in Germany. Broadband connections enable access to a growing variety of services, benefiting rural regions in particular. They are an important factor for companies and families when deciding where to settle and thus save local jobs. In this way, broadband also helps increase the attractiveness and productivity of rural areas.

More than 99% of households in Germany have basic broadband access (broadband coverage ≥ 1 Mbit/s), with minor differences between states, as shown in the following graphic.

Figure 7: Broadband coverage ≥ 1 Mbit/s in Germany by state for all technologies



Source: *Bericht zum Breitbandatlas* (Report on the broadband atlas), December 2011, commissioned by the Federal Ministry of Economics and Technology

The expansion of the LTE standard by mobile telecommunications companies plays an important role in the technology-neutral expansion of broadband.⁴⁶ By mid-2012, about 35% of households in Germany had broadband access with LTE. In the east-

⁴⁶ Long-Term Evolution refers to fourth-general mobile technology, the successor to UMTS/HSPA.

ern states, the picture is more mixed: Saxony, Saxony-Anhalt and Thuringia have LTE coverage around 45%, well above the national average, while Brandenburg's coverage of 19.4% is below the national average, and coverage in Mecklenburg-Western Pomerania is 31%.

Now it is time for the next step: Building next-generation networks and making high-capacity broadband infrastructure available lay the groundwork for innovative broadband services with economic potential in areas such as e-commerce, e-government, e-health and e-learning. The amended Telecommunications Act (TKG), which entered into force this year, further improves the conditions for building and expanding high-speed networks.

According to the Federal Government's broadband strategy, 75% of households are to have access to bandwidth of at least 50 Mbit/s by 2014. By 2018, broadband connections with this bandwidth are to be available nationwide – a highly ambitious goal when compared with other EU countries.

Such high-capacity networks are growing rapidly. From December 2010 to December 2011, broadband coverage of at least 50 Mbit/s rose from 39.5% to an impressive 48%, so that nearly every second household in Germany has access to this bandwidth.⁴⁷

II.6 Financial situation in the eastern German states

The eastern German states (not including Berlin) have made good progress on consolidating their budgets in recent years. The eastern state and local governments had budget surpluses from 2006 to 2009 and only a small deficit in 2010. Total government debt has fallen every year since 2005, with the exception of 2010. In 2010, the eastern state and local governments borrowed a total of €81.4 billion, or €6,316 per resident, compared to €8,511 per resident in the comparable western states of Lower Saxony, Rhineland-Palatinate, Saarland and Schleswig-Holstein.

A moderate spending policy was the key to the successful budget consolidation. From 2000 to 2010, spending rose on average less than 0.2% per year. With the continuing need to invest in infrastructure, however, spending by eastern German state and local governments is still higher than in comparable western states: €5,054 vs. €4,606 per resident. As a result, investment made up a larger share of total spending

⁴⁷ Source: *Bericht zum Breitbandatlas* (Report on the broadband atlas), December 2011, commissioned by the Federal Ministry of Economics and Technology.

in eastern German states in 2010: 17.3% as compared to 11.5% in comparable western states.

Under the terms of the Solidarity Pact II, the eastern states receive supplementary federal grants for special infrastructure needs resulting from the division of Germany and to compensate for underfunded local governments. For the period 2005–2019, roughly €105 billion will be provided in payments decreasing over time. The Federal Government has also agreed under the Solidarity Pact II to spend an additional €51 billion over the same period for rebuilding eastern Germany.

Table 3: Budgets of eastern German state and local governments (excluding Berlin)

	Revenues	Expenditures	Balance	Public debt
	€ million			€ per resident
2000	61,526	63,988	-2,464	5,069
2001	59,959	63,160	-3,201	5,332
2002	57,967	63,552	-5,580	5,659
2003	58,881	64,221	-5,338	6,058
2004	59,141	62,635	-3,494	6,370
2005	59,395	61,820	-2,425	6,636
2006	63,379	62,711	676	6,623
2007	65,919	61,518	4,401	6,606
2008	66,837	62,607	4,230	6,418
2009	64,041	63,858	183	6,260
2010	63,313	65,168	-1,855	6,316

Source: Federal Ministry of Finance

In 2010, revenues of the eastern German state and local governments amounted to €4,910 per resident. Due primarily to the Solidarity Pact II, the eastern states had about 20% more per resident to pay for public expenditures, in particular infrastructure, than the comparable western states (€4,105 per resident).

The current budget situation of the eastern state and local governments puts them on a good footing to manage the coming challenges. Because the Solidarity Pact II funding is gradually decreasing and will end in 2019, and EU structural funding will be reduced in the next funding period (funding during the current period: approx. €16 billion), public expenditures will have to be adjusted accordingly. And demographic change has a variety of impacts on the budget and fiscal policy options of the eastern states. Starting in 2020, the Constitution requires the states to balance their budgets and prohibits new borrowing. For eastern Germany, the planned reductions in Soli-

ernity Pact II and other funding together with demographic change mean that eastern state and local governments will have to continue to consolidate their budgets in order to complete infrastructure convergence by 2019 and maintain balanced budgets as required by the Constitution.

III. Outlook

During the recent crisis, eastern Germany's economy has continued to show stable growth. Unemployment has continued to drop and in summer 2012 reached its lowest level since reunification. However, further improving growth and employment prospects remains an urgent task, given the persistent differences in economic strength and labour markets.

Convergence of living standards has made good progress in many areas. Particularly in the provision of public goods such as education and health care, there are no longer any obvious differences between east and west, and in some areas, such as child care, eastern Germany is in the lead.

Funding to rebuild eastern Germany is gradually decreasing and will end when the Solidarity Pact II expires in 2019. Eastern Germany will then have to manage without special assistance. So it is all the more important to tackle the challenges posed by demographic change now, proactively and in innovative ways. All of Germany is facing this challenge, but the changes are already much more visible in eastern Germany – in urban development, in the economy and in ensuring the provision of vital services in rural areas. It is no longer possible to reverse this trend, so we must find ways to manage it. With its experience, eastern Germany can be a pioneer of this development in Germany.

Since the opening of the Iron Curtain, Europe has witnessed rapid economic and social change. The challenge for eastern Germany lies in taking advantage of the opportunities these changes offer and making the most of its strategic position in the heart of the Continent. Economic growth and expanding markets in the countries of central and eastern Europe, even during this time of crisis, represent an enormous chance for eastern Germany and Germany as a whole. Thanks to its geographical location and its history, eastern Germany is the gateway to cooperation in this region. With the latest EU enlargement into eastern and south-eastern Europe, the eastern states have moved into the centre of the expanded EU single market. Eastern Germany has a unique geographical advantage that it will utilize more in the future. This is apparent from foreign trade in recent years and above-average growth in exports

to Poland, Slovakia and the Czech Republic. In addition to federal assistance for market development, the EU has also provided funding to promote cooperation in the fields of infrastructure and the environment and to build cross-border value-added chains.

Active and innovative regional networks offer an opportunity to boost growth and innovation, particularly in a time of demographic change and shrinking Solidarity Pact funds. New kinds of cooperation between cities, counties, the private sector, the research sector and civil society are expected to improve the development chances for all involved.

Eastern German regions participated in the model regional planning project on inter-regional partnerships, the results of which confirm that the strategy of large-scale communities of shared responsibility⁴⁸ works in practice. Another model project⁴⁹ builds on this experience and hopes to promote development by encouraging urban and rural areas to join forces.

Cross-border cooperation with Poland and the Czech Republic also offers further potential for regional growth and innovation. Measures and projects to promote development need to be strengthened and reluctance and obstacles to cross-border cooperation overcome. With this in mind, the staff of the Federal Government Commissioner for the New Federal States runs a forum for practitioners to share experience.

The good experience with regional partnerships is encouraging additional cooperation initiatives between the eastern states and their neighbouring regions.

In conclusion, it is clear that while the eastern states have demonstrated impressive economic growth and improvement in their labour markets, they have still not entirely caught up with western Germany. The eastern states today are still marked by many shared structural features and challenges indicating that convergence with the level of the western German states has not yet been achieved. At the same time, regional differences have begun to emerge. Viewing all of eastern Germany – or western

⁴⁸ The following regions were involved in the model project (*Überregionale Partnerschaften*): northern Germany/Hamburg metropolitan area; north-eastern Germany; the Saxon Triangle metropolitan area; the Nuremberg metropolitan area; Frankfurt, Rhine/Main, central Hesse, Rhine/Neckar and the western Palatinate; Stuttgart metropolitan area; and the European Lake Constance region.

⁴⁹ Participants in this model project (*Stadt-Land-Partnerschaften: großräumig – innovativ – vielfältig* (Urban-rural partnerships: Large-scale, innovative and diverse)) are northern Germany/Hamburg metropolitan area; the Hanover-Braunschweig-Göttingen-Wolfsburg metro region; the central Germany metro region; the Nuremberg metropolitan area; and the Stuttgart metropolitan area. For more information, see the website of the Federal Institute for Research on Building, Urban Affairs and Spatial Development.

Germany, for that matter – as a single, homogeneous region is less and less useful; one should instead look at the different regions individually.

Policy for the eastern states is a task for Germany as a whole, focused on reliably continuing and optimizing funding policy for the eastern states in order to further strengthen commercial innovations and bolster the labour market and economic growth in the larger context of demographic change.⁵⁰ Given these special challenges, regional potential for innovation must be promoted. Government and commercial structures in the eastern states continue to be weaker financially, while federal and EU funding in the coming years will gradually end. But the more effectively the funding available until 2019 under the Solidarity Pact II is put to work, the better eastern Germany can utilize the potential for innovation in its economic and social performance to continue to make progress on convergence.

⁵⁰This report concentrates on the economic situation and the labour market in the context of demographic change. For the Federal Government Commissioner for the New Federal States, an additional key task is strengthening social cohesion and studying East Germany's communist regime.

Translation of Legends for Figures and Tables:

Figure 1

Wirtschaftsstandorte Neue Bundesländer	Industries in eastern Germany
Gesundheitswirtschaft	health care
Pharmazeutische Industrie (Pharma)	pharmaceuticals
Medizintechnik	medical technology
Chemieindustrie (Chemie)	chemicals
Biotechnologie	biotechnology
Fahrzeugbau	vehicle manufacturing
Schienenfahrzeuge	railway rolling stock
Automotive	automotive supply
Maschinen- und Anlagenbau	mechanical engineering
Luftfahrt	aviation
Optik	optics
Mikrotechnik	microtechnology
Mikroelektronik	microelectronics
Energietechnik	energy technology
Solarindustrie	solar
Informations- und Kommunikationstechnik (IKT)	information and communications technology, ICT
Ernährungswirtschaft	food production
Verkehr	transport
Logistik	logistics
Schiffbau	shipbuilding
Bio- und Medizintechnik	bio- and medical technology
Windindustrie	wind energy
Papier	paper
Stahlerzeugung	steel production
Bahntechnik	railway technology
Sensortechnik	sensor technology
Mikro- und Nanotechnik	micro- and nanotechnology
Umwelt-/Energietechnik	environmental and energy technology
Produktionstechnik	production technology
Mecklenburg-Vorpommern	Mecklenburg-Western Pomerania
Sachsen-Anhalt	Saxony-Anhalt

Sachsen	Saxony
Thüringen	Thuringia

Figure 2

Westdeutschland	western Germany
Ostdeutschland	eastern Germany
Staat	government
Hochschulen	universities
Wirtschaft	industry

Figure 3

OstD	eastern Germany
WestD	western Germany
Euroraum	Eurozone
Schweden	Sweden
Frankreich	France
Tschechien	Czech Republic
Polen	Poland
Staat	government
Hochschulen	universities
Wirtschaft	industry

Figure 4

Lebenserwartung bei der Geburt in Deutschland	Life expectancy at birth in Germany
Alter in Jahren	Age in years
Frauen	women
Männer	men
Deutschland	Germany
Früheres Bundesgebiet	western Germany and west Berlin
Neue Länder und Berlin-Ost	eastern Germany and east Berlin

Table 2

Ranking der Bundesländer nach Kaufkraft 2011	German states ranked by purchasing power, 2011
Rang 2011	Rank 2011
Bundesland	State
Kaufkraft 2011	Purchasing power, 2011
Kaufkraftindex	Purchasing power index
je Einwohner / Jahr in €	per resident / year in €
je Einwohner*	per resident*
Bayern	Bavaria
Hamburg	Hamburg
Hessen	Hesse
Baden-Württemberg	Baden-Württemberg
Nordrhein-Westfalen	North Rhine-Westphalia
Rheinland-Pfalz	Rhineland-Palatinate
Niedersachsen	Lower Saxony
Saarland	Saarland
Bremen	Bremen
Berlin	Berlin
Brandenburg	Brandenburg
Thüringen	Thuringia
Sachsen	Saxony
Mecklenburg-Vorpommern	Mecklenburg-Western Pomerania
Sachsen-Anhalt	Saxony-Anhalt
Bundesdurchschnitt = 100	National average = 100
Quelle	Source
GfK Kaufkraft® 2011, © GfK GeoMarketing	GfK Kaufkraft® 2011, © GfK GeoMarketing

Figure 5

Deutschland	Germany
Alte Flächenländer	Western Germany (not including Bremen or Hamburg)
Neue Länder	Eastern Germany
Stadtstaaten	City-states (Bremen, Hamburg, Berlin)
Ergebnisse der 12. koordinierten Bevölkerungsvorausberechnung (Variante Untergrenze der „mittleren“ Bevölkerung)	Results of the 12th coordinated population projection (Variant 1-W1: Lower limit of the median population)

Figure 6 [see Fig. 5]

Figure 7

Verfügbarkeit (% der Haushalte)	Coverage (% of households)
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