

## Germany 2020 – The Demographic Future of the Nation

### Main Results<sup>1</sup>

#### Farewell to Growth

Germany has a half century of uninterrupted population growth behind it. The number of German inhabitants rose from 68 million after World War II to 83 million people today. The reason for that growth was not a high birth rate, but rather about 12 million people who migrated to Germany from foreign countries and their offspring.

Already in the mid 1970s, the average number of children per woman fell in Germany below 2.1. This is the number that would be necessary to maintain a certain population size at constant life expectancy and without immigration. For the last three decades, the average number of children has been only 1.4, which means that every newborn generation is about one third smaller than that of its parents. With constant low fertility, the German population would decrease by 700,000 people by the year 2030, even if 200,000 migrants would annually enter the country. This relatively low decline in the beginning could increase up to 10 million people by 2050.

Because the younger generations shrink and the life expectancy rises, inevitably the proportion of elderly in the society must increase. But population aging and population loss will concern each of the regions in Germany in a different manner. Already during the last decade, one third of all German counties lost a portion of their population – especially in the eastern part of the Republic. According to projections of the Federal Office for Building and Regional Planning this decrease will expand to the West by 2020. Then, 60 percent of all German counties will suffer from population decline.

#### How sustainable are German regions?

For the first time the study “Germany 2020 – The Demographic Future of the Nation”, done by the “Berlin-Institute for World Population and Global Development”, analyzed the sustainability of all 440 counties and towns. We defined 22 indicators that allow a prediction about the developmental chances for these regions. These indicators were calculated based upon official and private statistical data and then were translated into grades. The result is a pattern of 22 single and one overall grade, which gives a countrywide picture of demographic sustainability. These results are much more indicative than a single population projection.

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<sup>1</sup> Germany is a federal republic composed of states (Laender) and counties (Kreise). With few exceptions German place names were not translated into the English form. The term “new states” refers to the five East German states that joined the Federal Republic after reunification in 1990.

## Overall Assessment: Gain in the South - Loss in the East

The demographic development of Germany is predominantly determined by the economy. This is an important finding of the study "Germany 2020". People move where the jobs are. That explains the huge – and still lasting – population movements in Germany since reunification. These migration movements hide a competition of regions: a prosperous economy does not just attract many people, but in particular the young and highly qualified. These regions draw people away from other areas. The improvement in human capital of the one region means significant losses for another.

One exception to the trend of economy-related migration can be found in counties with relatively high fertility. One example is in western Niedersachsen, around the town Cloppenburg and in the nearby north of Nordrhein-Westfalen around the county Borken. These rural areas generate their own economic development through higher numbers of children. There, new jobs have been created and small businesses have come into being.

At the top of the performance rating are the two prosperous southern states Bavaria and Baden-Württemberg. Both states have good conditions for a sustainable population development. Baden-Württemberg is, altogether, the best performing part of Germany. Here, the population is younger than in Bavaria, purchasing power and education level is higher and the local authorities have fewer debts.

Notably however, women in Baden-Württemberg have too few children for a long-term stable number of inhabitants. Without migration from other parts of Germany and from other countries, the population would shrink as well.

At the lower end of the rating, one finds all East German states including the capital Berlin, as well as the smaller states Saarland, Hamburg and Bremen. The entire East of Germany suffers from very low birth rates, out migration, fast population aging and poor economic development. There, future prospects are categorically worse than in the southern part of the Republic. In all parts of Germany, bigger cities lose population and tax power to their surrounding areas. They are better suited to working than to living. Especially young families leave the cities – and with them leaves a demographic future.

Among the 40 most sustainable counties 23 are in Bavaria, 14 in Baden-Württemberg and respectively one in Hessen, Brandenburg and Nordrhein-Westfalen. Among the 40 counties with the biggest demographic difficulties eight are situated in Saxony-Anhalt, eight in Saxony and six in Nordrhein-Westfalen. These are without exception cities of the Ruhr-area. Except for Baden-Württemberg, all states have their demographic problem zones.

The rating grades rank from 2.64 for Eichstätt on the outskirts of Ingolstadt (Bavaria) to 4.95 for Bremerhaven (Bremen) and Altenburger Land in Thuringen. The grades should not be seen as a judgment but as a guideline for future regional planning. They also reflect the free will of individuals. Demographic development is shaped by people, who have the freedom to move where they see the best chances for themselves and their families, and to decide how many children they want to bring into the world.

## Ten Important Findings

### 1. Germany lacks children

Germany has one of the lowest fertility rates in the world. The average number of children – 1.37 per woman – is not at all sufficient to keep the population size stable without immigration. This would require 2.1 children per woman. In addition, after the wall came down fertility rates halved in eastern Germany mainly because of economic uncertainty. In 1993, the East German fertility rate fell to the lowest ever measured level – 0.77 children per woman. Since then fertility has been slowly increasing. Still, in 2001 the average number of children in the East (1.2 children) was significantly lower than the western value of 1.41.

In cities, children are generally rare. Especially low are the numbers of children in towns with big universities. One woman out of every three has no children at all, and among women with university degrees only 60 percent start families. When women decide to have children, most have two. Rural areas are more children-friendly – especially the region around the Catholic-influenced county of Cloppenburg in Niedersachsen. In Germany, more children are generally born in areas with a lower labor force participation of women and a more conservative view of female roles.

### 2. Young females have left Germany's East

In many places there is a lack of women between the ages of 18 and 29, which is particularly important for the founding of families. This deficit mainly concerns the five new states. Only 89 females per 100 males of this age group live there. In eastern Germany the women's desire for employment is traditionally significantly higher than in the West. Because it is even harder for women than for men to find a job in these economically poor regions, they out migrate at a young age.

The remaining men are often poorly educated and unemployed. This accelerates the population decline even more. Because, considered statistically, men at the lower end of the social ladder more often do not find a partner to found a family. Particularly severe is the gender gap in rural areas of the new states. In the rural county of Uecker-Randow (Mecklenburg-Vorpommern) live only 76 females per 100 males aged 19 to 29. Only cities with universities like Jena or Dresden currently have a balanced sex-ratio. Those who profit from this female migration are the prosperous metropolitan areas in the western parts of the Republic, which have without exception a surplus of young women. University towns like Heidelberg, Bonn or Freiburg have a disproportionate percentage of young women. In Heidelberg live 122 women per 100 men aged 18 to 29 – the biggest female surplus in Germany.

### 3. The Germans are moving

Since 1989, Germany has been experiencing enormous migration movements. All new states have lost population. Since the wall came down more than 1.5 million people moved to the West. Due to the lasting poor economic situation of East Germany the migration outflow has

increased again, after a decrease in the mid-1990s. But also in the West, economically shrinking areas have significantly lost population. The German towns with the highest out migration rates during the last years were the seaports Bremerhaven and Kiel, due to the downfall of port- and shipbuilding industries. This phenomenon has now also reached big areas in the West – particularly the Ruhr-area, the Saarland and the southeast of Niedersachsen.

In the East (as in the West) people leave outlying rural areas. They are attracted by metropolitan areas that offer jobs. But the population movement is more directed to the surrounding areas than to the cities. Therefore most of the cities have actually lost population in the past. Only Hamburg could significantly increase its population during the 1990s – at about 4.5 percent. Counties with the highest migration gains can be found without exception in the surroundings of bigger cities like Munich, Hamburg, Bremen and Berlin.

#### **4. Germany is aging**

As numbers of children decline while life expectancy increases, a population ages rapidly. No county in Germany can avoid this process. But the regional impact is varied. The economically strong areas in Germany's South will not notice much of a demographic change during the next two decades – they are attractive enough to young migrants from Germany and foreign countries.

In regions that lose young people, however, the aging process accelerates. While in 2020 the youngest German regions – around Hamburg and Munich, but also in the relatively fertile region around Osnabrück – only 25 percent of the population will be older than 60 years, in the east of Thuringen this percentage will rise to 36 percent. Then, eastern Thuringen will be the “oldest” part of Germany.

But there are also West German areas that are aging rapidly. Mostly these are regions where a strong industrialization lowered the birth rates decades before, and that are now losing additional young people through the decay of old industries such as coal, steel and shipbuilding. The Ruhr area is typical for such a phenomenon. Once the most important industrial area of Germany, it has been losing population since the 1970s.

#### **5. Germany is losing population**

Nowhere in Germany are the birth rates and the percentage of younger people sufficient to guarantee a stable size of population. Today only 12 out of 440 counties are able to naturally maintain their population. As a result of aging, lack of children, and out migration, the middle of Germany is emptying out. From Saxony via Thuringen to the Ruhr area a broad expanse of depopulation sweeps across the Republic. These are the regions where until recently the most important industrial areas of Germany were situated. After 2020, there will be almost no regions with population gains. To level out this increasing deficit, a much higher number of migrants would be necessary.

## **6. Germany remains divided**

The West and the East of Germany have developed very differently since World War II. While the population of West Germany increased through natural growth and immigration, that of the East declined mainly through out migration. At the founding of the GDR<sup>2</sup> in 1949, 19 million people lived there. Despite a surplus of births of 1 million in 1961, just 17 million remained. Only the wall could stop the flight from the communist country. When the barrier fell in 1989, the out migration picked up where it had left off. In the West, the number of inhabitants rose not only through East German migrants, but also through people with German ancestors who immigrated from Eastern Europe.

## **7. Germany has too many school drop outs**

“Pisa”, the international comparative study of educational performance, has made it obvious that the German school system is at most mediocre in comparison with other industrial countries. Alarming is the high number of young people who leave school without any educational degree. These teenagers have a very low likelihood of getting an apprenticeship and a good job. In many cases, the descent to unemployment is foreseeable. Overall, low qualified men rarely start families, because they have more problems finding a female partner than average-educated males. In Germany, only 36 percent of all school drop-outs are female, but 64 percent are male. Especially problematic is the fact that among children who leave school without a degree twice as many are children of migrants. Among children with an “Abitur” – the school degree that is the prerequisite for university admittance – are less than half as many children with foreign parents than German youth.

## **8. The structural change in the economy is changing Germany**

The new states did not become “blooming landscapes”, like the former chancellor Helmut Kohl promised. They suffered an enormous structural change which almost lead to deindustrialization. Most of the industries did not survive the transformation from socialism to a market economy. Due to this economic upheaval, hundreds of thousands lost their jobs – despite the enormous amounts of subsidies for the East. To this day, only a few counties of eastern Germany show a positive trend in employment. In the West, the picture is heterogeneous: While regions with declining industries like northern Bavaria, the southeast of Niedersachsen and the Ruhr area lose jobs, high tech areas around Munich and Stuttgart are growing.

The region around Cloppenburg in western Niedersachsen is particularly interesting. There, the many children seem to boost the economy. Within the last 12 years the number of employees increased more than 10 percent.

In all of Germany, the number of wage and salary earners has been decreasing since 1992, mainly because companies relocate labor-intensive jobs to foreign countries. Particularly high are the unemployment rates in the new states and in the economically problematic regions

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<sup>2</sup> German Democratic Republic, the former East German state

like the Ruhr area, Bremerhaven, Kassel, Flensburg and Bremen. Prosperous states like Bavaria and Baden-Württemberg have far fewer unemployed and welfare recipients than other parts of the Republic.

## **9. Germany's migrants are poorly integrated into society**

Compared with the absolute number of annual immigrants, Germany is the most important immigration country in the world after the United States. Because of historical reasons the number of foreigners in the West is much higher than in the eastern part of Germany. In contrast to the former Federal Republic, the GDR had just a few migrants until 1989. Today the unemployment rate among foreigners in the East is hardly higher than among Germans. The reason seems to be that foreigners, because of the high unemployment rate in the East, only go there when they already have a job opportunity. Therefore the few migrants in the East are economically better integrated than in the West.

Most of the migrants live in cities, which has economic reasons. Because foreigners often get a smaller salary than long-established residents, they cannot move to the wealthier settlements in the surroundings of the cities. Since migrants mainly work in labor-intensive production, they are especially vulnerable to rationalisation and structural change. Migrants are in fact underprivileged everywhere, but there is no clear connection between high percentages of migrants in the entire population and the unemployment rate among foreigners. On the contrary, in metropolitan areas, especially in the South German regions, it is easier for people without a German passport to find a job than in rural areas with just a small number of migrants.

## **10. Nature recaptures parts of the country**

Seven out of the fifteen German national parks are situated in the new states. This alone shows that the East is sparsely populated and has a lot of areas with widely untouched nature. In regions where old industries decline and agriculture withdraws, nature recaptures its lost territory. In counties with a population density under 150 individuals per square-kilometre which are likely to lose even more inhabitants, animals and plants which lost their habitat in the past now have a good chance of returning. The most spectacular sort of animal to do this was the wolf, which returned to the Lausitz shortly after the wall came down. Meanwhile, two packs live in this area in eastern Saxony. Unlike the people in this area, the wolves have enough offspring that their further existence is guaranteed.

Considering these newly arising spaces it is likely that large carnivores will again live in Germany. For example, the lynx has recently returned to the "Pfälzerwald".

Demographic changes happen very slowly, but those described here are unchangeable in the foreseeable future. Considering limited public resources we must learn to include demographic factors in our planning. It is as wrong to ignore demographic change in the hope for "better times" as it is to subsidize declining regions "with the watering can". In the face of a shrinking population for some communities it will be questionable as to whether the infrastructure can be provided at the former level.

Companies must learn to cope with an aging work force, to qualify older employees and also to provide them jobs. And we have to ask ourselves if we want to live in such a society lacking children, or if children should belong to our everyday life again.

There are no easy solutions for these future problems, but the more aware we are about demographic changes, the better our society can cope with future burdens.

The study “Germany 2020 –The Demographic Future of the Nation” was published by the “Berlin-Institute for World Population and Global Development” in April 2004. The entire study can be found on the internet at [www.berlin-institut.org](http://www.berlin-institut.org) and can be ordered as CD-Rom or brochure (German version only).

Berlin-Institute for World Population  
and Global Development  
Markgrafenstraße 37  
D-10117 Berlin