

Germany's Demographic Challenges

by

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Very long lives are the probable destiny of most Germans alive today. Half of the 60-year-old readers of this article will probably reach age 88. Most 30-year-old readers are likely to survive past 95. For a baby born in Germany this year, the odds are better than 50/50 that the baby will celebrate his or her 100th birthday--in the 22nd century. Females have better chances than males and will probably continue to live 5 or so years longer. Both men and women, however, can anticipate long remaining lives, considerably longer than they might expect based on the longevity of their parents and grandparents.

In 1840 Swedish women enjoyed the world's longest life expectancy--under the conditions prevailing in 1840 they could anticipate an average lifespan of 45 years. The expectation of life under current health conditions for Japanese women is more than 85 years. From 1840 to today, record national life expectancy has steadily risen about 2.5 years per decade. There is no sign of any slowing of this remarkably regular progress. Both the historical trend and available biomedical information suggest that life expectancy is likely to continue to rise by about 3 months per year or perhaps even somewhat faster for at least several more decades.

As life expectancy rose above 60 and then above 70 and more recently above 80, various experts asserted that life expectancy could not rise much further. Their assertions were based on beliefs and "common sense" rather than on scientific studies--and their looming limits to longevity were soon overtaken by reality. Despite this sorry saga, official forecasts in most countries, including Germany, still assume that further increases in longevity will be modest. In Germany, for example, the most recent Bevölkerungsprognose of the Statistisches Bundesamt is that German life expectancy (for males and females combined) will rise from 78 in 2000 to 84 in 2050. Extrapolation of the historical trend in life expectancy, however, leads to a forecast of a life expectancy of 90 by the middle of this century.

The scientifically-indefensible view that mortality cannot be reduced much more is distorting public and private decision-making. Forecasts of longevity are used to determine future pension, health-care and other social needs. Increases in life

expectancy of a few years can produce large changes in the numbers of the old and very old, substantially augmenting these needs. The officials responsible for making projections, in Germany and most other countries, have recalcitrantly assumed that life expectancy will increase slowly and not much further. The official forecasts distort people's decisions about how much to save and when to retire. They give politicians license to postpone painful adjustments to social-security and medical-care systems.

Although there is growing recognition in Germany that adjustments are needed, few people appreciate the magnitude of the required reforms. Longer life is not a problem: it is a crowning achievement of modern civilization. Longer life will, however, require radical changes in retirement policies and social programs. And longer life will require individuals to re-think how they would like to spend their lives.

As Jonathan Swift remarked, everyone wants to live long but no one wants to be old. We desire healthy longevity. Although the evidence is mixed, it appears that the span of healthy life is rising together with the rise in the total length of life. This is good news not only for all of us aging individuals, but also for the budgets of health care systems.

Further good news comes from studies that indicate that even very old people's health can be improved by exercise, better nutrition, better living conditions, and various kinds of medical interventions. This is well illustrated by the health consequences of German unification. After 1990, mortality in the East declined rapidly toward prevailing levels in the West, especially among the elderly. Even octogenarians and nonagenarians were able to substantially benefit from the medical, social and economic improvements in the East.

Few Germans have thought carefully about what it means for themselves that they will probably live a very long time and for most of that time they probably will be in acceptably good health. To illustrate some possibilities, consider the case of a woman, 20 or so years old, who is starting studies at a university.

This woman will probably live to celebrate her 100th birthday. To keep herself amused during the next 80 or more years of her life, she probably should cultivate her appreciation of music, art, literature and the theatre. To be able to understand the changing world of the evolving 21st century, she probably should strive to get a broad education that will enable her to keep learning as she grows older. She might want to spend three years getting a Bachelors degree, spend some time working, and then come back to a university for further studies, perhaps for a Masters degree, perhaps in

a different field, when she is 40 or 50. She might want to have two or three children when she is in her twenties or early thirties. If so, she might want to be able to continue working, but on a part-time basis. When her children are grown, she might want to get some further education and then resume her career, full time and at a higher level, or perhaps start a new career. To compensate for the time she devoted to education and childrearing, to have time for the fulfillment of her career, she might want to work until she is 70 and then perhaps part-time until she is 80. If she retired at 80, she could look forward to two decades more of life, enjoying the music, art, literature and theatre she learned to appreciate when she was young and enjoying her children, grandchildren and great-grandchildren. During most of her retirement years, especially when she is in her 80s, she will probably be in acceptably good health.

This scenario is just one of many possible life courses that might seem desirable for younger people in Germany today. Deep thought and extensive discussion should be devoted to considering the best way to spend the time of your life if you are likely to live 100 years. Many people may want to get broad educations, with considerable emphasis on the liberal arts. Many people may want to be able to combine careers, perhaps on a part-time basis, with childrearing. Many people may want to go back to school when they are 40 or 50 to get some further education or to start a new career. Many people may want to work until they are 70, to compensate for time taken off earlier in life for education and childrearing and perhaps leisure. Many people may want to have the opportunity to work part-time, 20 hours per week say, when they have young children at home and again when they are in their seventies. If so, German society and the German economy should be re-structured to help them live the lives they would like to live.

The difficulties of such re-structuring are exacerbated by another demographic sea-change. For several decades Germans have had far fewer children than the number needed to maintain the population. Women (and men) have to give birth, on average, to two children, a boy and a girl, to replenish the population. Because some infants and children die before reaching the age of their parents, somewhat more births are required. On the other hand, because individuals are living longer, death is subtracting fewer people each year from the population. On balance it turns out that a baby boy and a baby girl are needed for every adult man and woman.

German adults, however, are not having two children over the course of their childbearing years. If current age-specific birthrates continue to prevail, then the

average German would wind up with about 1.3 or 1.4 children. Germans may be delaying childbearing to older ages and, if so, birthrates may increase a bit in the future and completed families may include an average of about 1.5 or 1.6 children. No one, of course, has a fraction of a child. Roughly a quarter of young German adults may reach age 50 with no children and the remaining three-quarters may have the required average of two children. This implies that Germans are currently giving birth to only 75% of the number of children needed to replenish the population. Unless there is massive immigration into Germany, on the order of one immigrant for every three babies, the population of Germany will decline. Each generation will only be three-quarters as large as the previous generation.

Very low fertility may lead to even more radical changes in the nature of people's lives--and may require even more difficult policy reforms--than the changes and reforms required by longer lives. Few young people want to remain childless: they wind up childless because the demands of education and careers lead to postponement and eventually abandonment of childbearing. Furthermore, many of the people who wind up with one child would have preferred to have had two.

Part of the problem is the lack of public childcare. For many young people, especially in former West Germany, adequate childcare is not available for infants, children of pre-school age, and children going to school for only a few hours per day. Furthermore, many young people do not think that the childcare that is available is of sufficiently high quality. They, especially the women, then face a choice between careers and children. If they could pursue their careers on a part-time basis, this might enable them to combine employment and nurturing. Few careers in Germany today, however, can be advanced on a part-time basis. Moreover, an expansion of part-time work would not eliminate the need for high-quality childcare.

Even if the birth rate in Germany jumped tomorrow to two children per man and woman, the consequences of three decades of low fertility will linger for several decades. Because it takes between twenty and thirty years--expensive years of education and upbringing--for a baby to become a productive worker, Germany will face a dearth of new workers for at least the next twenty or thirty years. Subsequently Germany will face a shortage of experienced workers. As older workers retire, fewer workers will be available to replace them.

A substantial increase in fertility is almost certainly in the long-term interests of the citizens of Germany. Many people have legitimate concerns about the impact of

population on the environment, but such concerns have to be weighed against the strong desire of most people to have children and grandchildren, as well as the possible negative impact of population decline on the economy. In any case, it should be recognized that even an immediate increase in fertility will not contribute to the resolution of the demographic challenges Germany faces between now and 2030.

Twenty-year-old immigrants can partially substitute for the children not born twenty years ago. Immigrants can function as workers, but they cannot substitute for unborn children or grandchildren. They may not have the education or the cultural and social attitudes of native-born Germans. Assimilation of immigrants into German society is difficult and expensive.

Informed discussion of policy options regarding immigration and the assimilation of immigrants depends on knowledge about immigrants, their role in society, their skills and needs, their aspirations and desires. Very little research, however, has been done about immigration into Germany. Even basic demographic information is lacking. For instance, reliable statistics are not available on the proportion of the German population born in foreign countries. Some indication of the magnitude of immigration, however, is provided by a remarkable fact: nearly a tenth of the people living in Germany today are not German citizens. To move beyond ignorance, speculation and prejudice, much more research is needed. In a few decades, a third or more of children born in Germany may be the children of immigrants. To appropriately meet the challenges implied by such a major demographic change, a knowledge base is required.

Germany faces a new demography of longer lives, fewer children, and more immigrants. It is not clear whether fertility will remain at its current, very low level, whether it will increase or whether it will decline even further. Similarly, it is not clear whether immigration will continue to run at about current levels or whether massive additional flows of immigrants will settle in Germany. And it is not clear how many of the immigrants will come from Eastern Europe vs. the Middle East. What happens depends on public policy but systematic, research-based knowledge about the causes and consequences of low fertility and high immigration is so meager that it is difficult to formulate intelligent public policies.

Nonetheless, it is possible to sketch the main policy options that are available to Germany. As people live longer, healthier lives, they will have to work longer. This is clear, but the details are not. How much longer people will have to work depends on

many factors. A key consideration is how many younger people are working. If many younger people are not working, then a greater number of older people will have to work. How many younger people are working depends on how many children were born decades earlier, on how many immigrants have joined the population, and on the proportions of these people who are working. How many older people will have to work also depends on how much money they saved for their retirement when they were younger. To the extent that they have not saved much, then either they will have to continue working or taxes will have to be imposed on younger people to support the elderly or benefits to older people will have to be reduced.

It might, however, be possible to somewhat offset such painful adjustments if greater efficiency could be achieved in the delivery of health and social services to the elderly or if the health of the elderly could be further improved so that they could work longer and so that they did not need so much health and social care. More of the frail elderly might be able to continue to live at home if more appropriate housing were available and if more help could be provided to the elderly in their homes. Better prevention of illness and disability and better rehabilitation could also contribute.

To deeply understand this complicated mix of available options and to determine how to be more efficient and how to increase the health of the elderly, research is needed--demographic research, gerontological research, medical research, etc. It is easy to blame politicians for inadequate public policies, but politicians are, for the most part, dedicated public servants who strive to do the best possible given their limited knowledge and given the constraints of public opinion. Extensive public discussions informed by systematic research are required for intelligent policymaking.

Germans have recently rediscovered demography. For more than half a century, there was little discussion of population change. Very few students learned the materials and methods of demography. Very few books or articles appeared about demographic trends. A few dedicated researchers at the Bundesinstitut für Bevölkerungswissenschaft and at a handful of universities probed population statistics, but their total output was necessarily limited.

Today there is an explosion of interest. Even the best recent writing is aptly described as pioneering, as a beginning step, as the first word rather than the last word. In contrast with the limited number of constructive contributions, most of the recent discussion of demography reflects ignorance. Neglect of demography has been

replaced by exaggeration, scare-mongering, uninformed speculation, and pessimistic fatalism.

The sky is not falling. It takes 100 years for a baby to become a centenarian. Demographic change is like an incoming tide on a North Sea beach: the tide comes in inexorably but gradually. To avoid even-more-painful adjustments in the future, the process of adjustment to the new demography should begin now. There is no reason, however, to radically alter people's lives immediately: there is time for a period of adjustment, starting soon but stretching over decades. This means that there is time to do the research that needs to be done so that policies are reformed--and people's lives are altered--in an informed, beneficial way. And there is time to start intelligent, nuanced public discussion about the nature of demographic change, its causes, its consequences, and the policy alternatives available to cope with it.

On balance, the future will probably be better than the past. People will probably live longer, healthier lives. Continued economic growth, even if at a slower pace than in the past, will further raise standards of living. Research will create more knowledge, enabling improvements in health, in material well-being, and in understanding of ourselves and our universe. Longer and perhaps life-long education will benefit more and more people.

So few Germans born 100 years ago are still alive that it is possible to estimate the average length of life of those born in 1904. That lifespan--only 46 years--sharply contrasts with the forecast that most Germans born today will live more than 100 years. In 1904 it would have been difficult to foresee the World Wars and the destructive forces of fascism and communism. Currently, there are many clouds on the horizon, including terrorism, war, economic stagnation, global warming, decimating epidemics, etc. The future might be dismal, but the balance of available evidence suggests that the 21st century will probably prove to be a better century, especially for Germany, than the 20th century.

If we will be richer, healthier, better educated, and longer-lived in the future, then we should be able to meet the challenges posed by demographic change. Adjustments will be needed and some aspects of some people's lives will worsen. On balance, however, intelligent policies should lead to outcomes that benefit the bulk of the citizens of Germany.

The 20th century was a century of redistribution of wealth. The 21st century may be a century of redistribution of work. Such redistribution would spread work

more evenly across people and over the ages of life. By reducing the need for transfer payments from workers to non-workers, taxes could be substantially reduced. People would work longer as they lived longer, healthier lives. A greater fraction of women, at both younger and older ages, would be in the work force. Inflexible labor markets and other causes of unemployment would be reformed. Employers, in both the private and public sectors, would offer many opportunities for part-time work. At present, three out of five Germans above age 20 are working. If this could be increased to four out of five, then the workweek could be cut from 40 hours to 30 hours. Alternatively, half of working Germans could work 40 hours per week and the other half could work 20 hours per week.

Let me speculate further by suggesting that future generations will think we were irrational about the way we spend the time of our lives. We concentrate work in those ages of life when we can have children and when children need the time and energy of their parents. Then, when we are 55 or 60 years old or so, we retire, enjoying decades of leisure, largely paid for by taxes on younger adults who are also taking care of children. We concentrate the leisure of our lives in the years when we can no longer have children and when any children we did have no longer need the intensive care they once required. Future generations will probably redistribute work so that younger people have more time to have children and to care for them and older people help them do so by staying on longer as productive members of the work force.

Perhaps this is too optimistic. Those who benefit from the status quo may be able to paralyze efforts at reform. It may prove impossible to reach consensus that radical changes are needed. Business companies and labor unions may oppose changes in retirement policies and expansion of part-time employment. Various commissions of experts have issued reports over the past decade and a half pointing out that demographic change will require policy adjustments. The experts have explained that if adjustments are postponed, then even more painful adjustments will be needed in the future. Nonetheless, few major reforms have been implemented. As the proportion grows of German voters who are older than 50, it may become even more difficult to raise the age of retirement and to make other changes. A gerontocracy may rule, exploiting immigrants and the native-born young to finance decades of retirement leisure, in many cases without children or grandchildren. As costs increase, expenditures on everything else, including research, education and childcare, may be diminished.

To avoid this dismal prospect, public discussion is needed, public discussion informed by systematic research on demographic change. Discussion is beginning, but knowledge is meager. In Germany today less than half a Euro per person per year is devoted to all demographic and gerontological research combined. A 100-fold increase would be well worthwhile. Every Gymnasium should offer instruction in demography. Every university should have a Lehrstuhl in demography. Currently, however, professorships exist only at Rostock, Bamberg (temporarily vacant), Humboldt (vacant, perhaps permanently), and Bielefeld (downgraded to level C3). At the Max Planck Institute for Demographic Research in Rostock (www.demogr.mpg.de), more than 30 research scientists and an even larger number of doctoral students and post-doctoral fellows are engaged in demographic research. The University of Rostock, under the determined leadership of Rektor Hans-Jürgen Wendel, is building a world-class program of education (B.A., M.A., Ph.D.) and research in demography. The Rostocker Zentrum for the Study of the Causes and Consequences of Demographic Change, a partnership between the University of Rostock and the Max Planck Society, is being developed by a group led by Prorektorin Thusnelda Tivig: it will open on October 1.

These are steps in the right direction, steps that need to be followed across Germany by many further steps. Policy discussions in Germany over coming years and decades will be driven by the social, economic and political challenges of demographic change. Germany, however, is severely deficient in the demographic research and educational infrastructure needed for informed discussion and policymaking. It is demographic ignorance, not demographic change, that poses the main threat to Germany.