

# Germany and the Challenge of Global Aging

by Richard Jackson



Center for Strategic and  
International Studies



Nationwide®  
Global

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Dear Friends:

Forty years ago, there were five German children under the age of five for every German elder over the age of 80. Forty years from now, if current trends continue, there will be three elders over the age of 80 for every child under the age of five.

Like the rest of the developed world, Germany is being overtaken by an unprecedented demographic revolution called global aging. It's the result of two forces: falling fertility and rising longevity. And when it has run its course, nothing will be the same.

*Germany and the Challenge of Global Aging* takes a close look at how this revolution is likely to transform Germany's economy and society over the next half century. According to the report, global aging will heap vast new costs on public budgets—the equivalent of an additional 25 percent of payroll in pensions and health-care benefits for the elderly. It will usher in an era of widespread labor shortages and slower economic growth. And it may ultimately mean stagnating or declining living standards—unless Germany renegotiates a social contract that, even with recent reforms, is due to channel an ever-rising share of society's resources from workers to retirees.

The Center for Strategic and International Studies and Nationwide Global are collaborating on this report for two reasons. As the world's third largest economy, Germany's success or failure in confronting its aging challenge will have important implications not just for its own future prosperity, but for the global economy. Germany, moreover, has just embarked on a much-heralded reform of its public pension system. The 2001 Riester reform, named after former Labor Minister Walter Riester, will scale back pay-as-you-go benefit promises and expand access to funded private alternatives.

Although the Riester reform is only a first step, it is nonetheless an important one. Germany's new emphasis on funded pensions marks a radical departure in social policy and may point the way toward a lasting solution to the aging challenge, not just for Germany, but for aging societies on both sides of the Atlantic.

*Germany and the Challenge of Global Aging* lays all of this out clearly and concisely. We hope that you find it as informative and compelling as we do.



John J. Hamre  
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## Introduction

**G**ermany is growing old. Forty years ago, just 17 percent of Germans were aged 60 or older. Today, 23 percent are. Forty years from now, the share will be reaching 40 percent.<sup>1</sup>

***The cost of public old-age benefits in Germany is on track to grow by 25 percent of worker payroll.***

Longer lives may be a great personal triumph, but they also pose a great collective challenge. The most direct impact of Germany's aging will be the staggering fiscal cost—the equivalent of an extra 25 percent of payroll in old age benefits on top payroll tax rates that already exceed 40 percent. But the challenge reaches far beyond how to support a larger number of old without overburdening the young. Germany's aging will also bring a broader social and economic transformation in its wake. The workforce and population will shrink, economic growth will slow, consumer markets will contract, rates of return will decline, and living standards may stagnate or even fall.

Germany is not alone in facing an aging challenge. Falling birthrates, rising life spans, and unaffordable pension and health-care benefit commitments pose similar concerns throughout the developed world. The challenge facing Germany, however, is one of the most daunting. Germany's population is among the developed world's oldest, its welfare state is among the largest and most expensive, its unions are among the most reform-resistant, and its citizens are among the most dependent on government. In the United States and the other English-speaking countries, the typical elder can count on substantial income from a private pension or personal savings in addition to Social Security. In Germany, most elders are almost entirely dependent on a pay-as-you-go state retirement system that cannot be sustained in its current form beyond the next decade.

***Germany's near-term economic difficulties complicate its long-term aging challenge.***

Germany's near-term economic difficulties make the long-term challenge all the more difficult to confront. Germany should be taking advantage of the window of opportunity afforded by the middle-aging of its postwar baby boom to boost savings and growth in advance of the age wave. Instead, in the words of European Central Bank chief economist Otmar Issing, it is becoming the "sick man of Europe." Since its reunification boom ended a decade ago, Germany's GDP growth has been the slowest in the European Union (EU)—and indeed, the slowest of all major industrial countries except Japan. In 2002, its budget deficit breached the European Monetary Union's or EMU's 3.0 percent of GDP ceiling, prompting a reprimand from the European Commission and a warning from Standard and Poor's that it will review Germany's bond rating. Corporate bankruptcies and unemployment are near record highs. Even Germany's vaunted educational system is in trouble. In a recent international test measuring the educational attainment of 15 year olds in thirty-two rich countries, Germany finished in the bottom third.<sup>2</sup>

To be sure, Germany is still a wealthy nation. It has one of Europe's most productive workforces and highest per capita incomes. It is the world's second largest exporter and the world's third largest economy. These are important advantages. Yet Germany's lead is slipping—and the biggest threat to its continued prosperity still looms over the horizon.

<sup>1</sup> The major data sources and long-term projections cited in this study—for population, for public pensions and health-care benefit spending, for private pensions, and for the income of the elderly—are discussed in the Note on Data and Sources at the end of the report. Note that throughout the report, the "elderly" are adults aged 60 and over. The age 60 threshold was chosen instead of the more conventional age 65 because it is much closer to the average retirement age in Germany and most developed countries.

<sup>2</sup> *The Implications of the PISA Study for Germany* (Bertelsmann Foundation; September 2002).

Over the past few years, Germany has begun to wake up to its aging challenge. It is reexamining protective labor market regulation that impedes job creation and economic growth. It is engaged in a vigorous national debate over the costs and benefits of stepping up immigration. And, most important, it has started to reform its retirement system.

In the spring of 2001, Germany passed a major reform that scales back future public pension benefits while encouraging the development of private funded alternatives. The so-called Riester reform, named for Walter Riester, the labor minister in the first Schroeder government, represents an important symbolic break with the past. The promise that government benefits alone would always be sufficient to maintain workers' living standards in retirement has been a cornerstone of Germany's social contract ever since World War II. The Riester reform for the first time acknowledges that workers will have to provide for some of their own old-age security themselves. The fact that the acknowledgment comes from a social democratic government makes it even more significant. In many countries, pension reform—and in particular, the desirability of greater funding—divides left and right. In Germany, both sides now seem to agree on the imperative of scaling back pay-as-you-go promises and boosting funded savings.

In practical terms, however, the Riester reform falls far short of a complete solution. The scheduled reductions in pay-as-you-go benefits are too small to close the long-term deficit in Germany's public pension system. As for the new private pensions, workers have been slow to sign up, in part because the regulations are too burdensome, and in part because public benefits remain so generous.

Most experts agree that much more needs to be done. In November 2002, the newly reelected Schroeder government acknowledged as much by appointing a new commission to evaluate the sustainability of Germany's pension and health-care systems—and make recommendations for further reforms. The commission, chaired by Burt Rürup, a prominent German pensions expert, is expected to issue its report in the summer or fall of 2003.

*Germany and the Challenge of Global Aging* turns the spotlight on Germany's efforts to prepare for the aging of its population. Chapter 1 describes the coming demographic transformation and assesses the likely impact on pension and health-care spending. Chapter 2 presents an overview of the German retirement system. Chapter 3 takes a closer look at the Riester reform and explains what it accomplished and what it didn't. Chapter 4 steps back and examines the broader implications of Germany's aging—not just the fiscal impact of rising retirement costs, but the economic, social, and political impact of a shrinking labor force, a contracting economy, and a graying electorate.

The report makes extensive use of a new CSIS resource called the Aging Vulnerability Index. For Germany and eleven other developed countries, the Index includes comparable data on public retirement benefits by age, the extent of elder dependence on government, the availability of alternative means of support, and the relative living standard of old and young. The Index, along with other key sources, is discussed in the Note on Data and Sources at the end of the report.

The bottom line is stark: Demography is pushing Germany toward a major crisis, recent reforms have only begun to engage the challenge, and time is running out.

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***Although a step in the right direction, the Riester reform falls far short of a complete solution.***

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## Chapter 1

### THE CONTOURS OF CRISIS

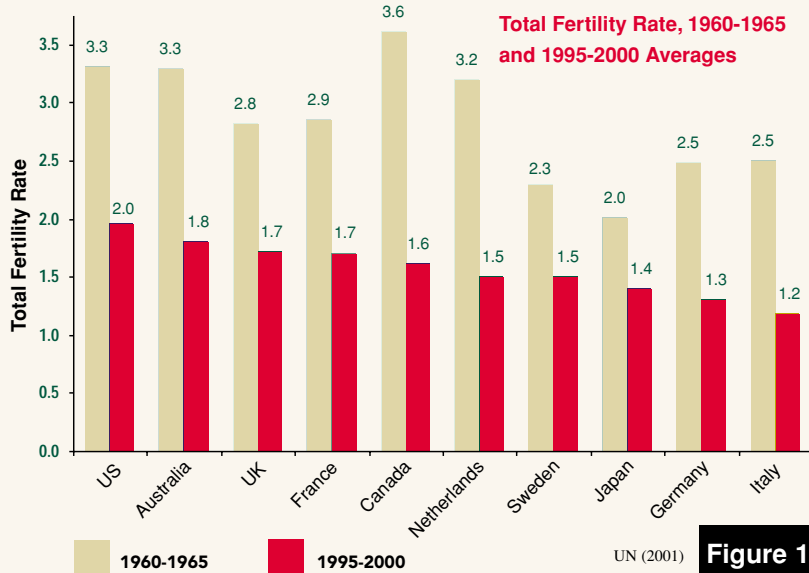
When Germany rebuilt its retirement system in the aftermath of World War II, it decided to finance it on an exclusively pay-as-you-go basis. The pay-as-you-go model, in which current workers are taxed to support current retirees, was attractive because it allowed benefit payments to begin immediately. At the time, the model also appeared to be affordable. The number of retirees was relatively small and the number of workers was growing steadily. What's more, everyone expected this situation to continue indefinitely.

*Global aging is the result of two forces: falling fertility and rising longevity.*

Since then, this expectation has crumbled. The developed countries stand on the brink of an unprecedented demographic transformation. It's called global aging and it's the result of two forces: falling fertility, which decreases the relative number of young in the population, and rising longevity, which increases the relative number of old. Global aging will soon be putting enormous pressure on public budgets and national economies. In a few fast-aging countries, including Germany, that pressure is already building.

Konrad Adenauer, the Federal Republic's first chancellor, once remarked that Germany would always be able to afford pay-as-you-go pensions because Germans would always have children. Germans are of course still having children—but not nearly as many as before and not nearly enough to sustain the demographic chain letter on which Germany's retirement system ultimately rests.

#### Germany, like the rest of the developed world, is in the grips of an unprecedented birth dearth.



Like the rest of the developed world, Germany is in the grips of an unprecedented birth dearth. Until the mid-1960s, fertility in every developed country was at or above the so-called 2.1 replacement rate needed to maintain a stable population from one generation to the next. Today, fertility in every developed country is at or below it—in most, far below it. (See Figure 1.) In Germany, the fertility rate dropped sharply in the late 1960s and has continued to drift downward ever since. It now stands at 1.3, which puts Germany in competition with Greece, Italy, and Spain for the developed world's lowest rate. The country that gave us kindergarten is fast running out of kinder.

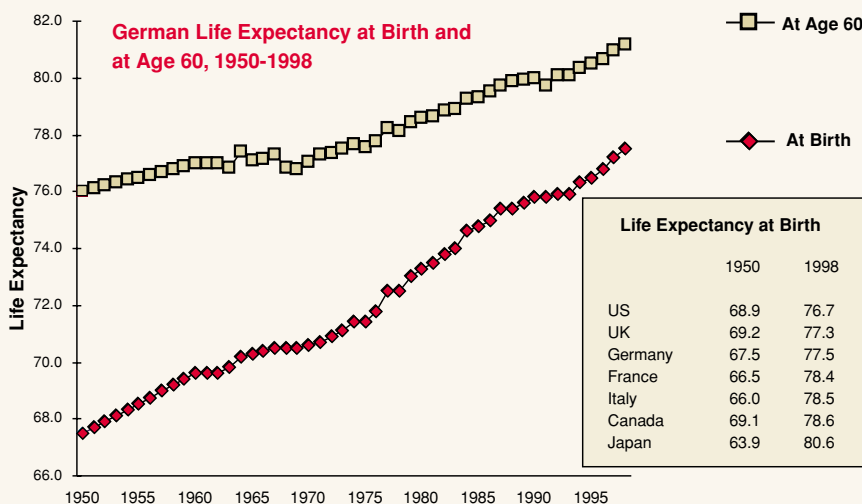
At the same time, Germans are living longer. Over the past fifty years, life expectancy at birth in Germany has risen from 68 to 78, for a cumulative gain of ten years. Life expectancy at older ages has risen as well. In 1950, the typical

60 year old could expect to live to 76. Today's 60 year old can expect to live to 81, a gain of five years. (See Figure 2.) This increase in life expectancy has already added nearly one-third to the total cost of Germany's public pension system. Few demographers expect the improvement in mortality rates to slow—and a growing number believe that it may accelerate as breakthroughs in biomedicine unlock the secrets of the aging process itself.

Together, these two trends are leading to a dramatic aging of Germany's population. The share of Germans aged 60 and over is on track to climb from 23 percent today to 37 percent by 2040, assuming that current rates of fertility and net immigration remain unchanged. Only a few developed countries, notably Japan and Italy, are projected to age more. (See Figure 3.) Meanwhile, the German "support ratio" of working-age adults (aged 15 to 59) to retirement-age adults (aged 60 and over) will sink like a stone—from 4.3 in 1950 to 2.6 today to 1.4 in 2040. (See Figure 4.) Again, this is more favorable than the nearly 1 to 1 ratio projected for super-aging Japan and Italy. But it is beneath the average projection for the developed world (1.7) and far beneath the projection for the United States (2.1).

This is bad news for a system that taxes current workers to pay for current retirees. In 2000, the German government spent 15.1 percent of GDP on benefits to persons aged 60 and over. Of this, 10.3 percent of GDP went to pensions and 3.8 percent to health-care benefits. The rest was made up of miscellaneous benefits, from housing subsidies to unemployment insurance. A handful of countries spend more on the old, the leader being Italy at 17.3 percent of GDP. But the German figure is well above the average for all developed countries (12.5 percent of GDP) and far above what the English-speaking countries spend—roughly 9 percent of GDP in Australia, Canada, and the United States and 12 percent in the United Kingdom.

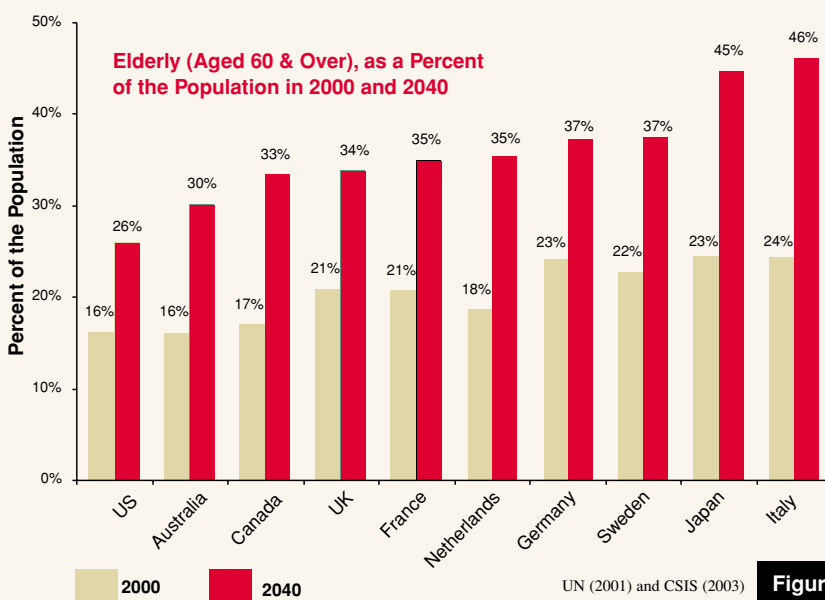
### German life expectancy has risen steadily—both at birth and at older ages.



OECD (2001) **Figure 2**

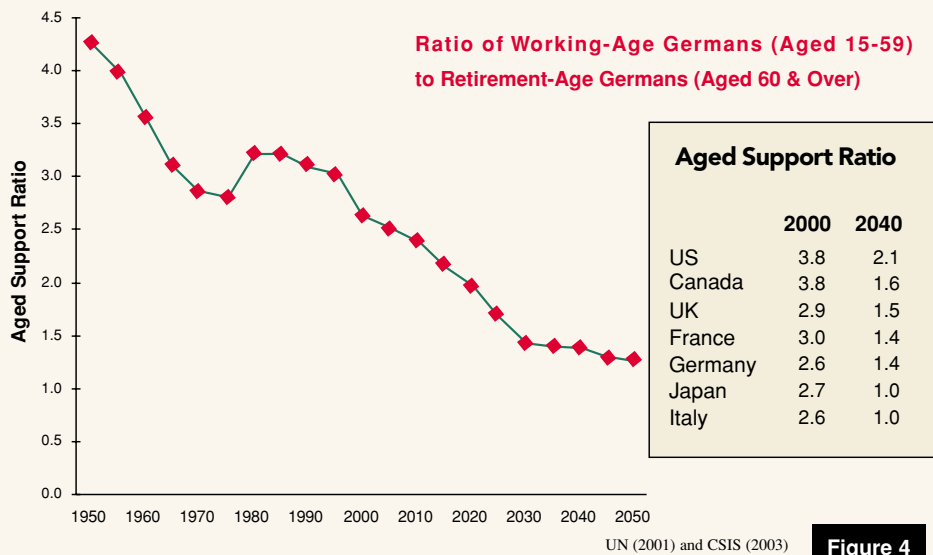
*Germany already spends more than most countries on pensions and health-care benefits for the elderly.*

### When fertility falls and longevity rises, the population ages.



UN (2001) and CSIS (2003) **Figure 3**

## There will be fewer working-age Germans to support each elder.



**Figure 4**

CSIS projects that the cost of public pensions for the elderly will rise by another 5 percent of GDP by 2040, or to 15.4 percent of GDP. This is a large increase—four times what Germany now spends on national defense. And the projection may be optimistic. It assumes constant (not falling) rates of fertility and constant (not accelerating) rates of improvement in mortality. It factors in future benefit reductions that have been legislated but not yet phased in. It allows for a rise in labor-force participation among older workers in response to recent reforms that have reduced work disincentives. And it assumes a continuation of current immigration policy. The last assumption makes a big difference indeed. With zero net immigration, the cost of public

pensions for the elderly would rise to at least 18 percent of GDP by 2040.

Pensions of course aren't the only expense that can be expected to grow as Germany ages. Health-care budgets will also be under intense pressure from rising expenditures on doctors, hospitals, and nursing homes for the frail elderly.

Here too, Germany already spends heavily relative to other countries. In fact, whether measured as a share of GDP or in per capita dollars, German health-care spending is higher than in any other country except the United States and Switzerland. Rates of nursing home residence for the elderly are also among the highest in the developed world, lagging only Canada, Denmark, Sweden, and the Netherlands. This is a particularly ominous indicator given the explosive projected growth in the number of "old-old" Germans—those aged 80 and over. While the number of Germans aged 60 to 79 is due to grow by just 25 percent over the next forty years, the number aged 80 and over is on track to grow by 150 percent.

CSIS projects that the cost of government health-care benefits for the elderly will rise from today's 3.8 percent of GDP to 8.4 percent by 2040. Again, this projection may be optimistic. It assumes that per capita spending will grow at its historical pace. In fact, the interaction of new technologies and rising social expectations about care and cure may push up per capita spending faster in the future than in the past. The projection also assumes that current age-specific rates of health-care utilization will remain unchanged. Some experts, however, predict that rates of utilization will rise as societies age. This is especially likely for nursing home residence. Compared with today's elderly, a much larger share of tomorrow's will have one child or no child—or will have children who are themselves elderly and disabled. Since World War II, the share of German women who are childless has grown from about one in ten to one in three. Faced with the need for long-term care, they may have no choice but to fall back on government.

All told, Germany's combined bill for pensions and health-care benefits for the elderly, the two big ticket benefit categories, is thus on track to rise to roughly 24 percent of GDP by 2040. Add in miscellaneous spending under smaller programs, and the total rises to roughly 26 percent of GDP, fully 10 percent of GDP more than today. (See Figure 5.) Germany's projected old-age dependency burden is not the highest in the developed world. CSIS projects that Japan will spend 27 percent of GDP on old-age benefits by 2040, France 29 percent, and Italy 32 percent. (See Figure 6.) But there is little comfort in the fact that a few other countries face fiscal futures even less sustainable than Germany's. An extra 10 percent of GDP is already unaffordable.

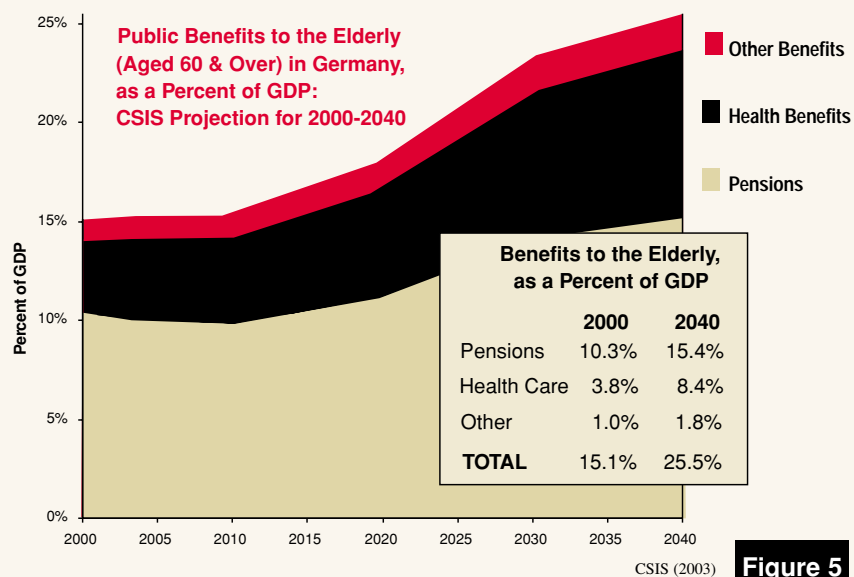
Raising taxes to pay for the growth in old-age benefits is not a long-term option. Payroll taxes, the main means of financing pensions and health-care benefits, already total 41 percent of workers' wages in Germany, among the highest shares in the world. (See Figure 7.) This huge tax wedge inflates labor costs, impedes job growth, and hurts German competitiveness.

***Raising taxes to pay for the age wave may simply slow economic growth and push more workers into the growing gray economy.***

Germany's total tax burden is about average for continental Europe, which is to say that it is high: 43 percent of GDP in 2001, compared with 39 percent in the United Kingdom,

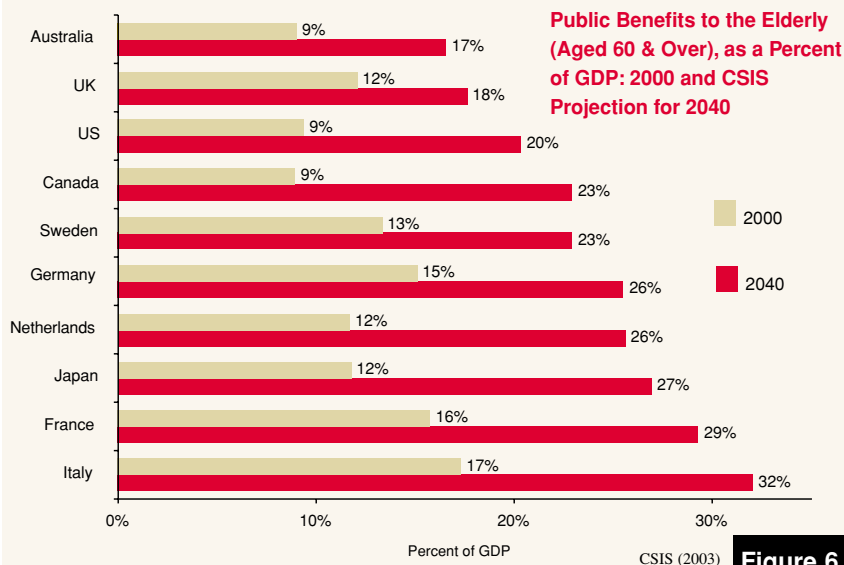
31 percent in the United States, and 30 percent in Japan. Raising taxes an extra 10 percent of GDP—the equivalent of 25 percent of payroll—could prove impossible, and not just politically. Germany, like most of Europe's aging welfare states, is already nearing its threshold of efficient taxation—meaning that, rather than raise new revenue, higher tax rates may simply slow the economy, increase unemployment, and push more workers into the growing gray economy. Leaders of all parties understand this, which is why no one advocates higher taxes. Indeed, Germany is now phasing in a reduction in income tax rates.

**Bottom line: Germany is on track to spend at least an extra 10 percent of GDP on old-age benefits.**



**Figure 5**

**Only a few developed countries are projected to spend more than Germany on old-age benefits.**

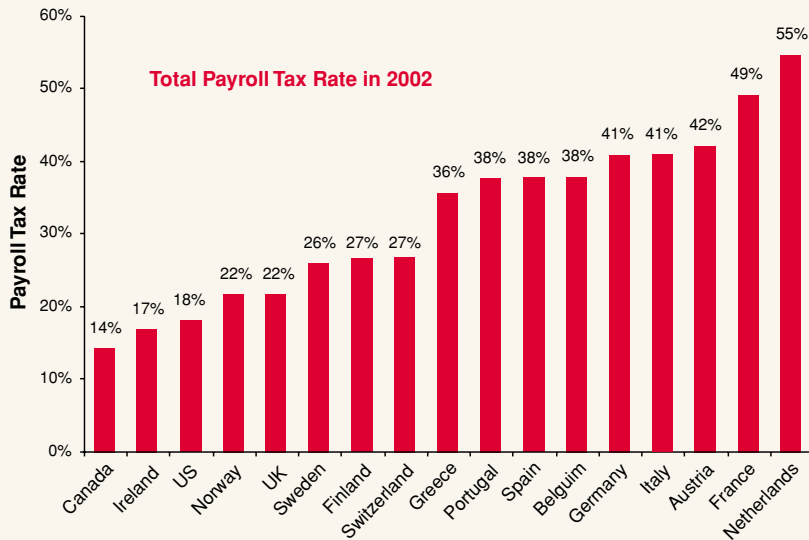


**Figure 6**

The obvious alternative to hiking taxes is to accommodate the rising cost of Germany’s welfare state by cutting other government spending. But what spending? Benefits to the elderly already consume a disproportionate share of public resources in Germany: 33 percent of total government outlays, more than in any country except Italy. If rising spending on the elderly were simply allowed to crowd out other spending “dollar for dollar,” CSIS projects that old-age benefits would consume 49 percent of total outlays by 2040. Another 24 percent would go to benefits for Germany’s dwindling population of children and working-age adults. Only a quarter of the budget would be left over to fund all other functions of

government, from national defense to the national parks. (See Figure 8.)

**Even before the age wave, German payroll taxes are among the highest in the world.**



SSA (2002) **Figure 7**

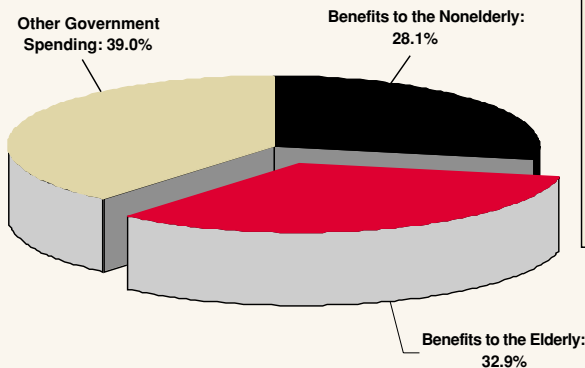
*Germany only has a narrow window of opportunity to prepare for its aging challenge.*

Germany is not alone in facing an aging challenge. The contours of the same emerging crisis are evident almost everywhere in the developed

world. Germany faces a particularly daunting challenge, however—and the time left to address it is running short. Over the next decade, while Germany’s postwar baby boom is still in the workforce, CSIS projects that old-age benefit spending will remain flat as a share of its economy. This window of opportunity will close abruptly in the early 2010s. Over the following three decades, old-age benefit spending will rise by one percent of GDP every three years. If Germany changes course now, it can still give the public time to adjust and prepare. If it delays, it will change course anyway—but in the midst of economic and social crisis.

**One-third of all government spending in Germany already goes to the elderly.**

**German Government Outlays by Type in 2001, as a Percent of Total Outlays**



**CSIS Projection for 2040**

Elderly Benefits	49.0%
Nonelderly Benefits	24.4%
Other Spending	26.6%

\*Assumes other spending is cut to accommodate the growth in old-age benefits.

CSIS (2003) **Figure 8**

## Chapter 2

### RETIREMENT GERMAN STYLE

**B**y almost any measure, the German public pension system is among the world's most generous. A full-career worker earning average wages retires with a benefit that replaces 70 percent of pay, far above the 40 percent replacement rate that US Social Security offers the typical retiree. The normal or statutory retirement age is 65. But early retirement pensions and special "preretirement" bridge benefits are so widely available that Germans on average retire at age 60. Once retired, their pensions are indexed to wages—a much more generous arrangement than the cost-of-living adjustments typical in other countries.

When Chancellor Otto von Bismarck established Germany's public pension system in 1889, he designed it as contributory "social insurance," meaning that participating workers pay payroll taxes and receive benefits based on earnings and length of service. Although the basic principle has remained the same, everything else has changed. Back then, the state promised a modest benefit to the tiny minority of workers lucky enough to survive to 70. Today, the vast majority of Germans can look forward to a comfortable retirement lasting a third or more of their adult lives.

Participation in the basic or "statutory" public pension scheme is obligatory for virtually all private-sector employees. The self employed, unless covered by special trade and professional plans, have the option of joining voluntarily. The payroll tax—19.1 percent in 2002, split evenly between employers and employees—covers just under three-quarters of total costs. The remainder is paid for through general revenue subsidies, including an earmarked "ecological" tax. If benefits were financed entirely by payroll taxes, the contribution rate would have to rise to 27 percent. Civil servants have their own, even more generous pension system financed exclusively through general revenues.

German social insurance, of course, consists of more than just old-age pensions. It includes a wide range of benefit programs, some of which function as integral parts of the retirement system. Unemployment benefits are available on special terms for workers in their late fifties and serve as "preretirement" or "bridge" pensions. In the typical arrangement, a worker is allowed to collect unemployment insurance without any requirement to search for work. If the unemployment benefit is less than his or her salary, the former employer usually tops up the difference. There are also special benefits payable to older workers who shift from full-time to part-time employment.

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*A full-career worker in Germany collects a pension that replaces 70 percent of average pay.*

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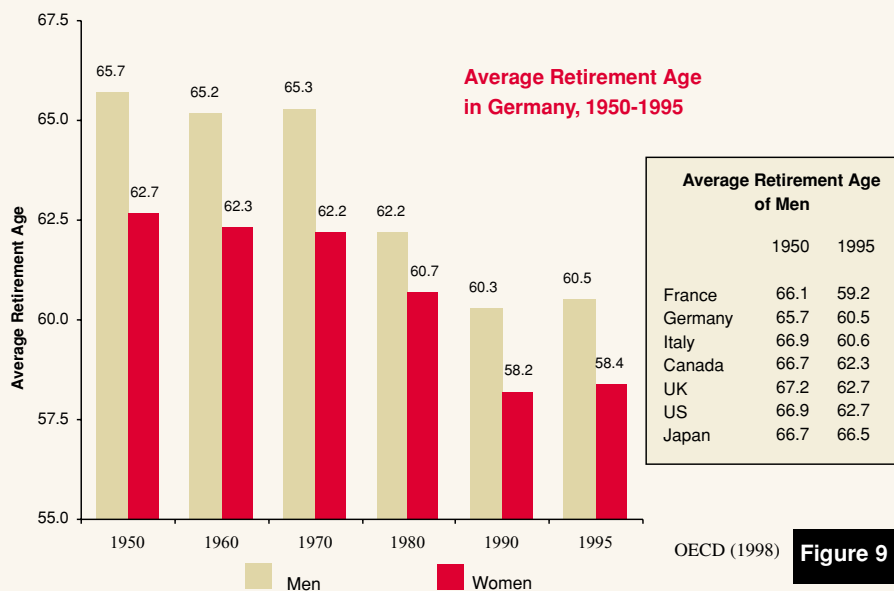
*Unemployment insurance serves as a "bridge" benefit for early retirees.*

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Like active workers, almost all retirees belong to one of Germany's statutory health-care funds. High earners and the self employed may choose between the public system and private insurance. Coverage for everyone else is mandatory. Workers and employers split the payroll contribution, which is now 14 percent. Retirees have half the contribution deducted from their pension checks and half subsidized by the government. The statutory funds cover the entire range of medical expenses, from dentistry to prescription drugs, including curative stays at Germany's spas. In 1995, coverage for long-term care, which had previously been means-tested, was added to the social insurance package.

Today's public pension arrangements date to the days of Germany's postwar economic miracle. The basic rules were established in 1957, then liberalized in 1972 with the addition

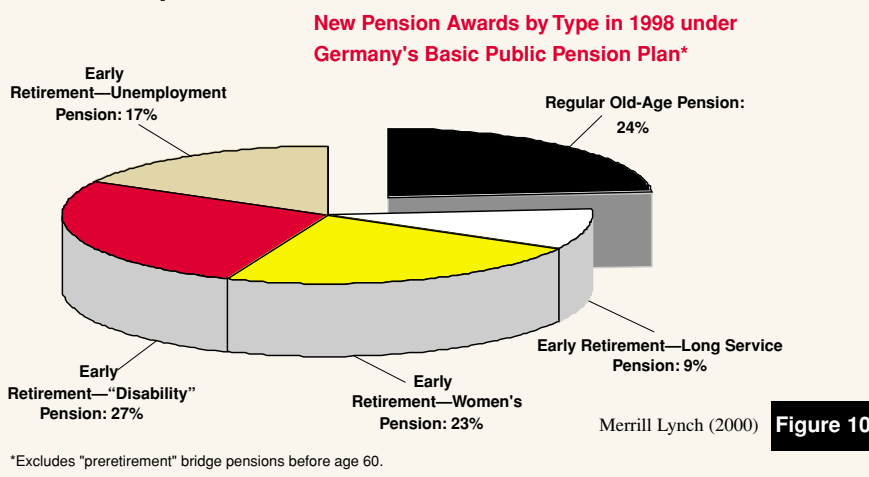
### The retirement age has fallen even as life expectancy has risen.



of a panoply of early retirement options. Retirement was allowed at age 63 for any worker with at least thirty-five years of contributions—and at age 60 for women, for the unemployed, and for the “disabled.” When applied to workers aged 60 or older, disabled in Germany does not necessarily imply handicapped in the usual sense. It may simply mean unable to find or hold a job in one's habitual occupation, whether for health or “labor market” reasons.

Incredibly, the 1972 reform made no reduction in the annual pensions of early retirees to reflect the greater number of years that their pensions would be collected. Looked at the other way around, it granted no later compensating increase in the annual pensions of workers who delayed retiring past the first year of benefit eligibility. Because German pensions are so generous, these benefit rules create a huge incentive for workers to retire early—and retire early they do. Since 1970, the average retirement age has dropped from 65 to 61 for men and from 62 to 58 for women. In 1998, only one-quarter of new pensioners in the basic public pension scheme retired with a standard old-age pension. The other three-quarters qualified for one of the special early retirement options.<sup>3</sup> (See Figures 9 and 10.)

### Most Germans take advantage of special early retirement pensions.



<sup>3</sup> German Pension Reform (Merrill Lynch; June 2000).

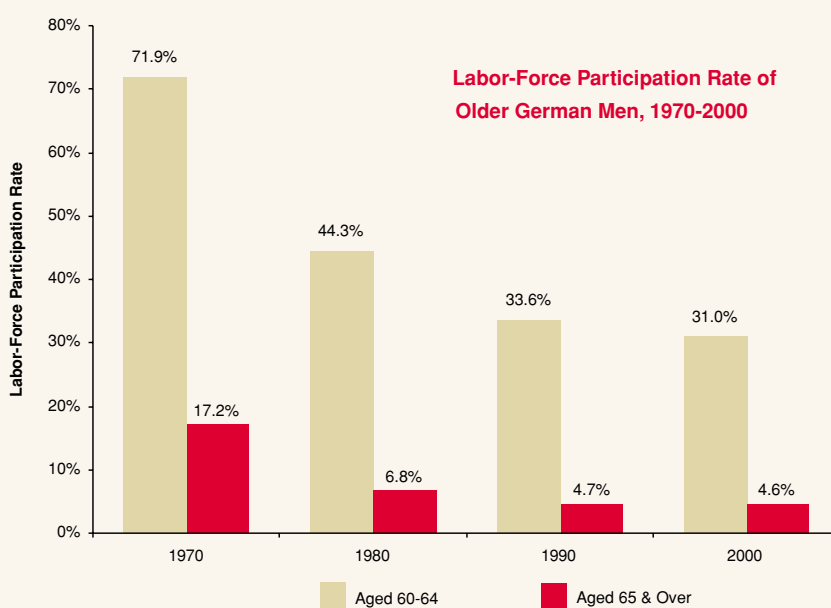
By the late 1980s, it was clear that action was needed to control the system's rising cost. In 1992, the Kohl government implemented a major reform that changed the wage base used in indexing pensions from gross to net wages—that is, to wages net of taxes. In effect, the change requires retirees to share in some of the burden of rising pension costs. The 1992 reform also gradually scales back the subsidies for early retirement. Under the terms of the reform, only long-service and disabled workers will be eligible for early retirement by 2012, and then only with reduced benefits. Since the reductions, however, are much less than actuarial, the incentive to retire early will persist. The reform, moreover, left all the special preretirement bridge benefits in place. As a result, the Mannheim Research Institute for the Economics of Aging concludes that it is unlikely to raise the average retirement age by more than six months.<sup>4</sup>

While a first step, the 1992 reform left Germany's pension system on an unsustainable trajectory. During the early 1990s, near-term costs surged as a result of reunification, which dumped hundreds of thousands of new pensioners onto the retirement rolls. At the same time, the long-term demographic outlook continued to deteriorate. In 1997, the Kohl government passed a second reform that would have indexed pension benefits to gains in longevity. The measure, which was not scheduled to take effect until 1999, was suspended by the newly elected Schroeder government. As we will see in the next chapter, the new government had a different vision of reform based on expanding access to private pensions.

The generosity of Germany's public pension system helps to explain why labor-force participation rates among older workers are so low. Just 31 percent of German men aged 60 to 64 are still employed, versus 73 percent of Japanese men and 55 percent of American men. At more advanced ages, employment is almost unheard of. Just 5 percent of German men stay on the job past 65, versus 34 percent of Japanese men and 17 percent of American men.

It wasn't always this way. As recently as 1970, the labor-force participation rate of German men aged 60 to 64 was 72 percent. Even a significant number of men aged 65 and over continued to work: 17 percent, the same share as in the United States today. (See Figure 11.) Then came the explosion in state-subsidized early retirement. Ironically, the trend toward shorter work lives began just as gains in elderly life expectancy accelerated—thus compounding the underlying demographic trend.

### Only a small and declining share of older Germans still work.



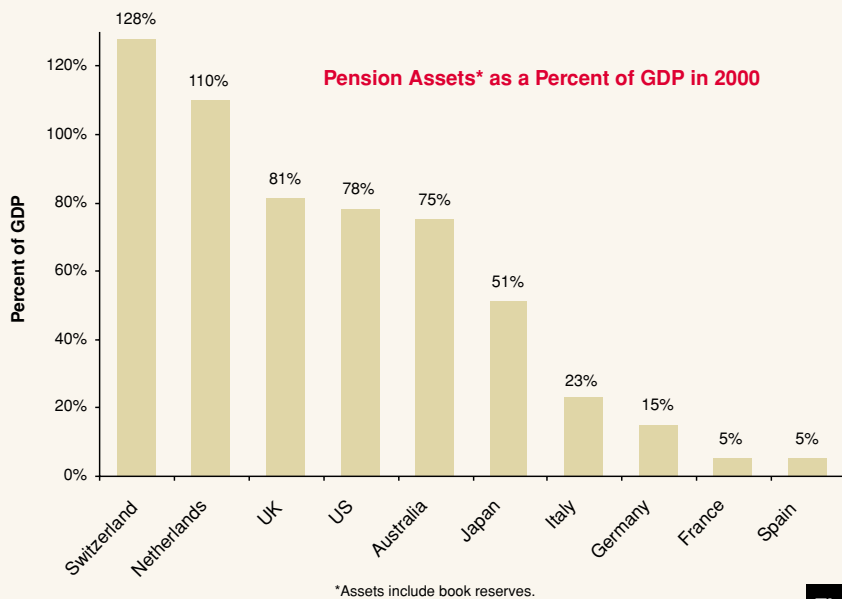
OECD (2003)

Figure 11

<sup>4</sup> Axel Börsch-Supan, Simone Kohnz, and Reinhold Schnabel, *Micro Modeling of Retirement Decisions in Germany* (Mannheim Research Institute for the Economics of Aging; March 2002).



## Germany's private pension system is tiny compared with world leaders like the US, the Netherlands, Switzerland, and the UK.

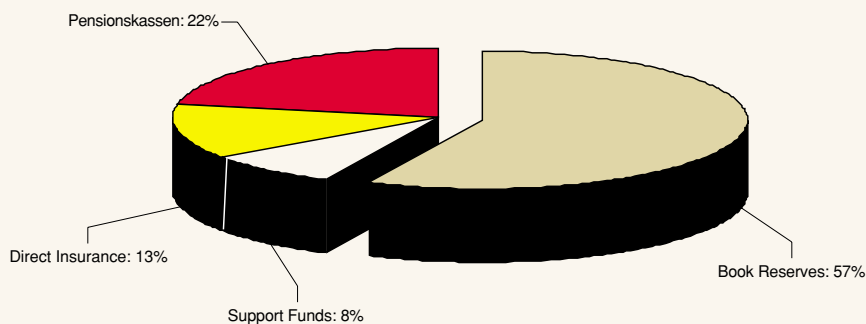


UBS (2002) **Figure 12**

Generous public pensions also help to explain why Germany has a low rate of private pension savings. Total private pension assets in Germany amounted to just 15 percent of GDP in 2000. That is more than in France, Europe's bastion of pay-as-you-go social insurance. But it is far less than in Australia, the Netherlands, Switzerland, the United Kingdom, and the United States, where pension assets total between 75 and 125 percent of GDP.<sup>5</sup> (See Figure 12.) Germany's large employers generally offer pensions. In Germany's Mittlestand of medium-sized firms, however, pensions are a rarity—and among small employers, they are practically unknown.

## Most German pension assets are held as "book reserves."

German Pension Assets by Type of Plan in 1998



Deutsche Bank (2001) **Figure 13**

Most private plans, moreover, are financed through book reserves, meaning that assets are retained as part of the firm's working capital rather than invested in marketable securities. In 1998, 57 percent of German pension assets were held as book reserves.<sup>6</sup> (See Figure 13.) This arrangement suits companies, which are free to borrow against the reserves, but puts workers at risk by tying their retirement security to a single firm. Since the default of a number of large companies in the 1960s, businesses must pay premiums to a mandatory insolvency fund that covers vested benefits in the event of bankruptcy. Until recently, workers needed to be at least age 35

and have at least ten years of service to acquire any vested pension rights. (The Riester reform lowers these thresholds to age 30 and ten years of service.) Moreover, because book reserve pensions are unfunded they are typically not portable: Workers can lose much of the value of their benefits when they change jobs.

There's another problem with book reserves—namely, that they aren't recognized as pension plan assets under international accounting standards. As German companies, their shareholders, and even their workforces become increasingly global, they are

<sup>5</sup> All figures include book reserves. See *International Pension Fund Indicators 2001* (UBS Asset Management; 2002).

<sup>6</sup> *Germany: Breakthrough to Pension Funds?* (Deutsche Bank Research; February 2001).

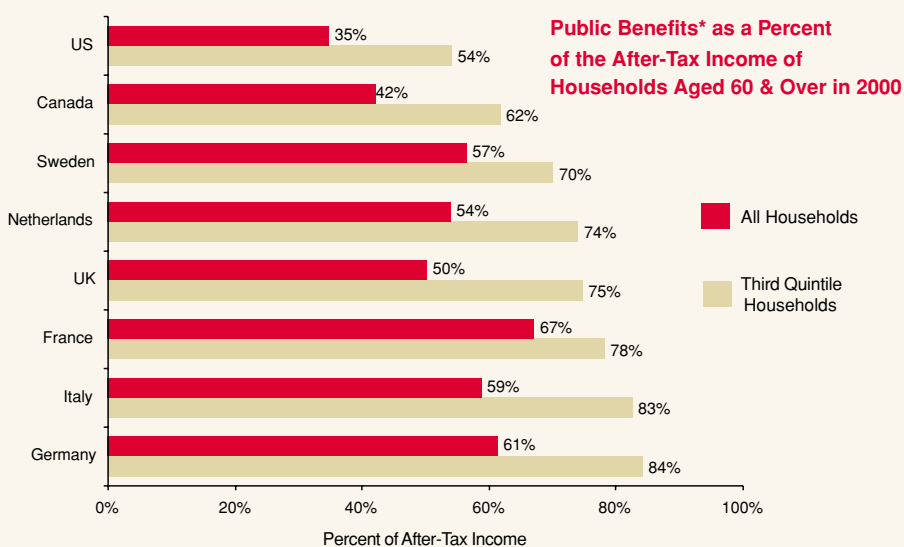
beginning to rethink how they finance pension promises. A growing number are deciding to invest at least some portion of their book reserve assets externally using funding vehicles known as Contractual Trust Arrangements or CTAs.

Besides book reserves, pre-Riester pension law allowed three other types of plans: “support funds” (8 percent of assets in 1998), “direct insurance,” (13 percent of assets), and *pensionskassen* (22 percent of assets). The support funds are a mere variation on the book reserve theme, since they still allow companies to borrow against pension assets. The last two plan types are fully funded. However, both are subject to rigid investment restrictions that limit returns. A fifth plan type authorized by the Riester reform—*pensionsfonds*—offers much greater investment freedom, leading some observers to predict that it will become the dominant form of pension provision. Whatever the relative merits of these specific plan options, externally funded plans in general are already gaining in importance. They will soon be given an extra push by the EU’s new pensions directive establishing European-wide accounting, investment, and management standards.

The bottom line is that the dependence of German retirees on government remains almost absolute. Overall, public benefits now make up 61 percent of the total after-tax income of households headed by adults aged 60 and over. High as it is, this share greatly understates the true level of elder dependence. The income measure is a cash measure, and so excludes health-care benefits and other types of in-kind income. The figure is also an average for all elders, including the affluent. Public benefits make up a much larger share of the income of “typical” elders than they do of the average elder. In fact, among elders in the third income quintile, public benefits make up an astonishing 84 percent of income, the highest share of any developed country. (See Figure 14.) At lower incomes, the dependence is even more absolute.

*The typical German elder relies on government for 84 percent of his or her total income.*

### The degree of elder dependence on public benefits is especially high in Germany.



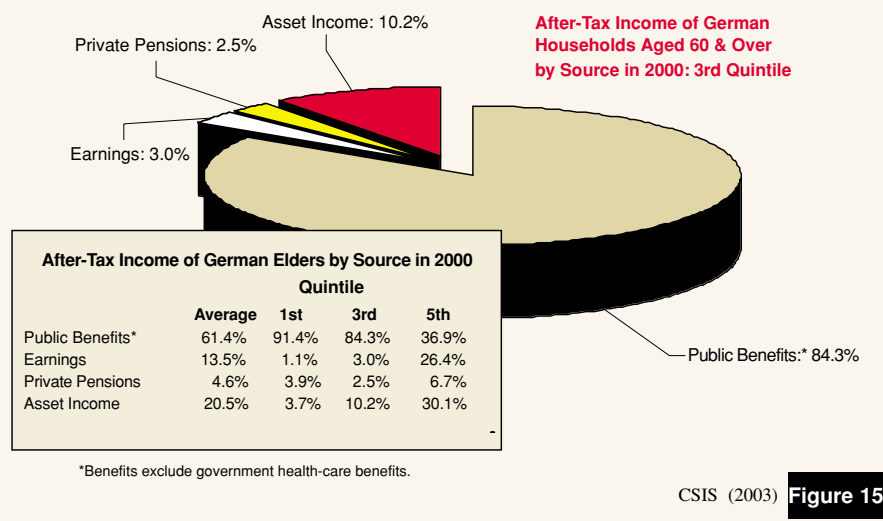
CSIS (2003) **Figure 14**

The problem is not so much that German elders have no private sources of retirement income, but rather that receipt of these private sources is highly skewed by income. Private pensions account for 7 percent of the income of elders in the top income quintile, earnings for 26 percent, and asset income for 30 percent. For the typical elder in the middle of the distribution, private pensions, earnings, and asset income combined total just 15 percent. (See Figure 15.)

There is no question that the German retirement system has been successful at improving the economic circumstances of the elderly. According to the Organization for Economic Cooperation and Development (OECD), Germans aged 60 to 80 consume only 4 percent less than working-age Germans.<sup>7</sup> Including the cash value of government health-care benefits, CSIS calculates that, after taxes, the per capita ratio of elderly to nonelderly income is 1.25 to 1 in favor of the elderly. To be sure, hardship and poverty have not been eliminated. But overall, German elders today enjoy a high standard of living compared with their peers in earlier generations and most other countries.

The problem is that the status quo is unsustainable. Left on autopilot, today’s retirement system will either crush future workers or betray future retirees. Clearly, reform must proceed on two tracks—reducing the cost of pay-as-you-go promises while expanding alternative means of support. That is precisely what the Riester reform sets out to do.

### The lack of private sources of retirement income is a major obstacle to reform in Germany.



<sup>7</sup>OECD Economic Surveys: Germany (OECD; December 2002).

## Chapter 3

### THE RIESTER REFORM

When Germany passed its most recent pension reform in the spring of 2001, former Labor Minister Walter Riester described it as “the biggest social reform of the postwar era.” According to the government, the reductions in pay-as-you-go benefits provided for in the Riester reform will be sufficient to stabilize pension costs as a share of worker payroll. Meanwhile, the new private pension options will make up for the loss in benefit income, leaving retirees as well off or better off than before.

The Riester reform, and in particular its expansion of private pension options, is a positive development. Funded retirement systems can help aging societies pay for a larger number of retirees without overburdening workers and taxpayers. At the macro level, they help shield government budgets from demographic pressures. At the micro level, they can offer individuals higher returns and higher benefits than pay-as-you-go systems can at the same contribution rate.

Unfortunately, the Riester reform promises more than it delivers. The new funded pension system is relatively small and voluntary, while Germany’s existing unfunded system remains nearly as large and unsustainable as before.

The Riester reform gives all employees the option of contributing to a variety of personal pension plans administered by insurers, banks, and other financial service providers. The maximum contribution started at 1 percent of payroll in 2002 and is due to rise to 4 percent by 2008. To encourage participation, the government subsidizes the pensions. Workers either make an after-tax contribution and receive a government matching contribution—or, if the arrangement is more favorable, make a tax-deductible contribution and forego the match. Traditionally, German pensions have all been defined benefit plans. Under the Riester reform, Germans for the first time have the opportunity to participate in tax-favored defined contribution plans.

Alternatively, workers can take advantage of the Riester “incentives” by having their employers contribute 4 percent of their pay to an approved occupational pension plan. The plans may be set up as direct insurance, *pensionskassen*, or *pensionsfonds*, the new type of pension plan introduced by the Riester reform. Book reserve plans, which are funded exclusively by employers, are not eligible for the Riester incentives.

At the same time, the Riester reform scheduled further reductions in pay-as-you-go pension benefits. It tightened eligibility for early retirement disability

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***Funded pensions can help aging societies pay for a larger number of retirees without overburdening workers and taxpayers.***

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pensions, which the 1992 reform had left untouched. More important, it introduced a complicated change in indexing rules that is designed to lower the current replacement rate from 70 to 64 percent of average wages between now and 2030, a benefit reduction of roughly 8.5 percent.

To judge by the government’s projections, the Riester reform virtually solves Germany’s long-term cost problem. According to the government, the reform will keep the contribution rate for Germany’s basic or “statutory” public pension scheme from rising above 22 percent of payroll, a seemingly manageable increase over today’s 19 percent. Most experts agree, however, that the government’s projections are misleading. They rest on fiscally optimistic assumptions, including rising rates of immigration and labor-force participation and falling rates of improvement in mortality. The government’s projections, moreover, stop short in 2030, well before Germany’s demographic transition is complete. Even so, they show that the pension system will require large and growing general revenue subsidies to stay afloat.

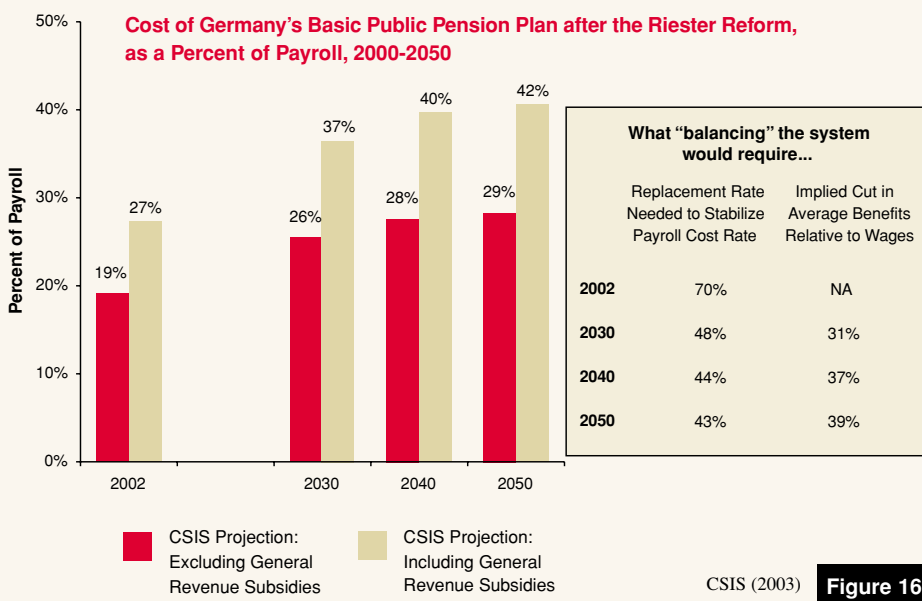
*To cover the full cost of Germany’s public pension system, the contribution rate would have to rise to 40 percent of pay by 2040.*

The CSIS “historical trends” projection offers a more realistic assessment of the Riester reform’s impact. According to the CSIS projection, the pension contribution rate would have to rise from 19 to 26 percent of payroll by 2030, assuming that general revenues pay for the same proportion of expenditures in the future that they do today. If the full cost of the basic pension scheme were paid for by payroll taxes, the contribution rate would have to rise to 37 percent. Beyond 2030, the limit of the government’s projection horizon, the required rate would keep climbing—to 40 percent by 2040 and to 42 percent by 2050. (See Figure 16.) Stabilizing the contribution rate at the government’s 22 percent target would require cutting the replacement rate from 70 percent today to 55 percent by 2030 and to 50 percent by 2050; stabilizing it at today’s 19 percent would

require cutting the replacement rate to 43 percent by 2050. Alternatively, the average retirement age would have to rise to nearly 70.

The Riester reform’s new private pensions are too small to fill this “benefit gap.” The CSIS projections imply that per capita benefits would ultimately have to be cut by nearly 40 percent relative to per capita wages to keep contributions from rising. Even under generous assumptions—a portfolio evenly divided between equity (earning a real return of 6 percent) and debt (earning a real return of 2 percent), the Riester pensions would at most offset half of this reduction. For many of tomorrow’s retirees, they will offset nothing at all.

### The Riester reform fails to control the long-term cost of Germany’s public pension system.



CSIS (2003) **Figure 16**

The problem is that only a fraction of eligible workers are opting to participate. Initially, the Riester reform was greeted with enthusiastic predictions by financial services firms that rivers of cash would soon be flowing into German pension funds—boosting savings, deepening capital markets, and bolstering retirement security. A year after the reform's debut, the initial enthusiasm is turning to skepticism. Although roughly 31 million people are eligible for the Riester incentives, just 2.1 million individual Riester pensions had been sold as of June 2002.<sup>8</sup> Many workers who are declining the personal option may yet take up the employer option. Yet here too, the outlook remains uncertain.

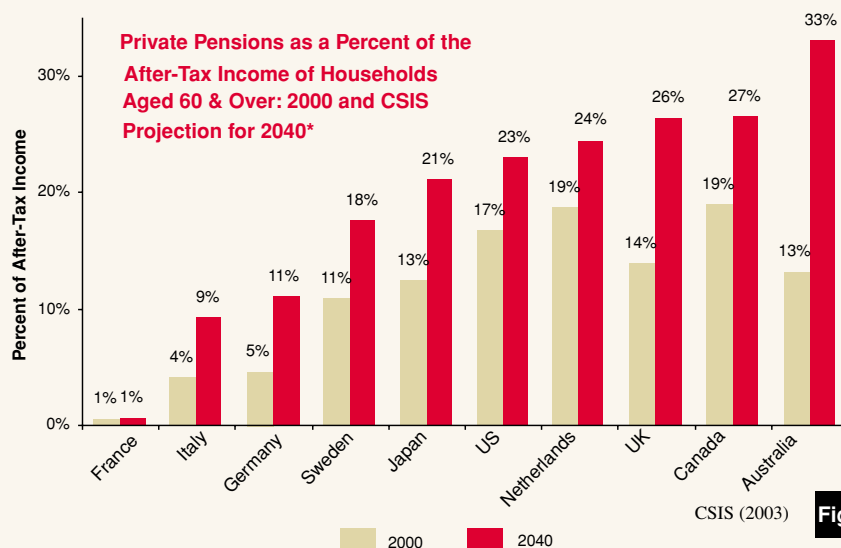
There are many reasons for the disappointing take up. The government matches will be tiny in the first two years of the reform—just 168 euros for a married couple with two children. Key questions about investment and tax rules also remained unresolved at the time the reform went into effect, leaving the public uncertain about the advantages. Consumer groups then weighed in and cautioned workers to hold off signing up. The phase-in of the reform, moreover, began in the midst of a market meltdown. Although stock ownership surged in the late 1990s, Germany's equity culture is still in its infancy. The crash of the DAX and Frankfurt's Neuer Markt, which lost 90 percent of its value over the past two years, has left the public shell-shocked and wary of "risky" investments. The hottest financial instrument in Germany in 2002 was the passbook savings account.

While this false start presumably can be overcome, there's a more fundamental problem. Almost without exception, financial service experts agree that the regulation of the Riester pensions is too restrictive—a "typically over-engineered German product," in the words of one banker. All plans must offer an expensive "money back guarantee," which will reduce rates of return and may even cancel out the tax advantages. Restrictions on use of assets may also make the Riester pensions less attractive than alternative investments. Preretirement withdrawals are generally prohibited, although workers may borrow pension funds to purchase an owner-occupied home. Upon retirement, at least 80 percent of assets must be annuitized. This last rule in particular may greatly reduce the appeal of the Riester pensions. Remember: 84 percent of the income of the typical retiree is already annuitized in the form of a monthly government pension check.

Finally, the government's failure to acknowledge the magnitude of the long-term cost problem may itself be an important reason for the disappointing take up. In presenting the Riester

*Only a small fraction of eligible workers are signing up for the new Riester pensions.*

### Even after the Riester reform, private pensions are likely to remain a comparatively minor source of elder income.



\*Projection for Germany assumes 50 percent participation in Riester pensions.

<sup>8</sup> "Riester-Rente" off to a Slow Start (Deutsche Bank Research; July 2002).

reform to the public, the government used a new definition of average wages that allowed it to say that the replacement rate would only fall from 70 percent to 67 percent over the next thirty years. With the government trying to downplay the impact of reform on promised benefit levels, the public's lukewarm reaction to the new private pension options is understandable. Why should people save more if they are going to get practically everything they are promised anyway? In a recent poll, 50 percent of respondents said that they had already made "adequate provision" for retirement, while 72 percent said that they had no interest in signing up for an individual Riester pension.<sup>9</sup>

Although these are real problems, the Riester reform nonetheless represents a real accomplishment. In principle, it pushes German retirement policy in the right direction—toward a smaller pay-as-you-go system and a larger funded system. Over time, moreover, participation in the funded system may rise. If a participation rate of 50 percent could be achieved, CSIS projects that private pension benefits would grow to 11 percent of total elderly household income by 2040, double today's share. With a participation rate of 100 percent, private pension benefits would grow to 15 percent of total elderly income.

These are significant improvements, though they would still leave Germany lagging most countries with well-developed private systems. CSIS projects that private pension benefits will exceed 20 percent of elderly income in the United States and 25 percent in Canada, the Netherlands, and the United Kingdom. In Australia, with its new system of mandatory employer pensions, the share will exceed 30 percent. (See Figure 17.)

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***To ensure universal coverage, Germany may need to make funded pensions mandatory.***

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To wean workers from pay-as-you-go dependence, Germany will have to undertake bolder reforms. It will need to further reduce the generosity of its existing unfunded system—and clearly announce the change. It will also need to rethink its approach to building a second funded pension tier. To substitute for a significant portion of today's pay-as-you-go benefits, the funded pensions must be universal—and to be universal, they may need to be mandatory.

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<sup>9</sup> German Pension Provision Institute poll, cited in "Riester-Rente" off to a Slow Start, op. cit.

## Chapter 4

### BEYOND THE FISCAL CHALLENGE

The consequences of global aging reach far beyond the direct impact on public budgets. In the decades to come, Germany's workforce will shrink, its economy will slow or contract, and its electorate will gray. As Germany refashions its retirement system, the broader consequences of global aging will influence its choices and constrain its options. At the same time, the choices Germany makes in retirement policy may themselves influence the bigger picture—and help determine whether Germany prospers or declines.

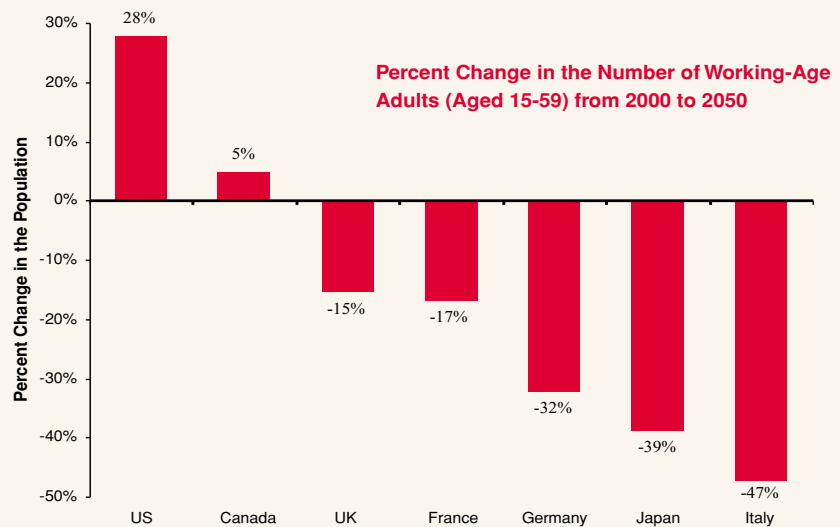
#### The Workforce Challenge

Even as today's birth dearth reshapes the traditional population pyramid, narrowing it at the base and widening it at the peak, it is also ushering in an era of unprecedented population decline. In several developed countries, including Germany, Italy, and Japan, working-age populations are already shrinking. Within a decade, they will be shrinking in most developed countries, the only major exception being the United States. By the 2030s, the total population of most developed countries will be falling as well.

In Germany, the demographic implosion will be stunning. By 2025, assuming current trends continue, there will be 14 percent fewer working-age Germans than there are today; by 2050, there will be 32 percent fewer. (See Figure 18.) Meanwhile, Germany's total population will shrink from 82 million to 68 million. And this assumes that Germany's relatively high current level of net immigration continues indefinitely. With constant fertility and zero net immigration, the German population would shrink to 51 million by 2050 and to 24 million by 2100.<sup>10</sup> (See Figure 19.)

*Without immigration, Germany's population would shrink from 82 to 24 million by the end of the century.*

The working-age population will shrink dramatically in Germany and other fast-aging countries.



UN (2001)

Figure 18

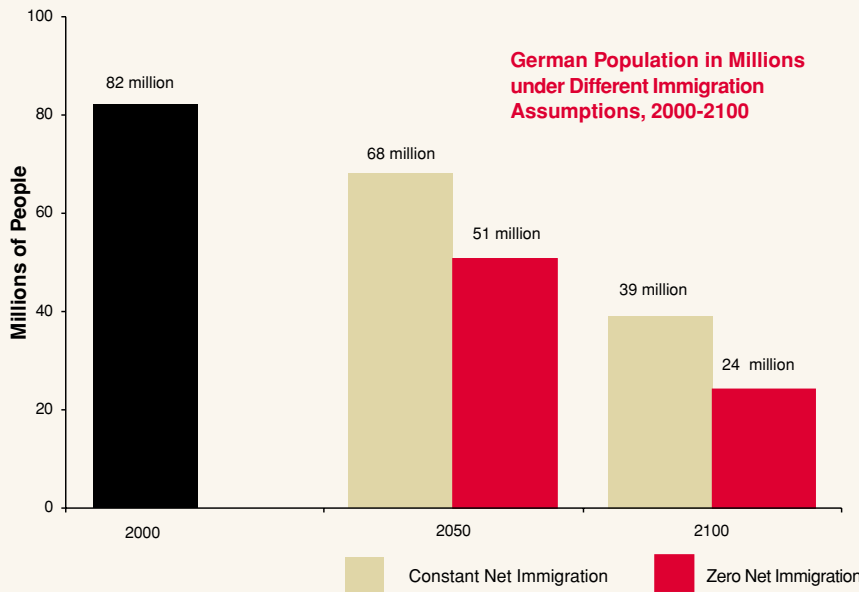
<sup>10</sup> The zero net immigration projection is by the Institute for Population Research and Social Policy. See Herwig Birg, "Demographic Ageing and Population Decline in 21st Century Germany," paper presented at the UN's Expert Group Meeting on Policy Responses to Population Aging and Population Decline (October 2000).

*Since the mid-1980s, the number of Germans in their twenties has dropped by 25 percent.*

Germany's workforce will also grow older, possibly reducing the innovation, risk-taking, and mobility essential for growth in today's "new economy." While the contraction in Germany's total working-age population is just gathering momentum, the number of young working-age adults is already in free fall. Since its peak in the mid-1980s, the number of Germans in their twenties has dropped by 25 percent. Already, the youth decline is translating into fewer apprentices, fewer university students, and fewer job applicants. A recent survey by the German Industry and Trade Association finds that nearly 60 percent of companies are having problems finding suitably qualified staff.<sup>11</sup>

The prospect of looming worker shortages is beginning to preoccupy Germany's leaders and focus attention on the need to reform policies that discourage work and deter job creation. In 2002, a government-appointed commission chaired by Volkswagen executive Peter Hartz recommended a package of reforms designed to streamline Germany's labor bureaucracy, improve job placement services, and move workers off the unemployment rolls. The Schroeder government has enacted most of the recommendations, though some were softened at the insistence of Germany's trade unions.

**By the end of the century, Germany is on track to lose one-half to two-thirds of its current population.**



UN (2001) and Institute for Population Research (2000) **Figure 19**

Most experts agree that the Hartz reforms, while sensible, do little to address the core problems: lavish government benefits that inflate labor costs and protective labor laws that make it difficult for employers to respond to market signals. Collectively bargained national wage agreements prevent employers from designing compensation packages tailored to local labor markets. Rigid redundancy rules prevent them from firing workers when business slows, and so deter them from hiring workers when it picks up. "First I have a problem finding qualified people, then I have a problem getting rid of them," explains Düsseldorf businessman Michael Austerschmidt. Wilfried Prewo, director of Hanover's Chamber of Industry and Commerce, notes that the German system has been very effective at ensuring labor market peace—a peace he compares to the "peace of the graveyard."

An aging Germany will need to make much fuller use of its human capital. The unemployment rate in Germany has averaged 8 percent over the past ten years. That's a better record than in France, Italy, or Spain—but their unemployment rates have been falling, while Germany's shows no sign of budging. Although Germany has a relatively high share of women working outside the home, it still lags behind the developed-world leaders—Denmark, Finland, Norway, and Sweden—by a wide margin. Then there is the

<sup>11</sup> Cited in *The Demographic Challenge* (Deutsche Bank Research; September 2002).

biggest squandered resource of all: mature adults, who are lost to the labor force while they still have years, or even decades, of productive work life remaining. If the average age of retirement in Germany could be raised from 60 to 65 over the next half century, it would offset half of the projected decline in the support ratio of working-age adults to elders. While raising the retirement age by five years would require large changes in behavior and expectations, it's worth recalling that the average retirement age has fallen roughly the same distance over the past three decades.

According to Deutsche Bank, the combination of shorter work weeks, longer vacations, higher unemployment, and earlier retirement reduced annual hours worked per capita in Germany from 900 in the 1960s to 700 at the end of the 1990s.<sup>12</sup> Boosting work effort and job growth will require action on many fronts—not just more flexible labor regulations, but everything from better daycare for working moms to lifelong learning for working seniors. Above all, it will require reform of Germany's social insurance system, and especially its public pensions, whose large and growing cost is a key reason Germany's labor supply isn't greater to begin with.

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***Total hours worked per capita in Germany have fallen from 900 per year in the 1960s to 700 today.***

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Over the course of the postwar era, Germany, like many European countries, has tried to create jobs for younger workers by bribing older workers to retire. The experiment has been a failure. Germany now has both one of Europe's earliest retirement ages and one of its lowest rates of job growth. Still, the old mentality persists. Klaus Zwickel, the president of IG Metall, advocates lowering the retirement age to 60. His motto: "The old out and the young in." In the future, Germany will have to pursue a different strategy. To bring joblessness down, labor costs will have to come down—and that will require reducing the generosity of pensions.

Looming worker shortages are also behind the debate over stepping up immigration, especially skilled or "labor market" immigration. In 2000, Germany issued 20,000 special work permits under a pilot program targeting high-tech workers, many of whom were recruited in India and promptly dubbed "computer Indians." In July 2001, a blue-ribbon commission recommended expanding the program to as many as 50,000 permits. In June 2002, the government passed a new immigration law setting up a Canadian-style "points system" in which prospective immigrants are ranked based on age, education, and skills—only to see it overturned in December by Germany's constitutional court.

While the law was overturned on a technicality, the reversal nonetheless highlights Germany's ambivalence about immigration. Germany is already a high-immigration country, though few Germans are comfortable with the fact. Fully 9 percent of German residents are non-citizens, about the same share as in America. In recent years, Germany's growing immigrant population has begun to trigger social tension and cultural angst. Jurgen Ruttgers, the Christian Democrat leader in North Rhine-Westphalia, says that Germany needs "Kinder statt Inder"—children, not Indians. In a bestseller about what ails Germany, author Friedrich Merz tells immigrants to adopt what he calls Germany's Leitkultur, or "leading culture." Asked whether "Germany needs more immigration to forestall a future shortage of labor," 76 percent of Germans say no.<sup>13</sup>

<sup>12</sup> *Bottleneck Labour: An Empirical Growth Analysis* (Deutsche Bank Research; December 2002).

<sup>13</sup> Emnid poll cited in *The Demographic Challenge*, op. cit.

In the end, Germany may have to accustom itself to a more heterogeneous self image—or risk economic decline. Most studies conclude that immigration offers large net benefits to the economy, especially when the contributions of immigrants' children and grandchildren are taken into account. Cultural assimilation, moreover, depends on the good will of natives and newcomers alike. Until Germany liberalized its naturalization laws in 2000, it was the only country in the developed world that based citizenship on bloodline rather than birthplace. The children and grandchildren of Turkish guest workers who arrived in the 1950s are still widely regarded as “foreigners.”

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***Higher immigration alone cannot prop up an aging Germany's welfare state.***

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At the same time, the immigration strategy clearly has limits. Immigrants, especially young and educated immigrants, can help an aging Germany grow and prosper. They cannot, however, prop up its welfare state. The required numbers are simply too large. According to the UN, net immigration of 325 million, double today's level, would be required each and every year over the next fifty years simply to keep Germany's population from shrinking. To keep its support ratio of working-age adults to elders from falling, annual net immigration of roughly 3.5 million would be required. In this scenario, 80 percent of “Germans” would be new immigrants or their descendants by the middle of the century.<sup>14</sup>

Understandably, leaders are also considering ways to persuade native Germans to raise a larger number of future workers, including more generous family benefits. In fact, Germany already spends heavily on cash benefits and in-kind services for families—about the same as France and not much less than Sweden, two countries famous for their child-friendly public policies. The Riester reform adds a new kind of benefit, since the government matching contribution rises along with the number of children that workers have.

Although such “pronatal” incentives may help, they are unlikely to make a decisive difference. The United States spends less on family benefits than any major developed country except Japan and Spain—yet has the developed world's highest fertility rate. Germany spends more than any major developed country except France and Sweden, yet has one of the developed world's lowest fertility rates. This is not to say that pronatal incentives have no effect on childbirth decisions, but rather that they are easily overwhelmed by other factors, from income trends to gender roles, from the outlook for next year's economy to the outlook for the next generation's future.

While a dramatic change in fertility behavior cannot be ruled out—the postwar baby boom caught demographers everywhere by surprise—Germany would be foolish to count on it. Fertility has been beneath the replacement level for so long that the one-child family is fast becoming the new social norm. None of the developments that originally depressed fertility starting in the 1960s, from more working women to the widespread availability of effective contraception, have been repealed. It's worth recalling, moreover, that raising the fertility rate is a strategy whose payoff is very long-term. Even if the German fertility rate doubled over the next decade, it would have virtually no impact on the size of the workforce or tax base until the 2030s. In the interim, of course, the greater number of children would add to society's total dependency costs.

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<sup>14</sup> *Replacement Migration: Is It a Solution to Declining and Ageing Populations?* (UN, Population Division; March 2000).

## The Economic Challenge

Global aging may also usher in an era of permanently slower economic growth in Germany—and indeed, most of the developed world. By the 2010s, assuming constant immigration, Germany’s labor pool will be contracting at roughly 1.0 percent per year; by the 2020s, it will be contracting at 1.5 percent per year. Unless productivity rises at least as fast as employment falls, Germany’s economy will begin contracting as well—not just during cyclical downturns, but decade in and decade out. Japan and the other fast-aging countries of continental Europe also face a real danger of long-term economic decline. Among the major developed economies, only the United States, with its younger population, can be expected to grow at close to historical rates beyond the next decade.

Global aging will affect the economy in other ways as well. Over the next ten to fifteen years, most developed countries can expect rates of savings and investment to increase as middle-aging baby boomers prepare for their retirement. In Germany, the share of all adults who are in their high-savings forties and fifties is now rising rapidly. The share is due to peak around 2010, then enter a steep decline. (See Figure 20.) As it does, so may rates of savings and investment. By the 2030s, the OECD projects that the private savings rate in Germany could fall by half or more.<sup>15</sup> Some economists say that this won’t hurt productivity or competitiveness, since societies with shrinking workforces won’t need to invest as much to maintain the same rate of growth in capital per worker. Others disagree. The pace of technological progress, they say, may depend crucially on the annual amount of new investment a society undertakes.

Businesses will have to adjust to the new realities. As the population declines, the demand for infrastructure and capital goods like highways, houses, and steel mills will fall. Markets for consumer goods may also stagnate or decline—not just for “youth products,” but for everything from automobiles to washing machines. In many sectors of economy, profits will fall amid chronic overcapacity. These developments will generate powerful economic crosswinds. On the one hand, Germany will become even more dependent on exports to maintain profits and growth. On the other hand, contracting domestic markets may give rise to new protectionist pressures—with potentially damaging consequences for the German economy and the world economy.

All of this, moreover, assumes that Germany confronts its fiscal challenge. If it simply leaves pensions and health care on autopilot, the result could be disastrous. Running larger public-sector deficits to cover the rising old-age dependency burden would crowd out scarce productive investment—and risk shattering the EMU. Hiking taxes to cover the rising burden would mean an even larger wedge between gross and net wages, and thus even less work effort and job growth. Either way, Germans would find themselves facing a future of stagnant or falling after-tax living standards.

The aging of the developed countries also has important implications for global financial markets. As economic growth slows, so may rates of return to financial assets. Some economists go so far as to predict a “Great Depreciation” when retiring boomers start cashing out their portfolios on a large scale in the 2020s. If so, the value of private pension savings could erode just as public systems are becoming unaffordable.

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***The OECD projects that the private savings rate in Germany could fall by more than half.***

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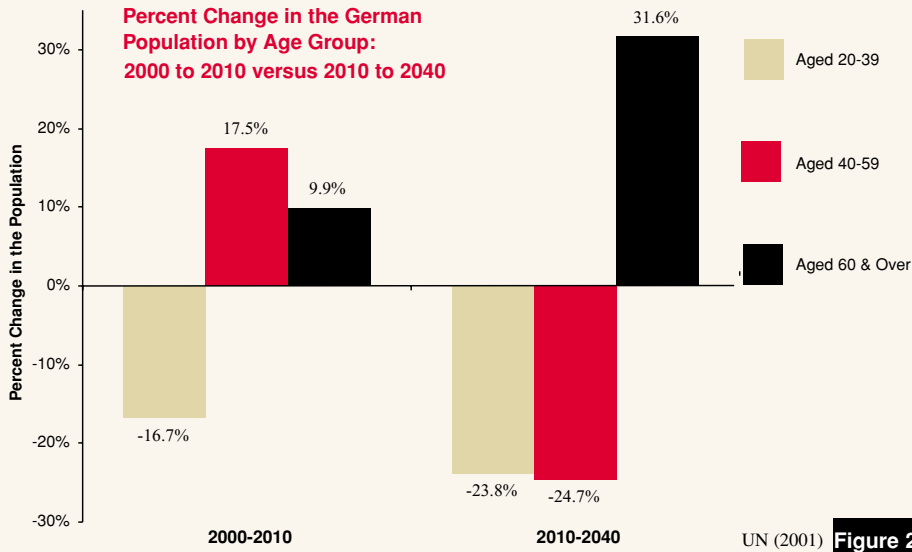
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***Businesses will have to adjust to shrinking consumer markets.***

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<sup>15</sup> *Ageing in OECD Countries: A Critical Policy Challenge*, Social Policy Studies no. 20 (OECD; 1996).

**The number of Germans in the high-saving middle years will grow for another ten years—before entering a steep decline.**



This need not happen. In pay-as-you-go systems, there is a lockstep link between the return on worker contributions and national economic growth, since the return is limited to the rate of growth in worker payroll. In funded systems, workers can continue to earn higher returns by investing in faster growing economies around the world. A study by the Mannheim Research Institute for the Economics of Aging suggests that Germany could offset almost all of the demographic impact on financial rates of return by shifting assets to countries—developed as well as developing—that are aging less or later.<sup>16</sup>

Whether Germany can take advantage of this "globalization"

strategy will depend on whether it continues the transition toward funded pensions that it began with the Riester reform. The strategy will also require relaxing quantitative investment restrictions and embracing the "prudent man" rule in use almost everywhere that private pensions are a significant component of retirement income. According to Dresdner Bank, just 7 percent of German pension fund assets are invested internationally, including in other EU countries. By way of comparison, the share is 17 percent for US pension funds, 25 percent for UK funds, and 29 percent for Netherlands funds.<sup>17</sup>

***Globalization is an essential strategy for an aging Germany.***

The globalization strategy will need to overcome other obstacles as well, including the lack of transparency and security in the capital markets of many developing countries. Much progress will have to be made before retirees in Berlin will be able to entrust their golden years to investments in Beijing. Still, globalization holds out the promise that young people can help support old people across international borders. As such, it is an essential strategy for an aging Germany—and an aging world.

<sup>16</sup> Joachim Winter, *The Impact of Pension Reforms and Demography on Stock Markets* (Mannheim Research Institute for the Economics of Aging; March 2002).

<sup>17</sup> *Pension Fund Systems in the World* (Dresdner Bank; 2000).

## **The Political Challenge**

As the average age of the workforce rises, so will the average age of the electorate. Already today, the widespread dependence of elders on pay-as-you-go retirement benefits is a major obstacle to reform. The resistance almost certainly will grow as Germany ages. If reform doesn't happen soon, it may not happen at all—at least not without a precipitating social and economic crisis.

It's difficult to say when the critical threshold will be reached. Very likely, it will be by the mid-2010s, when old-age benefit costs begin to rise rapidly. Certainly it will be by the mid-2020s, when half the German electorate will be over the age of 55, today's minimum eligibility age for public "preretirement" pensions. According to one recent study, the mid-2020s is also when a majority of the electorate would be too old to benefit from transitioning to a funded pension system.<sup>18</sup>

Some say that fears about "senior power" are exaggerated. Even if Germany is destined to become a gerontocracy, that does not necessarily mean that the old will use their electoral clout to defend today's status quo. Elders' own lives may be mostly in the past tense, but as grandparents they still care about the kind of world their grandchildren will inherit. Shifting generational attitudes may also help to tip the political balance toward retirement reform. Today's elders, who rebuilt the country in the aftermath of World War II, feel a collective sense of entitlement to public reward that today's middle-aged adults may not when they become elders in their turn.

Finally, if all else fails the young may rebel. So far, to be sure, they show little inclination to do so, although that may change as the pay-as-you-go tax burden mounts—and more people come to understand that it is the single biggest contributor to Germany's economic malaise. Social contracts only endure if they are sustainable over time. If the younger generation feels that it is not getting a fair deal, the contract will eventually be renegotiated. According to a recent National Bureau of Economic Research study, the rate of return on contributions to Germany's public pension system has fallen from 3.5 percent for the cohort entering the workforce in 1955 to 1.5 percent for the cohort entering it today.<sup>19</sup> Even this assumes that promised benefits will be paid in full—which of course they can't be. If we factor in the benefit cuts or tax hikes that will be needed to close the system's financing gap, the rate of return for today's younger adults may already be negative.

The open question is whether Germany will change course soon enough to forge a solution that protects the welfare of all generations, young and old alike. Such a solution will need to be based on realistic projections. It can build on the positive steps already taken in the Riester reform, but it will have to go much further—making larger reductions in pay-as-you-go benefits and providing for more certain and secure funded alternatives. As it reduces the burden on the young, society must not abandon its commitment to ensuring a decent standard of living for the old. From Australia to Sweden, many governments are concluding that continuing this commitment means making funded pension provisions mandatory.

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***Along with a graying workforce, Germany will have a graying electorate.***

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***Reform must protect the welfare of all generations, young and old alike.***

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<sup>18</sup> Hans-Werner Sinn and Silke Übelmesser, *When Will the Germans Get Trapped in their Pension System?* (CES; August 2001).

<sup>19</sup> Hans-Werner Sinn, *The Crisis in Germany's Pension Insurance System and How it can be Resolved*, NBER Working Paper 7304 (August 1999).

At the same time, Germany needs to recognize that retirement policy can no longer be just about retirement. Savings, investment, productivity, labor markets, immigration, and capital flows all need to be a part of the debate. An aging Germany will need to make better use of its human capital, rediscover its entrepreneurial spirit, and ensure that its society remains open—if not to new immigration, at least to new ideas. Frustrated German businessmen sometimes complain that in English-speaking countries everything is allowed unless explicitly forbidden, but that in Germany it's the other way around.

There is a growing sense of urgency in Germany about the need for reform, but also widespread denial and disbelief. According to one survey, 75 percent of Germans expect further reductions in public pensions over the next ten years—yet most Germans also say they are not prepared to save more privately.<sup>20</sup> Understandably, people find it hard to believe that a system that worked so well for their parents won't work nearly as well for their children.

Germany's emphasis on consensus—its weak executive, strong states, powerful unions, proportional voting system, and coalition politics—all suggest that changing course will be difficult. Some observers are beginning to fear that Germany in the 2000s, like Japan in the 1990s, will try to “muddle through” rather than face the difficult tradeoffs. If so, future generations may pay the price in lost opportunities, lower living standards, and a diminished stature in the world.

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<sup>20</sup> Axel Börsch-Supan, Tito Boeri, and Guido Tabellini, “Would you Like to Shrink the Welfare State? The Opinions of European Citizens,” in *Economic Policy*, vol. 32 (2001).



## A Note on Data and Sources

*Germany and the Challenge of Global Aging* draws on a wide variety of sources, from government and industry reports to academic articles, newspaper stories, and interviews with experts. This note identifies the most important data sources and calls attention to a few of the more useful studies. It also describes the assumptions and methodology underlying the long-term population, cost, and income projections cited in the report.

Almost all the historical population figures for Germany and the other developed countries come from the UN Population Division and are published in *World Population Prospects*.<sup>1</sup> These include total population, population by age bracket, support ratios, median ages, total fertility rates, and net immigration rates. Historical data for life expectancy at birth and at age 60 come from the 2001 edition of *OECD Health Data*.

The population projections cited in the report are based on the UN's constant fertility and constant immigration scenario, also published in *World Population Prospects*. This scenario assumes that fertility rates and net immigration rates continue at their 1995-2000 averages in each country. In two cases—namely, the cross-country comparisons of elderly population shares and aged support ratios—the projections also assume constant rates of improvement in mortality. This adjustment to the UN scenario, which for most countries assumes slower rates of improvement in mortality, only marginally affects the projections for Germany, although it has a large impact in Canada, Italy, Japan, and a few other countries.<sup>2</sup>

Most of the basic fiscal and economic data come from standard OECD sources. The totals for current government revenues and outlays are from the *National Accounts*; the totals for current public benefit spending by type are based on the most recent available data from the *Social Expenditure Database*, trended to 2000; the data on national

health-care expenditures, including growth rates in real per capita spending, are from the 2001 edition of *OECD Health Data*; the detailed figures for labor-force participation by age and by sex are from OECD's online *Labour Force Statistics Database*.

The cross-country statistics on retirement programs come from a variety of sources. The data for average retirement ages are from an OECD study.<sup>3</sup> The figures for private pension assets are from UBS Asset Management.<sup>4</sup> The figures for payroll taxes are from International Social Security Association data published by the US Social Security Administration.<sup>5</sup>

The report also makes extensive use of a new CSIS resource called the Aging Vulnerability Index. For Germany and eleven other countries, the Index includes comparable data on public benefits by age, the extent of elder dependence on government, the availability of alternative means of support, and the relative living standard of old and young. All detailed data cited in the report on benefits and income by age are drawn from the Aging Vulnerability Index. The Index is also the source for the CSIS projections of old-age benefit spending and private pension income. The following discussion offers an overview of the projections. Readers interested in more detail should consult the Index itself.<sup>6</sup>

The CSIS cost projections assume a continuation of historical demographic and economic trends. The demographic scenario is the constant fertility, constant net immigration, and constant mortality improvement scenario already described. The economic scenario assumes that age-specific rates of labor-force participation remain constant at their 2000 levels in each country, that unemployment rates remain constant at their 1990s averages, and that productivity and real wages grow at their average historical rates over the past twenty-five years.

<sup>1</sup> *World Population Prospects: The 2000 Revision*, 2 volumes (UN, Population Division; 2001).

<sup>2</sup> Specifically, the constant mortality improvement scenario assumes that age-specific mortality rates continue to decline at their long-term postwar (1950-94) average in each country. The adjustment is based on projections prepared by Shripad Tuljapurkar of Morning View Research and published in Paul Hewitt and Sylvester Schieber, "Demographic Risk in Industrial Societies," *World Economics*, 1:4 (October-December 2000).

<sup>3</sup> Sveinbjörn Blöndal and Stefano Scarpetta, *The Retirement Decision in OECD Countries*, Ageing Working Papers no. 1.4 (OECD; 1998).

<sup>4</sup> *International Pension Fund Indicators 2001* (UBS Asset Management; 2002).

<sup>5</sup> *Social Security Programs throughout the World: Europe* (US Social Security Administration; 2002).

<sup>6</sup> See *The 2003 Aging Vulnerability Index* (CSIS and Watson Wyatt Worldwide; 2003). The Index is available on the CSIS web site at [www.csis.org](http://www.csis.org).

There are two exceptions to the labor-force participation rule. The first allows for a “cohort effect.” In some countries (but not Germany), women in their twenties and thirties now work at higher rates than women in their forties and fifties. In the CSIS projections, it is assumed that women aged 40 to 55 in such countries will eventually work at the same rate as women aged 20 to 39. The second exception allows for a response to pension reforms that have scaled back early retirement options and improved work incentives. In Germany, the projections follow the OECD in assuming that recent changes will eventually lead to a 10 to 15 percent increase in participation rates among men aged 55 to 64.

The CSIS projections of public pension spending are based on country projections assembled and published by the OECD, except for Japan, where they are based on projections published by the Ministry of Health, Labor, and Welfare.<sup>7</sup> These “official” projections, which do not always cover the same universe of programs, have been normalized in the base year to actual spending totals from the *Social Expenditure Database*. More important, they have been adjusted to reflect the historical trends demographic and economic scenario described above. All adjustments to the official projections were made based on sensitivity analysis published by the OECD. Note that the projections assume that current benefit and eligibility rules will remain in effect indefinitely unless changes have been explicitly scheduled in current law. In the case of Germany, the projections reflect the future benefit reductions provided for by the 1992 reform and the Riester reform.

The CSIS health-care benefit projections are based on two critical assumptions. The first is that current per capita ratios of public health-care benefit spending on the old to spending on the young will remain unchanged in the future. This represents a compromise between two competing models of aging and health: the “compression of morbidity” model, which assumes that rising longevity will be accompanied by a falling incidence of morbidity at older ages, and the “failure of success” model, which assumes the opposite. The second assumption is that rates of growth in per capita health-care spending in each country will

gradually converge, by 2040, to the rate of growth in per capita GDP plus 1 percent—roughly the average growth rate for all the developed countries over the past twenty-five years. For Germany, this means that per capita growth is projected to be virtually unchanged.

The CSIS projections of private pension income take into account recent efforts by the developed countries to expand private provision. In the case of Germany, they assume 50 percent participation of eligible workers in the new Riester pensions. Investments are split evenly between equity (at a real return of 6.0 percent) and debt (at a real return of 2.0 percent). Transaction costs equal 0.5 percent of assets, yielding an after-expense return of 3.5 percent. Two-thirds of the Riester contributions are assumed to represent new savings, while one-third is assumed to be offset by reductions in other forms of household savings.

The description of Germany’s retirement system presented in the report—the benefit and eligibility rules, the regulations, and the recent reforms—relies on many specialized studies. The following short list is merely meant to orient the interested reader: Axel Börsch-Supan, “Social Security and Retirement in Germany,” in Jonathan Gruber and David A. Wise, eds., *Social Security and Retirement Around the World* (NBER; 1999); Bert Rürup, “The German Pension System: Status Quo and Reform Options,” in Martin Feldstein and Horst Siebert, eds., *Social Security Pension Reform in Europe* (NBER; 2002); Deutsche Bank Research, *The Demographic Challenge* (September 2002); Dresdner Bank, *Pension Fund Systems in the World* (2000) and *The Market for Pension Products in Europe* (2001); Merrill Lynch, *German Pension Reform* (June 2000); and Goldman Sachs, *German Pension Reform: The First Step* (June 2001).

<sup>7</sup> *Fiscal Implications of Ageing: Projections of Age-Related Spending*, Economics Department Working Papers no. 305 (OECD; 2001); and *1999 Actuarial Valuation of the Employees’ Pension Insurance and the National Pension* (Japanese Ministry of Health, Labor, and Welfare; 1999).

## *A Key to Source Citations*

CSIS (2003) = Richard Jackson and Neil Howe, *The 2003 Aging Vulnerability Index* (CSIS and Watson Wyatt Worldwide; 2003).

Deutsche Bank (2001) = *Germany: Breakthrough to Pension Funds?* (Deutsche Bank Research; February 2001).

Institute for Population Research (2000) = Herwig Birg, “Demographic Ageing and Population Decline in 21st Century Germany,” paper presented at the UN’s Expert Group Meeting on Policy Responses to Population Aging and Population Decline (October 2000).

Merrill Lynch (2000) = *German Pension Reform* (Merrill Lynch; June 2000).

OECD (1998) = Sveinbjörn Blöndal and Stefano Scarpetta, *The Retirement Decision in OECD Countries*, Ageing Working Papers no. 1.4 (OECD; 1998).

OECD (2001) = *Health Data 2001*, CD-ROM (OECD; 2001).

OECD (2003) = *Labour Force Statistics Database*, online database (OECD; 2003).

SSA (2002) = *Social Security Programs throughout the World: Europe* (US Social Security Administration; 2002).

UBS (2002) = *International Pension Fund Indicators 2001* (UBS Asset Management; 2002).

UN (2001) = *World Population Prospects: The 2000 Revision*, 2 volumes (UN, Population Division; 2001).

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Richard Jackson writes on public policy issues arising from the aging of America's and the world's population. He is currently an Adjunct Fellow at CSIS, where he is affiliated with the Global Aging Initiative, an Adjunct Fellow at the Hudson Institute, and a Senior Advisor to the Concord Coalition. He is the author of numerous policy studies, including *The Global Retirement Crisis* (CSIS and Citigroup; 2002) and *The 2003 Aging Vulnerability Index* (CSIS and Watson Wyatt Worldwide; 2003). Jackson regularly speaks on long-term demographic and economic issues and is often quoted in the press. He holds a B.A. in classics from SUNY at Albany and a Ph.D. in history from Yale University. He lives in Alexandria, Virginia, with his wife Perrine and their sons, Benjamin and Brian.



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