GLOBAL AGING
THE CHALLENGE OF THE NEW MILLENNIUM

CENTER FOR STRATEGIC AND INTERNATIONAL STUDIES AND WATSON WYATT WORLDWIDE
Dear Friends:

Among the many trends that compete for the attention of policy makers these days, none is more likely to shape economic, social, and political developments in the early twenty-first century than the simultaneous aging of Japan, Europe, and the United States. The Commission on Global Aging has come together under the aegis of the Center for Strategic and International Studies (CSIS) in the belief that global prosperity depends on a wise balancing of the needs of older populations with those of economic growth in nations that today account for almost two-thirds of world output.

In the following pages, CSIS and Watson Wyatt Worldwide outline the historic challenge posed by shifts in the ways developed world populations form families, work, save, retire, and care for their aged. The human life cycle is undergoing unprecedented change. To preserve economic security, we must adapt the social institutions built around it to these new realities. And yet attempts to do so inevitably encounter political expectations that are difficult to change.

The Commission has undertaken a two-year effort to understand and communicate the economic, political, social, and strategic exigencies of population trends in the major industrial nations. As honorary co-chairmen, we are pleased to commend this document to your attention. We urge you to join with us in examining the urgent responsibilities thrust upon us by global aging.

Sincerely,

Walter Mondale
Former Vice President
Of the United States

Ryutaro Hashimoto
Diet member and
Former Prime Minister
Of Japan

Karl Otto Pöhl
Former President,
Deutsche Bundesbank
COMMISSION ON GLOBAL AGING

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Yoshio Yazaki, Director, University of Tokyo Medical Center
The world stands on the threshold of a social transformation — even a revolution — with few parallels in humanity’s past. It’s called global aging, and in the coming decades, it will subject the developed countries to extraordinary economic, social and political stress.

For nearly all of history, the elderly (people aged 65 and over) never amounted to more than 2 or 3 percent of the population. Roughly 150 years ago, that share started to rise. Today, in the developed world, it amounts to almost 15 percent. By the year 2030, it will be nearing 25 percent and may be closing in on 30 percent in some of the fast-aging countries of continental Europe.

As a whole, the developing world will remain much younger for the foreseeable future. Yet, it too is aging. Several major countries in East Asia — including China, Taiwan, Singapore and both Koreas — are projected to approach developed-world levels of old-age dependency by the middle of the next century.

Global aging will place new burdens on workers and employers and pose difficult choices to voters and government leaders.

There is the staggering fiscal cost. In every major developed country, the unfunded liability for public pensions alone amounts to 100 to 250 percent of GDP — an amount far greater, in each country, than its official public debt. The burden of health benefits to tomorrow’s elderly may be even larger.

But the challenge of global aging transcends its impact on government budgets. It promises to restructure the economy, reshape the family, redefine politics and even rearrange the geopolitical order of the next century. Unlike many predictions about the future, global aging is no mere hypothesis. Its approximate timing and magnitude are already locked in. It is a revolution sure to happen — and when it has run its course, nothing will be the same.
WHY GLOBAL AGING MATTERS

For GOVERNMENTS, global aging will:
- Vastly increase the cost of pension and health-benefit programs.
- Cause some countries to run large, destabilizing budget deficits.
- Generate enormous pressure to reduce benefits, raise taxes — or crowd out spending for defense, infrastructure, education and other vital public services.
- Reorder political agendas and trigger generational tensions between those who pay and those who benefit.

For BUSINESSES, global aging will:
- Mean higher taxes, rising capital costs, shrinking consumer markets and perhaps falling tangible asset and equity valuations.
- Tighten labor markets, make it difficult to retain top-quality personnel and create incentives to recruit foreigners or move production abroad.
- Lead to overcapacity in real estate, construction, retailing and other key sectors.
- Intensify competition over shrinking sales — reducing returns on investment and perhaps generating new pressures for capital controls, nontariff barriers and outright protectionism.

For INDIVIDUALS, global aging will:
- Make today’s revocable government pension promises a risky personal retirement strategy and create a new urgency about saving.
- Lead to cuts in promised old-age benefits, delayed retirement and a larger family role in long-term care.
- Undermine the value of residential real estate and possibly equity portfolios.
- Lead to changing work patterns, including midlife retraining and later retirement.

Forty-two percent of U.S. RETIREES say Social Security is their biggest source of income.
Only 3 percent of U.S. workers under age 35 expect the same when they retire.

Forty-four percent of the WORLD’S POPULATION now live in countries where fertility is beneath the 2.1 replacement rate.
Global aging is the result of two fundamental demographic forces: falling fertility and rising longevity. The first reduces the relative number of the young, while the second increases the relative number of the old. The fiscal and societal implications of these demographic trends are compounded by other forces: earlier retirement, pay-as-you-go (unfunded) public pension systems and the growing cost of health care.

**Falling Fertility**

Worldwide, the fertility rate has fallen from 5.0 to 2.7 over the past 30 years. In the developed countries, it has fallen to 1.6. As recently as the early 1960s, almost every developed country was at or above the 2.1 replacement rate needed to maintain a stationary population. Today, every developed country is below it — some far below it. In Japan, the fertility rate is 1.5; in Germany, 1.3; in Italy, 1.2.

The decline in fertility is turning the traditional population pyramid on its head. It also means that, absent massive immigration from developing countries, the population of the developed world will soon peak and begin to decline. By the early 2020s, the working-age population (aged 15 to 64) will be shrinking in every developed country, with the possible exception of the United States. By the late 2020s, the total population of the developed world is due to begin shrinking as well.

**FIGURE 2:** Fertility in every developed country has fallen beneath the replacement rate of 2.1.

<table>
<thead>
<tr>
<th></th>
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<tbody>
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<td>Japan</td>
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<td>Italy</td>
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**FIGURE 3A:** Japanese population structure, 1950

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<thead>
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<th>Age Group</th>
<th>1950</th>
</tr>
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<tbody>
<tr>
<td>0-4</td>
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<tr>
<td>95-99</td>
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**FIGURE 3B:** Japanese population structure, 2030

<table>
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<td>95.99</td>
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<tr>
<td>95-99</td>
<td>100+</td>
</tr>
</tbody>
</table>

**Source:** U.N.
WHAT IF FERTILITY DOESN’T REBOUND?

The official “medium variant” U.N. population projection assumes that fertility in the developed world will climb back to the replacement level, even though all the trends that have suppressed fertility — from growing affluence to more working women to the availability of effective birth control and abortion — continue unabated.

What happens if fertility doesn’t rebound? According to the official U.N. projection, the median age of the developed world will rise from 37.5 today to 45.6 by 2050. According to its “low variant” projection, which assumes that fertility will stabilize at about its current level, the median age will rise all the way to 51.1 by 2050. And this is just the average. In Germany, the median age will reach 53; in Japan, 54; and in Italy, 57. The population of the entire developed world would begin shrinking by 2013 — and Europe and Japan would lose roughly two-thirds of their current population by the end of the 21st century.

**FIGURE 4:** The population of the developed world will peak and begin to decline.

- “Medium” U.N. projection (peaks in 2026)
- “Low variant” U.N. projection (peaks in 2013)
Rising Longevity
Since World War II, global life expectancy has risen from around age 45 to age 65, for a greater gain over the past 50 years than over the previous 5,000. Meanwhile, life expectancy in the developed world has risen to age 75. And in Japan, the world’s longevity leader, it has reached age 80.

All experts agree that longevity will continue to rise in the next century. Pointing to recent progress on the genetic origins of illness and the biochemistry of human aging — as well as to healthier lifestyles — some even conclude that a life expectancy of 100 years or more is attainable within a few decades. Although the official projections are much more conservative, their implications are staggering. To spend the same number of years collecting benefits as the typical U.S. worker retiring at age 65 in 1935, the U.S. Social Security Administration projects that the typical worker in 2050 would have to wait until age 76 before retiring — a number that assumes only modest gains in longevity. The reality, of course, is that retirement ages have gone down, not up.

**Figure 5:** The life expectancy of the elderly is rising rapidly in developed countries.

![Graph showing life expectancy at age 65 by country](source: U.C. Berkeley, 1997)
Earlier Retirement

In the United States, the average Social Security retirement age has fallen from 69 to 63 since 1950. In Western Europe, workers are generally eligible for unreduced retirement benefits at age 60 — and even sooner for special disability benefits that often substitute for retirement pensions. In France, Germany and Italy, a mere 5 percent of men aged 65 and over are now employed. And it is not just the elderly who have been leaving the labor force in large numbers. In most countries, only one-quarter to one-third of men aged 60 to 64 still work.

What this means is that the ratio of tax-paying workers to nonworking pensioners in the developed world is due to fall much further than demographics alone suggest. Today, that ratio is 3 to 1. By 2030, it is projected to fall to 1.5 to 1 — and in a few European countries it will drop to 1 to 1 or even lower.

Growing Health Costs

Accelerating advances in medical technology, together with rising social expectations about care and cure, guarantee that health-care spending for all age groups will continue to grow faster than the economy in most developed countries. This cost trend is especially explosive because the elderly consume three to five times more health-care services per capita than younger people.

By 2050, there may be more Italians, Germans and Japanese over 80 than under 20.

Figure 6: Retirement ages have been steadily falling.

<table>
<thead>
<tr>
<th>Country</th>
<th>1960</th>
<th>1995</th>
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</thead>
<tbody>
<tr>
<td>France</td>
<td>64.5</td>
<td>59.2</td>
</tr>
<tr>
<td>Germany</td>
<td>65.2</td>
<td>60.3</td>
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<tr>
<td>Italy</td>
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<tr>
<td>Canada</td>
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<tr>
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<td>Japan</td>
<td>67.2</td>
<td>66.5</td>
</tr>
</tbody>
</table>

Average retirement age* for men, by country
- ■ 1960
- □ 1995

* Defined as age of total withdrawal from the labor force.
Moreover, the older the elderly are, the more health care they consume. And it is the population of the oldest old that will be growing the fastest. Worldwide, the number of elderly aged 65 to 84 is projected to grow threefold by the year 2050. But the number aged 85 and over is projected to grow sixfold — and the number aged 100 and over is projected to grow sixteenfold. This “aging of the aged” adds an extra multiplier to the burden of global aging. In the United States, the ratio of per capita health spending on the oldest segment of the population — aged 85 and over — to spending on elders aged 65 to 74 is 3 to 1; for nursing homes alone, it is more than 20 to 1.

**FIGURE 7: There will be fewer taxpayers to support each retired pensioner.**

<table>
<thead>
<tr>
<th>Country</th>
<th>1995</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.</td>
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<tr>
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<tr>
<td>Germany</td>
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</tr>
<tr>
<td>Italy</td>
<td>0.7</td>
<td>1.3</td>
</tr>
</tbody>
</table>

Ratio of contributors to retired pensioners in public pension systems, by country
- **1995**
- **2050**

Source: IMF (1996)
Global aging will bring profound changes to every dimension of public and private life in the developed countries — not just government budgets, but the economy, the family, politics and even the next century’s geopolitical order.

**Global Aging and Fiscal Policy**

The OECD projects that the average bill for public pensions in the developed world will grow by over 4 percent of GDP over the next three decades. In Japan and many countries of continental Europe, it will grow by over 6 percent of GDP. Add in health-care spending, and the total bill for public retirement benefits is due to rise by between 9 and 16 percent of GDP in most of the developed countries. This amounts to an extra 25 to 40 percent of workers’ taxable wages — on top of payroll tax rates that often exceed 40 percent already.

Even key developing countries may be facing severe fiscal stress. In China, pension costs are expected to exceed 40 percent of payroll by the early 2030s. In an economy in which most workers live near subsistence, this could be a crushing burden.

The fiscal cost of global aging leaves the developed countries no easy choices:

- Some countries may run widening budget deficits — possibly wrecking their economies before collapsing domestic investment or spiraling debt-service payments to foreigners compel them to change course. For the developed world as a whole, however, deficit financing is not an option. By the 2030s, the combined public pension deficit of the G-7 nations would exhaust the net national savings of all the developed countries.

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**FIGURE 8:** Graying means paying more for pensions and health care.

U.K. 10.5% 15.5%
U.S. 10.5% 17.0%
Canada 12.6% 22.5%
Japan 11.5% 23.1%
France 17.6% 25.8%
Germany 17.3% 28.8%
Italy 19.7% 33.3%

Public spending on pensions and health benefits, as a percentage of GDP, by country

- 1995
- 2030 (Official Projection)

By comparison, total G-7 public spending on defense, education and R&D was 8.1% of GDP in 1995.
WHAT IF LONGEVITY GROWS FASTER?

Most demographers agree that the official longevity projections for the American population are near the low end of possible outcomes. The U.S. Social Security Administration (SSA), for instance, assumes that longevity at age 65 will in the future grow at less than half its pace over the past quarter-century. If true, this means that U.S. life expectancy in the year 2050 will be no greater than Japanese life expectancy already is today.

At a time of stunning breakthroughs in biomedicine, many demographers expect that longevity gains will accelerate—not slow. Their forecasts point to much larger increases in the cost of pensions and health care for the exploding number of the oldest segment of the population.

<table>
<thead>
<tr>
<th>Projection by SSA</th>
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<td>Projection by Census</td>
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<tr>
<td>Projection by Ronald Lee*</td>
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<td>Projection by James Vaupel*</td>
<td>39.0</td>
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<tr>
<td>Projection by Kenneth Manton*</td>
<td>48.7</td>
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</tbody>
</table>

* Research funded by the National Institute on Aging (NIA).

**FIGURE 9:** The number of the oldest segment of the population could far exceed the official projections.

According to one **CHINESE JOURNALIST**, China is on track to become “the first society to get old before it gets rich.”
Some countries will try to make room for retirement benefits by cutting other spending. But this response, too, has its limits. The cost of global aging is so great that many countries could cut all nonbenefit spending and still find themselves unable to balance their budgets by the 2020s.

Raising taxes is a dubious option since few countries have room to raise them much. In the European Community, the total tax burden already averages 46 percent of GDP. Collecting an extra 9 to 16 percent of GDP might prove economically impossible. At some point, the revenue gain from higher tax rates will be entirely negated by the revenue loss due to slower economic growth — or a larger gray economy.

In the end, most countries will probably try all of the above — and still find that they have no choice but to cut retirement benefits. The real question is whether they will undertake reform sooner, while there is time to adjust and prepare, or later, when reform is forced upon them by economic or political crisis.

Global Aging and the Economy
Beyond the fiscal challenge, global aging poses even more fundamental economic challenges. As populations decline in the coming decades, so too will the number of consumers and producers. For example, by 2010, the European Union will experience a 13 percent decline in populations aged 20–39. Because this age group is in its household-forming years, a time of life when home-buying propels demand for everything from washing machines...
to baby carriages, its decline could lead to overcapacity and falling returns on investment in such key sectors as construction, real estate and durable goods. Many products will see declining domestic unit sales for as far into the future as it is possible to project. Banks, pension funds and other institutions that hold mortgage-backed securities could likewise experience deteriorating balance sheets.

Moreover, as a larger share of the population enters its harvest years, the OECD projects that the private saving rate in the developed world will fall by more than half (a trend that would be accelerated by reductions in pension benefits or increases in taxes). Some economists say that this isn’t a problem since societies with slowly growing (or shrinking) workforces won’t need to invest as much to maintain the same rate of growth in output per worker. Others disagree. The pace of technological progress may depend crucially on the volume of investment a society undertakes. An optimistic outlook for national savings, moreover, assumes that growing fiscal deficits won’t crowd out private savings and productive investment.

Whatever happens to savings, tomorrow’s economies will look very different from today’s. By the 2010s, the workforce in Japan and much of continental Europe is projected to be contracting by roughly 1 percent per year — which means that, unless productivity growth speeds up, the real economies of some countries may begin contracting as well. How will government leaders react when the tax base is scheduled to decline from one decade to the next? How will business leaders react when the size of their markets is expected to shrink from one decade to the next?

Global aging will breathe new life into the old debate over the desirability of zero or negative population growth. On the plus side, some economists stress that natural resources are finite, and that less growth therefore helps living standards. On the minus side, others argue that fixed-cost undertakings become more affordable when their cost can be spread over a larger population. The classic examples are basic research and infrastructure investment. There are also important examples of fixed-cost challenges — a geopolitical threat, for instance — where sheer demographic and economic size can determine the fate of nations.

In Japan, the number of workers under age 30 is expected to fall by 25 percent between 2000 and 2010.
A Recipe for Financial Chaos

Japan is now the world’s largest capital exporter. If it fails to change its fiscal course, it will have to become a net capital importer within a decade simply to maintain its current level of domestic investment. Over the next 10 years, the growth in Japan’s public pension deficit is projected to be three times larger than its current capital exports to the United States. Over the next 30 years, it is projected to be 30 times larger.

<table>
<thead>
<tr>
<th>Growth in Japan’s Public Pension Deficit* as a Percentage of GDP:</th>
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<tbody>
<tr>
<td>2000 to 2010</td>
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<tr>
<td>3.1%</td>
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* Includes interest on prior-year deficits. Source: OECD (1997)

Global Aging and Financial Markets

Global aging will also threaten the stability of world financial markets. One danger is that some of today’s large capital exporting nations will fail to enact timely fiscal reform and begin running massive budget deficits early in the next century. This in turn could lead to large and destabilizing shifts in the direction of global capital flows — perhaps triggering a world financial crisis. Another danger is the possibility of global capital shortages (Fig. 9). Japan and Europe heretofore have supplied the lion’s share of capital to global financial markets. But by 2020, they could be net capital importers. The effect may be to shift the role of international lender to the emerging economies of Asia and Latin America. In that case, global financial stability might depend on the leadership of the developing world.

Meanwhile, divergent fiscal policies will strain regional economic unions like the EMU. Currently, there are few effective circuit-breakers in place. The official debt and deficit criteria for membership in the EMU do not take into account unfunded pension liabilities. As these come due, countries that fail to reform their public retirement systems will find it difficult to meet the EMU’s deficit ceiling. Will the ceiling be retained at the insistence of countries that have put their fiscal house in order? Or will it be eased? Either way, the EMU could unravel.

In the English-speaking world, countries will have to cope with the financial stress triggered by the retirement of the large Baby Boom generation a decade from now. Many economists expect that as Boomers start selling their financial assets en masse to the smaller “Buster” cohorts following them, the financial markets will experience a “great depreciation.” If so, the retirement plans of millions of individuals could be ruined — leading to pressure to increase the generosity of public benefit systems just as they are due to become unaffordable.

Much will depend upon the demand in the developing world for investments denominated in yen, euros or dollars.
Global Aging and Labor Markets

Global aging will usher in an era of tight labor markets in the developed countries. Governments may respond with policies designed to expand the labor supply, either by encouraging more citizens to work or by encouraging those who are already employed to work more. In most countries, however, such policies will have to overcome deep-rooted social expectations — about early retirement or the role of women or shorter work weeks. Moreover, they are unlikely to be effective unless governments first reform public retirement systems, whose rising cost is one important reason the labor supply isn’t bigger to begin with.

Aging developed countries will also debate whether to welcome more immigration from a younger developing world. In the EU, under current retirement practices, immigration would have to average 4 million annually in order to compensate for projected declines in native-born workers. Whether or not quotas are raised, businesses will seek new ways to hire inexpensive foreign labor. Already, a growing number of U.S. firms are exporting work (such as data entry) rather than importing the workers. Meanwhile, several European governments are issuing seasonal visas for domestic workers. As native labor becomes scarcer, however, the pressure to step up immigration will grow — both from those seeking jobs and from those offering them.

According to **ONE ESTIMATE**, the payroll tax hikes needed to cover the rising costs of public pensions in Europe will add a cumulative $5 per hour to real manufacturing costs by the mid-2020s.
Governments everywhere are counting on families to assume most of the burden of long-term care for the frail elderly, especially the rapidly growing number of the oldest segment of the population. This burden will grow heavier. Today’s elders typically have two or more children, increasing the odds that at least one will be able and willing to help out. But when today’s working-age adults grow old in their turn, they will be much more likely to have only one child or no child — or to be never-married, widowed or divorced. When the need for long-term care arises, a growing share will have no alternative to public programs.

This is part of a bigger problem: the unprecedented transformation in the size and shape of the extended family. In some of today’s developed countries, at least one child in two is an only child. Fast-forward another generation, and at least one in four will have neither brothers nor sisters, nor aunts nor uncles, nor cousins. Even as families shrink in size, rising life expectancy is multiplying the number of generational tiers alive at one time — not just more grandparents, but more great-grandparents and great-great-grandparents.

In recent years, the expansion of public retirement benefits, the entrance of women into the labor market and the rise of a new ethic of “independent living” have weakened the traditional role of the family as a support network for dependents of all ages. Now global aging threatens to heap vast new burdens upon it. Will it be up to the task? And if it is not, can government take up the slack?
Global Aging and Politics

Despite the mounting evidence that today’s public retirement systems are unsustainable, politicians and voters remain in denial. In Europe, generous unfunded pensions are considered the indispensable linchpin of “social solidarity” — and talk of benefit cuts instantly raises class hackles. In the United States, they are defended as “earned” entitlements, tantamount to personal property.

In the years to come, the growing political power of older voters could make reform even more difficult. By 2030, nearly half of all adults in developed countries and perhaps two-thirds of all voters will be at or beyond today’s retirement age.

Indeed, the power of the elderly is already on the rise. Until recently, organized senior lobbies were largely a U.S. phenomenon. But the electoral clout of the elderly is also growing in Europe, where it operates through labor unions and labor-affiliated political parties. In the Netherlands, a newly formed “Pension Party” has scored successes at the voting booth. And in most of Eastern Europe, the Communist Party has emerged as the de facto party of pensioners. Paradoxically, the cause of big government is becoming associated with the political and economic interests of the old, not the young — a reversal of the customary stereotype.

By the YEAR 2030,
over half of all U.S. adults will be over age 50 —
and thus be eligible to join the American Association of Retired Persons.
Global Aging and the World Order

Ever since Thucydides, historians have observed that the rise and fall of civilizations is closely linked to demographic trends. Throughout history, contracting populations have given way militarily, economically and culturally to expanding ones. While today’s older developed countries are not predestined to pass their leadership to younger developing countries, they cannot ignore the geopolitical implications of diverging fertility and age trends.

A demographically expanding developing world may be a politically unstable one. Many of the countries that have the youngest and fastest-growing populations — in the Middle East, in Africa and in Central Asia — also have the highest poverty rates, the most rapid urbanization and the weakest traditions of democratic government. Many strategic planners anticipate a proliferation of local and regional conflicts early in the next century — leading to more frequent intervention by the developed countries. The localities with the biggest “youth bulges” are assumed to be the biggest potential trouble spots.

At the same time, an aging developed world will find it harder to meet its security commitments.

Defense and international affairs budgets will be under constant pressure from rising pension and health-care expenditures.

**FIGURE 12:** The developed countries will make up a shrinking share of the world population.

![Graph showing the percentage of developed world population as a percentage of total world population. The data points are as follows:

- In 1950: 23.5%
- In 2000: 14.5%
- In 2050: 9.7%](source: UN (1997))

Developed world population as a percentage of total world population.
Armed forces may experience chronic manpower shortages — both because the number of youth will be declining and because tight civilian labor markets will make military careers less attractive. If so, the substitution of military capital for labor could lead further in the direction of high-tech “cruise-missile” intervention designed to minimize loss of life.

Elder-dominated electorates may also be more risk averse, shunning decisive confrontations abroad in favor of ad hoc settlements.

The changing structure of families could pose a serious issue if parents remain unwilling (as traditionally they have been) to risk their only male children in combat situations.

It is also possible that many of today’s developed countries will someday become dependent on capital imports from higher-saving, faster-growing developing countries to finance domestic investment — and, indeed, national defense. How will the international balance of power change if China is a large lender and Japan, Germany and the United States are all large borrowers?

In 1950, seven of the world’s most populous nations were developed countries. By 2050, only one developed country will remain on that list: the United States. As the developed world’s population (and ultimately its economic output) shrinks as a share of the world total, other great powers will arise. The challenge facing an aging developed world is how to ensure that the emerging newer order is compatible with its values, interests and long-term security.

**GUNS VERSUS GERITOL**

**FIGURE 13:** G-7 government spending on pensions, health benefits and defense, as a percentage of GDP.

<table>
<thead>
<tr>
<th></th>
<th>1960</th>
<th>1995</th>
<th>2030</th>
</tr>
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<tbody>
<tr>
<td>Pension benefits</td>
<td>4.8%</td>
<td>7.9%</td>
<td>12.1%</td>
</tr>
<tr>
<td>Health benefits</td>
<td>2.5%</td>
<td>6.3%</td>
<td>11.6%</td>
</tr>
<tr>
<td>National defense</td>
<td>5.0%</td>
<td>2.3%</td>
<td>?</td>
</tr>
</tbody>
</table>

Source: OECD (1997)

**SAUDI ARABIA** already imports food and has severe water shortages.

Yet its population will double by 2020.
The challenge of global aging is beginning to find its way onto the political agendas of the developed countries. Over the past few years, many governments have debated trimming pension-benefit formulas. Five of the G-7 nations have already scheduled modest future hikes in the full-benefit retirement age. And two countries — Britain and Australia — are even replacing unfunded public retirement systems with funded systems based on personally owned savings.

Yet almost everywhere, the cost projections remain unsustainable. Sooner or later, most countries will have to make much deeper reductions in public retirement benefits than politicians or voters are now ready to contemplate. At the same time, they will have to grapple with a bigger question: What will replace the benefits that are cut? Many households have nothing to count on in retirement except a government check. Outside of the English-speaking world, only a few small countries have funded private pension systems covering half or more of the workforce. And household savings rates everywhere are highly skewed by income.

In the years ahead, the developed countries will be looking for ways to meet the needs of tomorrow’s elderly without overburdening the economy or overtaxing the young. Many different strategies will be on the table:

- **Strengthen foundations for economic growth.** With benefits outlays rising rapidly, the industrial nations must have sustained, robust economic growth in order to avoid fiscal crisis. Reforms to a range of policies that inhibit capital and labor productivity — from taxes to pensions to employment to financial markets — are increasingly essential to the maintenance of social guarantees in the 21st century.

- **Encourage longer worklives.** The most direct way to achieve large fiscal and economic savings without hurting the living standards of the elderly is to encourage longer worklives. Moving beyond the traditional three-box life-cycle of education, work and retirement would also have enormous benefits for the economy — and, many gerontologists believe, for the elderly themselves.
Encourage more work from the nonelderly — either by persuading working-age citizens to work more or by expanding immigration. Like longer worklives, this strategy would increase the size of the economy and tax base. Societies with low rates of immigration (like Japan) or with high labor costs and high unemployment (like Germany) will find themselves engaged in a heated debate over the costs and benefits of this “American” strategy.

Raise more numerous and more productive children. This strategy would spread the elder dependency burden over a larger and more affluent rising generation. A number of developed countries — notably the Scandinavian nations and France — have a long tradition of generous public funding for pronatal incentives and investment in children. This tradition might spread to other countries, partly in response to worries about population decline.

Strengthen family bonds. Societies like the United States in which the extended family is weak, elder poverty is high and long-term care costs are rising fast have much to learn from “Confucian” societies like Japan. While no Western country is likely to import this ethic wholesale, many will be looking at policies that encourage and help family members to care for each other.

Target benefits according to need. Public retirement systems generally disburse benefits to all retirees regardless of income or wealth. Although Australia is now the only developed country where all public pension benefits are means tested, other countries may turn to this “floor of protection” strategy.

Require people to save more throughout their worklives. Britain and Australia (along with Chile and Singapore) are showing the world how to move toward funded retirement savings. This strategy does most to overcome one of the biggest challenges of global aging — namely, how to sustain adequate rates of savings and investment. Besides longer worklives, it is also the only strategy that does not impose a direct tax or indirect economic and familial burden on future generations.

While all of these strategies promise large fiscal and economic payoffs, all will be difficult to implement. Some, like later retirement and targeting benefits according to need, will challenge settled expectations — in this case, that government should subsidize early retirement for everyone. Some, like pronatal policies and stepped-up immigration, are sure to trigger cultural and social controversy. Some, like investing more in children, may require more patience and wisdom than most governments now possess. And practically all will be more acceptable in some countries than in others. Strengthening family bonds, for example, will be easier in Asia than in North America, while mandatory savings will appeal more to North Americans than to continental Europeans.
In our personal lives, everyone understands the importance of age. At 50, we do not expect to act or behave or feel as we did at 20 — nor at 80 as we did at 50. The same is true for entire societies. Demographic aging brings with it a systemic transformation of all spheres of social life — a transformation so profound that it may, in key respects, transcend cultural boundaries. From Tokyo to Paris to Warsaw to Washington, it is already generating similar newspaper headlines on roughly the same fiscal, family and health issues.

Beneath these headlines, and beneath even the daunting fiscal projections, lies a longer-term economic, social and cultural dynamic whose workings we are only just beginning to understand. What will it be like to live in societies that are much older than any we have ever known or imagined? Does the developed world understand all the challenges and opportunities this transition may present? Is it ready to mobilize policies accordingly? With societies as with people, those that plan ahead are the ones that succeed in aging gracefully — and wisely.

Bradley D. Belt, CSIS Senior Vice President for Policy Development, oversaw the development and design of this report. Paul S. Hewitt, CSIS Research Fellow and Project Director of the Global Aging Initiative, and Sylvester J. Schieber, Director of the Watson Wyatt Research and Information Center, provided editorial direction and content. The team of Richard Jackson and Neil Howe led the research and drafting.

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