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The Global Aging Preparedness Index: A New Tool for Assessing How Well Prepared Countries are for Global Aging

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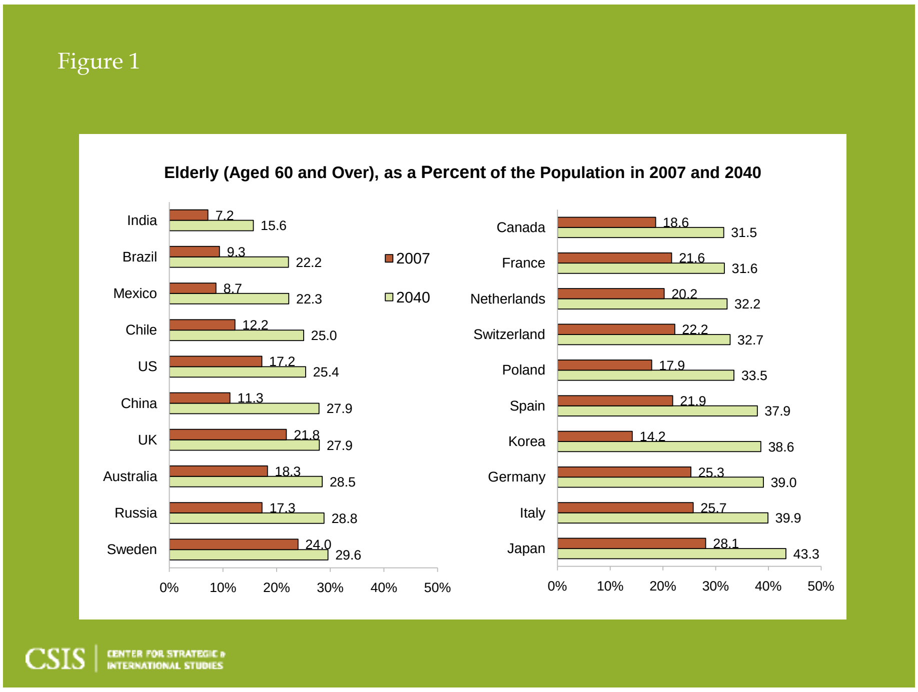
The world stands on the threshold of a stunning demographic transformation. For most of history until well into the 19th century, the elderly—defined here as adults aged 60 and over—comprised only a tiny fraction of the population, never more than 4 or 5 per cent in any country. In the developed world today, they comprise roughly 20 per cent of the population. Three decades from now in 2040, the share is on track to reach 30 per cent—and that is just the average. In Japan and the fastest-aging European countries, it will be approaching or passing 40 per cent.[1] (See Figure 1.)

Figure 1: Elderly (aged 60 and over), as a per cent of the population in 2007 and 2040



The developing world as a whole is still much younger, but it too is aging—with some countries traversing the entire demographic distance from young and growing to old and stagnant or declining at a breathtaking pace. By 2040, Brazil and Mexico will be nearly as old as the United States and China will be older. Meanwhile, South Korea will be vying with Germany, Italy, and Japan for the title of the country with the oldest population on earth.

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1 The demographic projections cited in this article are from the United Nation's *World Population Prospects: The 2008 Revision* (New York: UN Population Division, 2009). They refer to the UN's "constant fertility variant", except for India, where they refer to the "medium variant".

The demographic transformation now sweeping the world promises to affect every dimension of economic, social, and political life. Perhaps most fatefully, it could throw into question the ability of societies to provide a decent standard of living for the old without imposing a crushing burden on the young.

Which countries are most prepared to meet the challenge? And which countries are the least prepared? The Global Aging Preparedness Index (or GAP Index), developed by the Center for Strategic and International Studies, provides the first comprehensive quantitative assessment of the progress that countries worldwide are making in preparing for global aging, and particularly the old-age dependency dimension of the challenge.

Purpose and Structure of the GAP Index

Ten or 15 years ago, global aging barely registered as a policy issue. Today, it has become the focus of growing concern worldwide. Many governments are beginning to debate and some have enacted major reforms.

Most of the concern, especially in the developed world, is focused on the rising fiscal cost of government benefit programs. Most developed countries have expensive pay-as-you-go public pension systems that were put in place or expanded back in the early postwar decades when workers were relatively abundant and retirees scarce, but which the steep decline in fertility and the steady rise in life expectancy are now rendering unsustainable. Graying also means paying much more for healthcare, because the elderly typically consume at least three times more per capita in medical services and at least ten times more in long-term care services than the non-elderly.

Meanwhile, in the developing world, governments are beginning to worry that societies may grow old before they grow rich. Many emerging markets are aging before they have had time to put in place the full social protections of a modern welfare State. In China, India, and Mexico, only a fraction of the workforce is earning a formal retirement benefit of any kind, and the majority of elders still depend heavily on the extended family for support. Yet the informal family networks on which elders depend are already under stress from the forces of modernization—and will soon come under intense new pressure as populations age and family size declines. Here the problem is not so much the growing burden on the young as the growing vulnerability of the old.

Yet despite the growing concern, there exists no satisfactory measure of how well countries are actually responding to the challenge. The purpose of the Global Aging Preparedness Index is to fill this gap. The GAP Index is based on projections of public benefit spending and household income by age through the year 2040. It covers 20 countries, including most major developed countries and a selection of economically important emerging markets for which adequate data were available.

In calculating the GAP Index, we use a current policy and current behavior baseline. The projections fully reflect the future impact of retirement policy reforms that have already been enacted but are being phased in over time. They also incorporate predictable “cohort effects” in rates of labor-force participation and pension receipt. The projections, however, do not anticipate additional policy or behavioral responses beyond those that are already in the pipeline. The GAP Index thus serves as a “stress test” of current retirement policies. Its purpose is not to forecast where countries will necessarily end up, but rather to show where they are heading on their current course.

The GAP Index consists of two subindices—a fiscal sustainability index and an income adequacy index. These subindices in turn are based on indicators grouped into distinct categories, each dealing with a different dimension of the challenge (see Figures 2 and 3).

On the fiscal side, the GAP Index includes three indicator categories: public burden, fiscal room, and benefit dependence. The public burden category measures the magnitude of each country’s projected public old-age dependency burden, including both State pensions and health benefits. The fiscal room category measures each country’s ability to accommodate the growth in its public old-age dependency burden by raising taxes, cutting other government spending, or borrowing. The benefit dependence category measures how dependent the elderly in each country are on public benefits, and thus how politically difficult it may be to enact cost-cutting reforms—or indeed, to follow through on reforms that have already been enacted but not yet phased in.

Figure 2: GAP Fiscal Sustainability Index

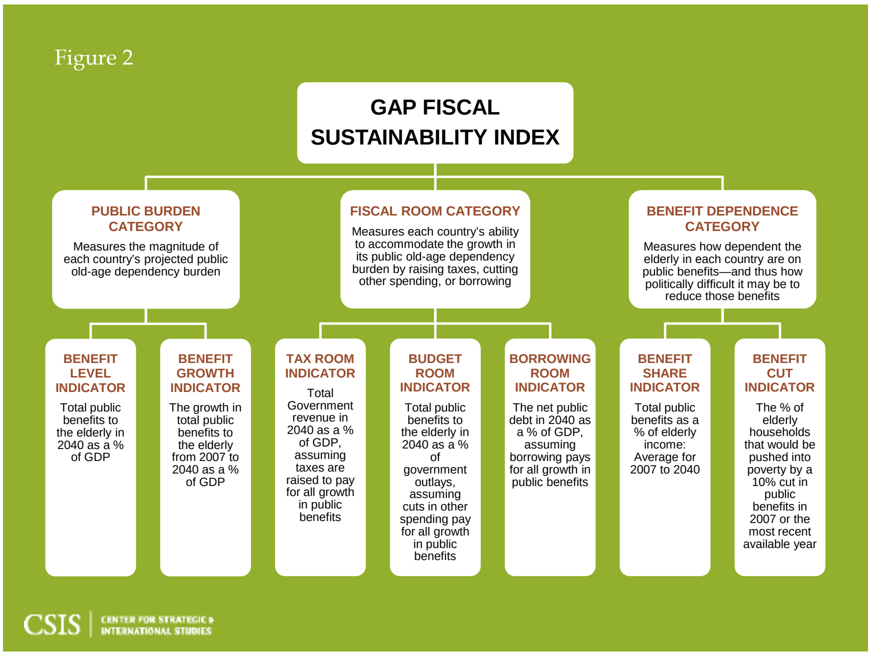
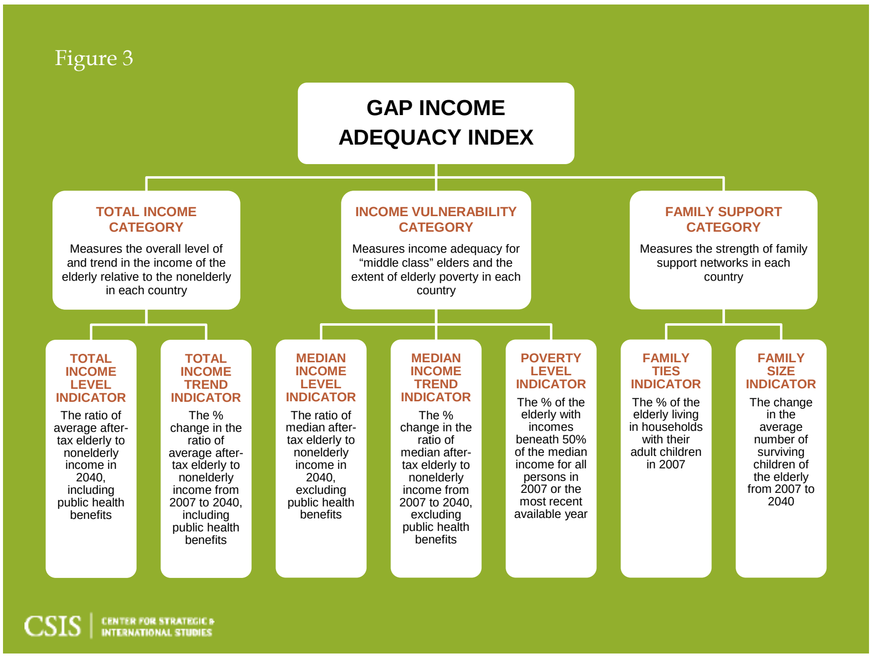


Figure 3: GAP Income Adequacy Index



On the adequacy side, there are also three indicator categories: total income, income vulnerability, and family support. The total income category measures the overall level of and trend in the living standard of the elderly relative to the non-elderly in each country. The income vulnerability category measures the relative level of and trend in the living standard of "middle income" elders in each country, a group that will be disproportionately affected by changes in the generosity of retirement income systems, as well as the extent of elderly poverty. The family support category measures the strength of informal family support networks, which play a crucial role in retirement security in many emerging markets and some developed countries.

Note that the GAP Index measures the performance of countries relative to each other rather than against some absolute standard of "preparedness". We considered establishing such a standard, but concluded that any benchmark would be arbitrary. There is no real consensus within countries, much less across countries, on what constitutes an acceptable old-age benefit burden on workers or an acceptable living standard for retirees. Yet almost everyone would agree that the lower the burden on workers is and the higher the relative living standard of retirees is, the more prepared the country is.

Overview of the GAP Index Results

Figure 4 presents the overall results for the fiscal sustainability and income adequacy indices. What's most striking is that very few countries score well on both indices. Three of the seven highest-ranking countries on the fiscal sustainability index (Mexico, China and Russia) are among the seven lowest-ranking countries on the income adequacy index. Four of the seven highest-ranking countries on the income adequacy index (the Netherlands, Brazil, Germany, and the U.K.) are among the seven lowest-ranking countries on the fiscal sustainability index.

Figure 4: GAP Index Country Rankings

Figure 4 **GAP Index Country Rankings**

Fiscal Sustainability Index		Income Adequacy Index	
1	India	1	Netherlands
2	Mexico	2	Brazil
3	Chile	3	US
4	China	4	Germany
5	Russia	5	UK
6	Poland	6	Australia
7	Australia	7	Sweden
8	Japan	8	Chile
9	Canada	9	Spain
10	Sweden	10	India
11	US	11	Canada
12	Korea	12	Japan
13	Switzerland	13	Poland
14	Germany	14	Switzerland
15	UK	15	Russia
16	Italy	16	France
17	France	17	Italy
18	Brazil	18	China
19	Netherlands	19	Korea
20	Spain	20	Mexico

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The emerging markets generally score much better on fiscal sustainability than income adequacy. In the developed countries, with their expansive welfare States, the trade-off is precisely the reverse. There are, however, a few notable exceptions. Brazil, which spends more on pensions than many rich countries, scores spectacularly on adequacy, but dismally on sustainability. There are also two developed countries that score near the bottom of both indices: France and Italy. To rein in the rising cost of their pay-as-you-go old-age benefits, these countries have enacted pension reforms that dramatically reduce the generosity of the public "deal" that future retirees can expect to receive. Yet France and Italy have such expensive old-age benefit systems that, even after the reforms, they remain on a fiscally unsustainable course. In short, both countries are moving towards retirement systems that are all at once inadequate and unaffordable.

The few countries that score well in the GAP Index on both dimensions of aging preparedness generally have modest pay-as-you-go State benefits, large funded pension systems, and high rates of elderly labor-force participation. Australia, which combines a low-cost, means-tested floor of public old-age income support with a large, mandatory, and fully-funded private pension system, ranks well into the top half of both indices. So does Chile, which has a similar mix of retirement policies. Canada and the United States, with their well-developed private pension systems and large numbers of working elderly, also do a better job of balancing fiscal sustainability and income adequacy than most countries.

Several other countries, moreover, are clearly moving in the right direction. Like France and Italy, Germany and Sweden have scheduled deep reductions in the future generosity of their public pension systems. But unlike France and Italy, they are on track to fill in the resulting gap in elderly income by increasing funded pension savings and extending work lives. Although their fiscal burdens remain high, they have been cut well beneath what they would otherwise be without undermining adequacy.

This contrast points to a crucial lesson. Most of the world's developed economies—as well as a few emerging markets—will have to make large reductions in the generosity of State retirement provision to stave off fiscal Armageddon. But unless reforms also ensure income adequacy for the old, the reductions are unlikely to be socially and politically sustainable. This is especially true in Europe, where State benefits make up a huge share of total elderly income. In France, Germany, Italy, and Spain, over 70 per cent of the income of the typical elder comes in the form of a government cheque.

The example of the U.K. should be heeded. In the 1980s, the U.K. switched the indexation of its basic State pension from wages to prices, flattening the projected growth in old-age benefits as a share of GDP. However, as price indexing caused benefits to decline steadily as a share of wages, concerns about the reform grew. In 2007, amid an emerging consensus that current policy would impoverish the elderly, the government re-indexed benefits to wages. The U.K. now scores much better on income adequacy than it would have ten years ago, but it also scores much worse on fiscal sustainability.

One might object that the better prepared countries have more favorable demographics than the worse prepared countries. This is generally true, though it is worth pointing out that the demographic outlook in Australia, Canada, and the United States gets a big boost from immigration, which is a matter of policy choice. Nor is demography necessarily destiny. The aging trend in France, which has the highest fertility in Europe, is no more severe than in Australia or Canada. Yet it ranks near the bottom of both indices. Japan, despite its massive age wave, ranks in the middle of both indices, thanks to its relatively modest per capita public pension benefits, which help to minimize the fiscal burden, and its high rates of elderly labor force participation and multigenerational living, which help to boost old-age income. In short, policy matters.

Conclusion

Clearly, global aging poses a daunting economic and social challenge. Many fast-aging countries, especially in the developed world, face a difficult choice between relieving the growing fiscal burden on the young and maintaining adequate income for the old. In most developing countries, the choice is just the opposite: whether to impose a new fiscal burden on the young in order to relieve the growing vulnerability of the old.

Yet just as clearly, there are many strategies available to address the challenge—and not all involve painful trade-offs. The GAP Index includes a reform guide that assesses the urgency and potential payoff in different countries of seven key reform strategies, from reducing public pension benefits and healthcare cost growth to strengthening old-age poverty floors and increasing fertility rates and immigration. Two strategies in particular—extending work lives and increasing funded pension savings—are especially important, since they allow countries to escape, or at least to mitigate, the trade-off between fiscal sustainability and income adequacy. In fact, they are the only means by which aging countries can maintain or improve the adequacy of income for the old without imposing a new tax or family burden on the young.

With much of the world still reeling from the global economic crisis that began in 2008, many policy leaders may conclude that now is not the right time to address the long-term challenge of global aging. This would be a mistake. In fact, the economic crisis has made timely action even more urgent. It has drastically reduced the fiscal resources that most countries have to accommodate rising old-age benefit costs. At the same time, it has left many elderly people more vulnerable. There's also the critical issue of confidence. The public and the markets increasingly worry that governments have lost control over their fiscal future. In this sense, taking credible steps to address the long-term aging challenge may be a necessary part of ensuring near-term recovery as well.

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