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Addressing the Challenge of Global Ageing—Funding Issues and Insurance Solutions

edited by Patrick M. Liedtke and Kai-Uwe Schanz

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Addressing the Challenge of Global Ageing—Funding Issues and Insurance Solutions

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1. How demography is reshaping the economic and social landscape of the 21st century

Richard Jackson

Ten or fifteen years ago, global ageing barely registered as a policy issue. Today, with large age waves looming just over the horizon in most of the world's leading economies, it has become the focus of growing concern.

Much of the concern, especially in the developed world, is focused on reducing the rising fiscal burden of pay-as-you-go state retirement programmes that were put in place back in the early postwar decades when workers were abundant and retirees were scarce, but which are now being rendered unsustainable by the collapse in birthrates and the steady rise in life expectancy. Meanwhile, in the developing world, countries are waking up to the prospect that they may grow old before they grow rich. While today's fully developed economies were all affluent societies with mature welfare states by the time they became ageing societies, many of today's emerging markets are ageing before they have had time to put in place adequate government and market substitutes for informal family support networks. If the challenge for most developed countries is how to ameliorate the growing burden on the young, the challenge for most emerging markets is how to ameliorate the growing vulnerability of the old.

Beyond this old-age dependency challenge, countries are also beginning to worry about how global ageing will affect the dynamism of their economies, the mood of their societies and even their place in the world order. Demographic trends, after all, can play a central role in determining everything from rates of savings and investment to rates of employment and productivity growth. As populations age—and grow more slowly or contract—what are the implications for growth in the standard of living, business psychology and electoral behaviour? Most fundamentally, will ageing societies be able to meet the needs of the old while maintaining opportunity for the young?

Despite the growing concern about global ageing, the full implications are not well understood by policymakers, corporate decision-makers or the public. The purpose of this chapter is to help raise awareness of this challenge and promote constructive policy responses. The first section briefly reviews the scope and causes of the unprecedented demographic transformation now sweeping the world. The second section focuses on the central old-age dependency dimension of the global ageing challenge—that is, the challenge of balancing fiscal sustainability and income adequacy. Here the analysis draws on the results of the Center for Strategic and International Studies' (CSIS) Global Aging Preparedness Index (or GAP Index), a unique new tool for assessing “ageing preparedness” on a comparable basis across countries. The third section expands the

chapter's horizons and considers the broader economic and social implications of global ageing. The final section identifies and discusses six critical policy strategies.

1. The demographic transformation

The world stands on the threshold of a stunning demographic transformation. For most of history, the elderly—defined throughout this chapter as adults aged 60 and over—only comprised a tiny fraction of the population, never more than 5 per cent in any country. That share first began to rise in what we now call the developed world during the Industrial Revolution of the 19th century. In the developed world today, the elderly comprise a little over 20 per cent of the population. By 2040, the share will reach 30 per cent—and this is just the average. In Japan and some faster-ageing European countries, it could be approaching or even passing 40 per cent¹ (see Figure 1).

Most developed countries will not only have ageing populations, but also stagnant or contracting ones. The working-age population has already begun to contract in several large developed countries, including Germany, Italy and Japan. By 2030, it will be contracting in nearly all developed countries, the only major exception being the United States. In a growing number of countries, the population as a whole will decline as well.

Although it is today's developed countries that are leading the way into humanity's graying future, global ageing, as the name implies, is a global phenomenon. The developing world as a whole is still much younger, but it too is ageing—with some emerging markets traversing the entire demographic distance from young and growing to old and stagnant or declining at a breathtaking pace. By 2040, Brazil and Indonesia 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 oldest country on earth.

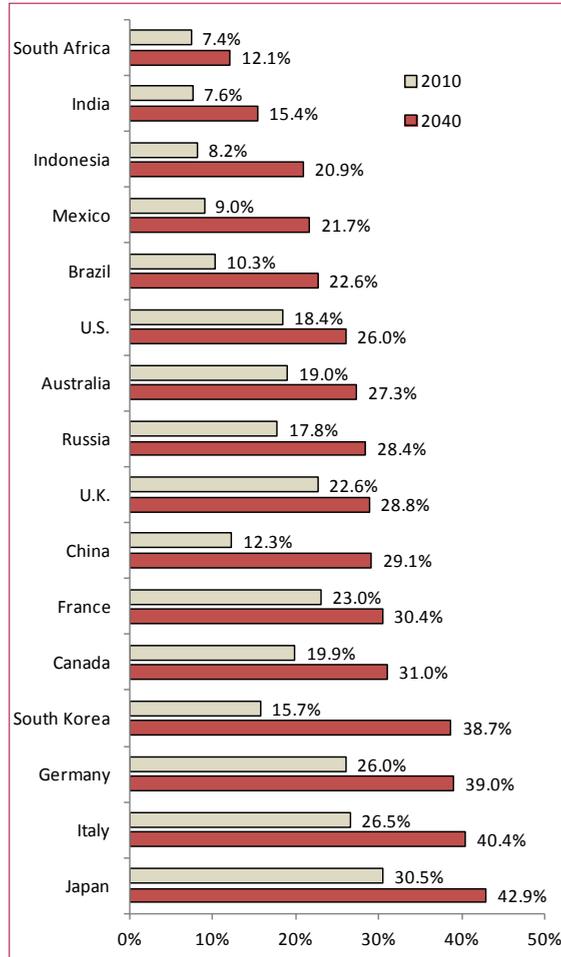
There are two forces behind the demographic transformation. The first and quantitatively more important force is falling fertility. People are having fewer babies, and this decreases the relative number of young in the population. As recently as the mid-1960s, every developed country was at or above the so-called 2.1 replacement rate needed to maintain a stable population from one generation to the next. Today, every developed country is at or below it—and most are far below it. In Germany and Italy, the fertility rate is just 1.4 and in Japan it is just 1.3. Although the trend toward lower birthrates began in the developed world, it has now overtaken most of the developing world as well. Fertility has fallen well beneath the replacement rate in all of East Asia. It is also well beneath replacement throughout Central and Eastern Europe, and it is near, at or beneath replacement in most of Latin America's leading economies. Although higher, fertility rates are also falling rapidly in South Asia and much of the Muslim world. The only region largely bypassed by the trend is sub-Saharan Africa.

The second force is rising life expectancy. People are living longer, and this increases the relative number of elderly in the population. Worldwide, life expectancy at birth has increased by roughly 20 years since 1950, a larger gain over the past 60 years than humanity had achieved over the previous six thousand. In the developed world, life expectancy has now risen into the late seventies or early eighties in every country, and

¹ Most of the demographic data cited in this chapter come from the United Nations Population Division (United Nations, 2011). For countries whose current (2005-2010 average) fertility rate is 2.1 or lower, the projections refer to the UN's "constant fertility" variant; for countries whose current fertility rate is above 2.1, they refer to the UN's "medium variant".

it has reached the same level, or nearly the same level, in some emerging markets. Life expectancy in China today is 73 (up from 45 in 1950), in Mexico it is 76 (up from 51 in 1950) and in South Korea it is 80 (up from 48 in 1950).

Figure 1: Elderly (aged 60 and over), as a percentage of the population in 2010 and 2040



Source: United Nations (2011).

The timing of the demographic transformation, though not its ultimate extent, is also affected by the ageing of postwar baby boom generations, which were particularly large in the United States and other English-speaking countries. As they have moved through youth and middle age, they have temporarily slowed the rise in old-age dependency burdens—but when they arrive in old age, they will accelerate it. Some emerging markets, notably China, also have unusually large baby boom generations approaching old age. But in contrast to the developed world, whose baby booms were due to a temporary spike

in fertility rates, the developing world baby booms are simply the last large generations born before fertility rates began to decline.

Non-demographers may suppose that population projections two or three decades into the future must be highly speculative. But in fact, global ageing is perhaps the most certain prediction that social science can make about the future. Falling fertility is the result of many well-established social and economic trends, from increasing affluence to increasing female educational attainment. Rising life expectancy is the result of ongoing improvements in nutrition, public health and medical technology. Few experts believe that any of these trends will be reversed in the near future. And even if the experts are proved wrong, “demographic momentum” still ensures that the world will age dramatically over the next few decades. Even a new baby boom would have no appreciable impact on the size of the working-age population or the ratio of workers to retirees over the next 20 years and only a modest impact over the next 30 years.

Demography is like an ocean liner: once it is steaming full speed ahead, it can only change course slowly. For better or worse, governments, businesses and families will have to cope with the challenges that global ageing poses.

2. The old-age dependency challenge

The most obvious challenge, at least for the developed countries, is containing the rising fiscal burden of government benefit programmes. Graying means paying—more for pensions, more for healthcare and more for long-term care for the frail elderly. Falling fertility and rising longevity translate directly into a falling support ratio of taxpaying workers to retired beneficiaries, and a falling support ratio in turn translates into a rising cost rate for pay-as-you-go social insurance, which is now the dominant pillar of old-age support in the great majority of developed countries.

To gauge the potential fiscal burden, CSIS has projected the cost of government benefit spending on the elderly under a “current deal” scenario that assumes the present generosity of benefit systems remains unchanged in the future.² In the 12 largest developed economies, state pension spending on the elderly would, on average, nearly double as a share of GDP, from 7.4 per cent in 2007 to 13.1 per cent in 2040. The cost would be lower in Australia, Canada and the United States, which both spend less per capita on pensions than the developed-world average and are due to age less. It would be higher in Japan and the countries of continental Europe, most of which have more generous pension systems and faster-ageing populations. In France, Germany, Japan and Spain, state pension spending on the elderly would approach 20 per cent of GDP by 2040 and in Italy it would approach 25 per cent. Adding in spending on healthcare and other benefits, the total cost of the current deal would, on average, rise from 12.9 per cent of GDP in 2007 to 23.0 per cent in 2040. In France, Germany and Japan it would exceed 25 per cent and in Italy it would exceed 30 per cent.

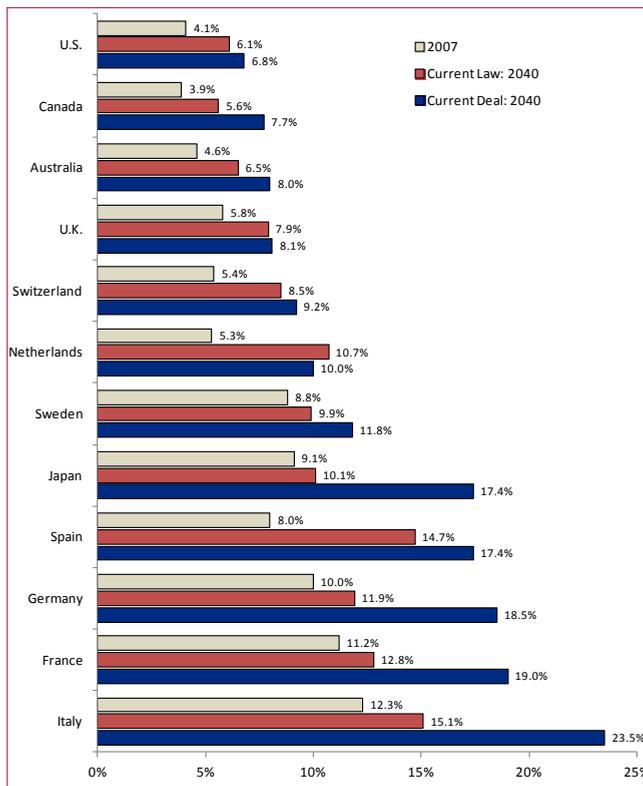
Faced with this daunting fiscal arithmetic, many developed countries are introducing reforms that are scheduled to reduce the future generosity of government old-age support and especially state pensions. Some countries are phasing out “no penalty” early retirement options, while others are raising their “normal” retirement ages. Several have also enacted major overhauls of their state pension systems designed to lower future

² The data and projections for government old-age benefits cited in this section come from Jackson, Howe and Nakashima (2010).

replacement rates—that is, the share of preretirement wages that benefits replace. Sweden and Italy are transforming their traditional defined benefit systems into notional defined contribution systems in which benefit payouts are effectively indexed to the growth in the payroll tax base. France has re-indexed its second-tier state pensions from wages to prices, which will also cause average benefit payouts to decline as share of average wages. Meanwhile, Germany and Japan have introduced “demographic stabilisers” that achieve much the same result by automatically adjusting benefit payments to partially or fully offset the annual change in the dependency ratio of retired beneficiaries to contributing workers.

The impact of some of these reforms promises to be quite large. Under current law projections that reflect scheduled changes in the future generosity of state pension systems, benefits to the elderly would, by 2040, be cut by roughly one-third beneath current deal benefit levels in France, Germany and Italy. In Japan, they would be cut by roughly two-fifths (see Figure 2).

Figure 2: State pension benefits to the elderly (aged 60 and over), as a percentage of GDP in 2007 and 2040: current law versus CSIS “current deal” projection*



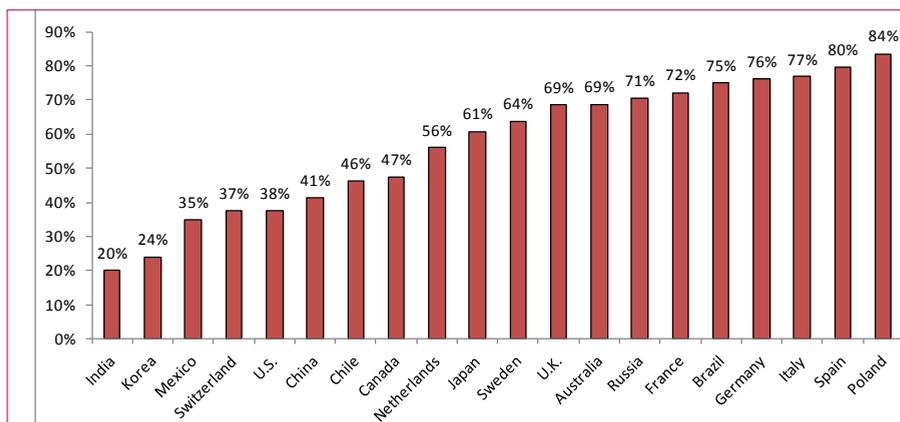
* The CSIS “current deal” projection assumes that current retirement ages and replacement rates will remain unchanged in the future.

Source: Jackson, Howe and Nakashima (CSIS, 2010).

There are two ways to look at the difference between the current law and current deal projections. One is that some countries have already made a lot of progress in reducing the fiscal cost of their ageing populations. The other is that these countries have a lot of benefit-cutting to do over the next few decades just to keep costs from rising even higher than official government projections now indicate they will.

It is an open question whether some governments will be able to stay the course. The elderly in most developed countries, after all, are highly dependent on government benefits. Even in the United States, with its traditions of limited government and financial self-reliance, nearly 40 per cent of the cash income of the typical elderly household in the middle of the income distribution comes in the form of a government check. In every other developed country except Canada, the Netherlands and Switzerland, the share is over 60 per cent. In France, Germany, Italy and Spain, it is over 70 per cent (see Figure 3). Unless reductions in state pension benefits are accompanied by reforms that increase alternative sources of elderly income support, some countries are likely to face a backlash from their ageing electorates, more than half of whom will be over age 50 by the 2030s in Japan and most European countries.

Figure 3. Government benefits in 2007, as a percentage of the income of the “median income” elderly (aged 60 and over)*



* Benefits and income exclude in-kind benefits; “median income” elderly are the elderly in the third quintile of the income distribution.

Source: Jackson, Howe and Nakashima (CSIS, 2010).

If the challenge for most developed countries is how to reduce the rising burden that existing retirement systems threaten to place on the young without at the same time undermining the security they now provide to the old, the challenge for most emerging markets is precisely the opposite: how to guarantee a measure of security to the old that does not now exist without at the same time placing a large new burden on the young. Compared with the developed countries, most emerging markets have relatively low government old-age benefit burdens today, both because they still have relatively young populations and because coverage under their state pension and healthcare systems is usually far from universal. To be sure, this burden will grow rapidly as their populations age. According to CSIS projections, government benefits to the elderly will nearly double

as a share of GDP in India and Russia between 2007 and 2040, nearly triple in China and quadruple in South Korea. Even so, very few emerging markets are on track to acquire fiscal burdens as large as those in the developed world. The striking exception is Brazil, which already spends lavishly on state pensions today despite its youthful age structure.

The relatively low government benefit burden in most emerging markets would be an unambiguous advantage if alternative sources of retirement income were adequate and secure. Unfortunately, with only a few exceptions, this is not the case. In India, barely one in ten workers earns a formal pension benefit of any kind, public or private. In China and Mexico, just one in three do. Even in high-income South Korea, the figure is just two in three. The result is that the per capita income of the elderly in many emerging markets is very low compared with the income of the non-elderly, poverty rates are very high and dependence on the extended family remains widespread.

Robust family support networks can constitute an important asset in managing the costs of population ageing. But as societies industrialise and modernise—and as average family size declines—overreliance on these networks can also become a liability. In China, the average number of children that the typical elder can turn to for support will decline by 1.6 between 2007 and 2040. In Brazil it will decline by 1.7, in Korea by 1.8 and in Mexico by 2.5. As this demographic shift unfolds, developing adequate and affordable government, employer and market substitutes for informal family support will become evermore crucial to old-age security. Indeed, if the emerging markets fail to develop these substitutes, some may face a humanitarian ageing catastrophe. Imagine tens of millions of today's vast floating population of rural migrants in China's cities ageing by the 2020s and 2030s into tens of millions of indigent elders without pensions, without health care, and without nearby family to support them. Or imagine, in China's countryside, entire villages of demographically stranded elders.

Is there any way to gauge which countries are best prepared to meet the old-age dependency challenge and which are worst prepared? The GAP Index, developed by CSIS, provides the first comprehensive quantitative assessment of where countries around the world now stand. The GAP Index covers 20 countries, including both developed economies and emerging markets. It consists of two separate subindices: a fiscal sustainability index and an income adequacy index.

On the fiscal side, the GAP Index takes into account the magnitude of each country's projected government old-age benefit burden, the fiscal room that countries have to accommodate the growth in that burden and the dependence of the elderly on government benefits—a crucial indicator of 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. On the adequacy side, it takes into account the level of and trend in the income of the elderly relative to the non-elderly in each country, the extent of elderly poverty and the strength of informal family support networks.

What is most striking about the results is that very few countries score well on both dimensions of the old-age dependency challenge (see Table 1). Those that do generally have modest pay-as-you-go government benefit systems, large funded pension systems and high rates of elderly labour-force participation. Australia, which combines a low-cost, means-tested floor of government old-age income support with a large, mandatory and fully funded private pension system, ranks well into the top half of both subindices. So does Chile, which has a similar mix of retirement policies. Canada and the United States,

with their relatively inexpensive state pension systems, 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—though the extraordinarily rapid rate of growth in healthcare costs in the United States cancels out some of the advantage it gains from relatively low state pension spending.

Although the outlook is more problematic in other countries, several are moving in a positive direction. The GAP Index projections reveal that Germany and Sweden are on track to offset the scheduled reductions in the generosity of their state pension systems by increasing funded retirement savings and extending work lives. Their projected fiscal burdens remain high, but have been cut well beneath what they would otherwise be without undermining adequacy. Meanwhile Japan, despite its massive age wave, ranks in the middle of both subindices. It is making deep cuts in state pension benefits, which helps to minimise its fiscal burden, but it also has higher rates of elderly labour-force participation and multigenerational living than any other developed country, which helps to blunt the impact of those cuts on elderly living standards.

Table 1: GAP Index Country Rankings

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

Source: Jackson, Howe and Nakashima (CSIS, 2010).

Most countries, however, score much better on one dimension of the old-age dependency challenge than the other—and two, France and Italy, score near the bottom of both subindices. Like Germany and Sweden, France and Italy have scheduled deep prospective reductions in the generosity of their state pension systems. But unlike Germany and Sweden, they are failing to fill in the resulting gap in elderly income. At the same time, even after the reductions in state pensions, their government benefit systems remain so expensive—and levels of elderly benefit dependence so high—that the systems may not be fiscally sustainable. In short, both countries risk moving toward retirement systems that are at once inadequate and unaffordable.

This contrast points to a crucial lesson. Most of the world’s developed countries—as well as a few of its emerging markets—will have to make large reductions in the generosity of state retirement provision in order to avoid a fiscal meltdown. But unless the reforms they enact also ensure income adequacy for the old, the reductions are unlikely to be socially and politically sustainable.

The experience of the U.K. should be a warning to other countries. In the 1980s, it switched the indexation of its basic state pension from wages to prices, flattening the projected growth in benefits as a share of GDP. However, as price indexing caused benefits to decline 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 10 years ago, but it also scores much worse on fiscal sustainability.

3. The broader economic and social challenge

The impact of global ageing will reach far beyond retirement policy. Over the next few decades, the rapid ageing of the developed world’s populations promises to profoundly alter the shape of its economies and societies, ushering in a new era of slower economic growth and, perhaps, of declining global influence.

Table 2: Average annual growth rate in the working-age population (aged 20-59), by decade, 1980s-2040s

	1980s	1990s	2000s	2010s	2020s	2030s	2040s
Developed countries							
Canada	1.7%	1.2%	1.0%	0.2%	-0.1%	0.3%	0.1%
France	0.7%	0.5%	0.4%	-0.1%	0.0%	0.1%	0.1%
Germany	0.8%	0.0%	0.0%	-0.8%	-1.5%	-0.7%	-1.0%
Italy	0.6%	0.2%	0.3%	-0.3%	-1.0%	-1.2%	-0.7%
Japan	0.5%	0.3%	-0.8%	-0.7%	-0.9%	-1.6%	-1.3%
U.K.	0.7%	0.4%	0.4%	0.3%	-0.1%	0.1%	-0.2%
U.S.	1.4%	1.2%	0.8%	0.2%	0.3%	0.5%	0.4%
Emerging markets							
Brazil	2.8%	2.3%	1.9%	1.0%	0.4%	0.0%	-0.4%
China	2.8%	1.8%	1.3%	0.3%	-0.7%	-0.7%	-1.2%
India	2.6%	2.4%	2.3%	1.7%	1.2%	0.7%	0.2%
Korea	2.9%	1.3%	0.6%	-0.2%	-1.3%	-1.5%	-1.4%
Russia	0.2%	0.1%	0.8%	-1.1%	-0.7%	-0.9%	-2.0%

Source: United Nations (2011).

The expectation that global ageing will lead to slower growth is largely a matter of arithmetic. Growth in real GDP equals the growth in employment, or more precisely hours worked, times the growth in output per worker hour, or productivity. By the 2020s and 2030s, the growth rate of the working-age population will have fallen to near zero or turned negative in every major developed country other than the United States. In Japan and the faster-ageing European countries, the working-age population will by then

be contracting by between roughly 0.5 and 1.5 per cent per year (see Table 2). Even at full employment, the growth in real GDP could stagnate or decline, because the number of workers may be falling as fast or faster than productivity is rising. Unless labour-force participation rates surge or economic performance improves dramatically, some developed countries could face a future of secular economic stagnation—in other words, of zero real GDP growth from peak to peak of the business cycle.

It is possible that higher labour-force participation will offset some of the economic drag created by more slowly growing or contracting working-age populations. Participation rates now vary greatly across the developed countries, implying that most have room to raise them. This is especially true at older ages. In France, just 20 per cent of men aged 60-64 and 2 per cent of men aged 65 and over were still on the job in 2009. In Japan, the shares were 76 per cent and 29 per cent. While many countries, including France, have begun to raise retirement ages, changes in retirement behaviour large enough to have a substantial impact on the macro outlook would require much larger changes in current policy than most countries now contemplate.

While improvements in economic performance are also possible, they will be difficult to achieve. Indeed, the ageing of the developed world's populations is more likely to pull down economic performance than to push it up.

To begin with, household savings rates will decline as a larger share of the population moves into the retirement years. If savings fall more than investment demand, as much macroeconomic modeling suggests is likely, either businesses will be starved for investment funds or the dependence of the developed economies on capital from higher-saving emerging markets will grow.³ In the first case, the penalty will be borne in the form of lower output. In the second, it will be borne in higher debt service costs and loss of political leverage, which history teaches is always ceded to creditor nations.

At the same time, workforces in most developed countries will not only be stagnating or contracting, but also graying. While older workers are valuable assets to the economy, younger workers have their own indispensable qualities. A large literature in the social and behavioural sciences establishes that worker productivity typically declines at older ages, especially in eras of rapid technological and market change.⁴ Economies with graying workforces may also be less entrepreneurial. According to the 2007 Global Entrepreneurship Monitor, which surveyed 53 countries, new business start-ups in high-income countries are heavily tilted toward the young.⁵ Of all “new entrepreneurs” in the survey (defined as owners of businesses founded within the last three and one-half years), 40 per cent were under age 35 and 69 per cent were under age 45. Only 9 per cent were aged 55 or older.

Even as economic growth slows, developed countries will have to transfer a rising share of society's economic resources from working-age adults to non-working elders. Yet very few have the tax room to pay for more than a fraction of the projected current law growth in old-age benefit spending—and some, particularly in Europe, are already at or beyond the threshold of efficient taxation. This means that, rather than raise new revenue, higher tax rates may simply increase unemployment and drive more workers into the gray economy.

3 For a discussion of the literature on demographics and savings, see Jackson and Howe (2008) pp.97-108.

4 For a discussion of the literature on productivity and age, see Jackson and Howe (2008) pp. 108-112.

5 Autio (2007).

Faced with the choice between economically damaging tax hikes and politically difficult benefit cuts, many governments may choose a third option: cannibalise other spending on everything from education and the environment to foreign assistance and national defense. Or else they may run widening deficits that further undermine national savings and economic growth.

The impact of global ageing on the collective temperament of the developed countries is more difficult to quantify than its impact on their economies, but the consequences could be just as important—or even more so. With the size of domestic markets fixed or shrinking in many countries, businesses and unions may lobby for anticompetitive changes in the economy. We may see growing cartel behaviour to protect market share and more restrictive rules on hiring and firing to protect jobs. We may also see increasing pressure on governments to block foreign competition. Historically, eras of stagnant population and market growth—think of the 1930s—have been characterised by rising tariff barriers and beggar-thy-neighbour protectionism.

The shift in business psychology could be mirrored by a broader shift in social mood. As a growing share of the developed world's population moves towards having most of its life in the past tense and relatively little in the future tense, time horizons may shrink. Psychologically, older societies are likely to become more “small c” conservative in outlook and possibly more risk-averse in electoral and leadership behaviour. Elder-dominated electorates may tend to lock in current public spending commitments at the expense of new priorities. We know that extremely youthful societies are in some ways dysfunctional—prone to violence, instability and state failure.⁶ Extremely aged societies may also prove to be dysfunctional in some ways, favouring consumption over investment, the past over the future and the old over the young.

The extent to which global ageing affects economic growth and social mood will of course vary from one country to another depending on its institutions, culture and, of course, demographics. The impact is likely to be least in the United States, which is the youngest of the developed countries today and, thanks to its relatively high fertility rate and substantial net immigration, is destined to remain the youngest for the foreseeable future. By 2040, the U.S. median age, now 37, will rise to only 40. Meanwhile, the U.S. working-age population will continue to grow over the next three decades and beyond. The impact is likely to be greatest in countries like Germany, Italy and Japan, where fertility has fallen far beneath replacement, working-age populations are already contracting and median ages are due to rise well past 50 by 2040.

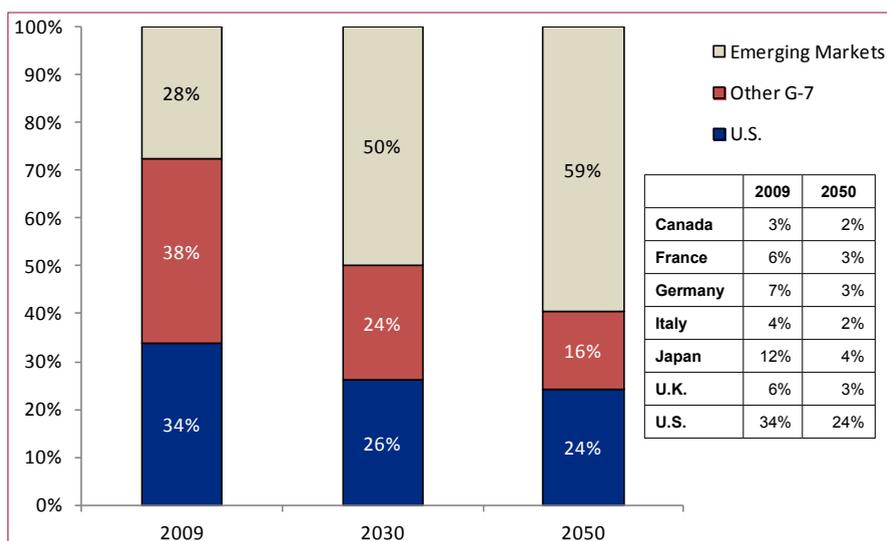
The outlook for emerging markets is even more varied. In much of the developing world, including South Asia, Latin America and some Muslim-majority countries, demographic trends are now leaning strongly with economic growth and will continue to do so over the next few decades. When a country's fertility rate first declines, it enjoys a window of opportunity for economic and social development known as the “demographic dividend”. As child dependency burdens fall and the share of the population in the working years rises, labour-force participation may increase, savings and investment may grow and economic and living standard growth may accelerate. Development economists who have studied the dynamic agree that it has given a powerful boost to the economies of emerging East Asia over the past quarter-century, underpinning the stunning rise first of the Tigers

6 See, for example, Esty *et al.* (1998); Cincotta, Engelman and Anastasion (2003); and Urdal (2006).

and then, more recently, of China.⁷ The dynamic is now also helping to propel the growth of other emerging markets around the world, from Brazil to India and Indonesia.

In some of the developing world’s most successful economies, however, demographics are beginning to lean against economic growth. The initial economic impact of falling fertility may be positive, but as societies age the relative decline in the number of children is eventually overtaken by the relative growth in the number of elderly and dependency burdens once again rise. The emerging markets of East Asia, where fertility has fallen faster than elsewhere in the developing world, are now approaching this tipping point. All have rapidly ageing populations and all, including China, will have stagnant or contracting working-age populations within a decade. Demographics will also be leaning against growth throughout Central and Eastern Europe, whose fertility decline has not been as precipitous as East Asia’s but began much earlier.

Figure 4: GDP (in 2005 US\$) by country or country group, as a percentage of G-20 total, 2009-2050



Source: Dadush and Stancil (2010).

These crosscurrents notwithstanding, demographic trends will continue to drive the relative rise of today’s emerging markets—and the relative decline of the developed economies. During the era of the Industrial Revolution, the population of the developed world grew faster than the rest of the world’s population, peaking at 25 per cent around 1930. Since then, its share has declined. By 2010, it stood at just 13 per cent and it is projected to decline still further to 10 per cent by 2050. As a share of the world’s economy, the GDP of the developed countries will also be declining—and much more steeply. According to projections by the Carnegie Endowment for International Peace, the U.S. share of G-20 GDP will fall from 34 per cent in 2009 to 24 per cent in 2050. The combined share of the other G-7 countries—

⁷ See, for example, Bloom and Williamson (1998); Bloom, Canning and Malaney (1999); and Williamson (2001).

Canada, France, Germany, Italy, Japan and the U.K.—will fall from 38 to 16 per cent⁸ (see Figure 4). Driving this decline will be not just the slower growth of the developed world, but also the surging expansion of large, newly market-oriented economies in the developing world.

4. Six critical policy strategies⁹

Although global ageing clearly poses tremendous challenges, these challenges are not insurmountable. Demography shapes the overall economic and social environment facing governments, businesses and families in important ways, but it need not be destiny. Whether countries prosper as they age will depend critically on the policy choices they make. An effective response to the global ageing challenge will have to proceed on many fronts—not just retirement policy, but economic policy, social policy and even foreign policy. The following discussion does not attempt to cover the full range of possible policy choices, but instead focuses on six especially critical strategies:

- **Reduce pay-as-you-go benefit burdens.** For developed countries, any overall strategy to confront global ageing must begin with reducing the rising cost of pay-as-you-go old-age benefits. There are many possible ways to reduce state pension spending. Governments can raise eligibility ages, means-test benefits, alter indexing formulas or introduce demographic stabilisers that directly adjust benefit levels to offset changes in the old-age dependency ratio. As we have seen, several of the countries with the largest “current deal” burdens, including France, Germany, Italy and Japan have already enacted major reforms of their state pension systems. Since the benefit cuts are prospective and their pain is yet to be felt, however, the political durability of the reforms has yet to be tested.
- **Strengthen old-age safety nets.** For developing countries, any overall strategy must begin with strengthening the old-age safety net, which in many cases means constructing one where none now exists. In economies with large informal sectors, achieving anything close to universal coverage under contributory pension systems is next-to-impossible. To ensure an adequate floor of old-age poverty protection, emerging markets also need a system of tax-financed, non-contributory pensions, sometimes called social pensions. In recent years, some emerging markets have put these in place, or at least are moving in this direction. Brazil now has non-contributory “rural pensions”—and an elderly poverty rate that is just one-fifth of Mexico’s, which doesn’t. Chile has “solidarity pensions” that underpin its savings-based personal accounts, greatly improving the overall adequacy of its retirement system. Meanwhile, China is beginning to extend subsidised pension coverage to migrant and rural workers. Although strengthening old-age safety nets is most urgent in the developing world, a significant share of the elderly in some developed countries also experience economic hardship—and the problem may grow as the generosity of state pension systems is cut back and retirement ages are raised in the future. Governments would be well advised to redirect some savings from reductions in benefits to higher-income elders to improving targeted poverty protection for lower-income elders. Since poverty is much more prevalent among the “old old” aged 80

8 Dadush and Stancil (2010).

9 Chapter 9 of this report offers a more comprehensive account of potential responses by different stakeholder groups, including employers, insurers and individuals.

and over, they might even consider restructuring state pension systems themselves as “longevity backstops” that offer greater benefits at older ages.

- **Increase funded retirement savings.** As developed-country governments scale back pay-as-you-go benefits, it is not enough to provide additional protection to the poor elderly. They will also need to ensure that the gap in the income of middle-class retirees is filled in. Meanwhile, emerging markets will have to finance adequate and affordable retirement benefits for their own rapidly growing middle classes. An essential part of the solution is to increase funded retirement savings. Several countries, of course, already have well-established funded retirement systems—and others, from Germany and Spain to China and Korea, have recently jumpstarted new ones. While many models are possible, experience teaches that mandatory systems are more effective at ensuring broad coverage than voluntary systems. According to CSIS projections, there are only four countries in which funded pension savings are on track to supply at least one-quarter of elderly income by 2040—Australia, Canada, the Netherlands and Switzerland. Of the four, only Canada has a voluntary system. Beyond improving income adequacy, funded retirement systems have other potentially important advantages. Depending on their design, they may help to maintain adequate levels of national savings, which will be one of the greatest challenges facing ageing societies. Unlike pay-as-you-go systems, they also allow ageing societies to escape the tyranny of their own demography by investing in younger and faster-growing economies around the world.
- **Encourage longer work lives.** Perhaps no strategy for confronting the global ageing challenge offers more potential benefits than encouraging longer work lives. Longer work lives increase the adequacy of income for the old without putting a new burden on the young. They can help ease future labour shortages and boost economic growth in fast-ageing countries with declining populations in the traditional working ages. To the extent that eligibility ages for state pension benefits are raised, there is also a double fiscal benefit. Unlike cuts in replacement rates or indexing formulas, higher retirement ages both save on benefit costs and increase tax revenues by lengthening the number of years in which contributions are made. Remaining productively engaged, moreover, is good not only for the health of the budget and the economy, but also, according to most gerontologists, for the health of the elderly themselves. To leverage this strategy, countries will need to reduce government subsidies for early retirement, revise employment policies (like seniority pay scales) that make older workers costly to hire or retain, encourage lifelong learning and develop “flexible retirement” arrangements of all kinds.¹⁰
- **Encourage higher birthrates.** Although higher birthrates would do little to reduce the magnitude of the ageing challenge over the next two to three decades, in the longer-term nothing would do more to lower old-age dependency burdens and raise economic growth rates in today’s lowest-fertility countries. Policies that help women (and men) balance jobs and children are the lynchpin of any effective pronatal strategy. Countries that want to raise birthrates may need to reform labour-market rules that limit part-time work options, implement parental leave policies, and provide for affordable daycare. More broadly, they may need to move toward more flexible career patterns that allow parents to move in and out of employment to

¹⁰ See Chapters 4, 8 and 9 of this report for a more detailed discussion of extending work lives.

accommodate the cycles of family life. There are two different models that countries can follow. France and Sweden now have among the highest fertility rates in the developed world, thanks in part to government benefits and mandates that include generous cash benefits for families, subsidised daycare, paid maternity leave, and job guarantees. The United States also has a high fertility rate, but the explanation lies in the flexibility of its economy and especially its labour markets. Young people find it easier to launch careers and establish independent households than in most other developed countries, while working women who wish to raise families find it easier to exit and re-enter employment.

- **Increase immigration.** Higher net immigration functions much like a higher fertility rate but without the lag. Since immigrants tend to be disproportionately young adults, they immediately increase the size of the workforce and slow the ageing of the population, at least for a time. The catch, of course, is that the immigrants themselves ultimately grow old, which means that for increased immigration to permanently alter the age structure of the population the new higher immigration rate must be permanent as well. Countries that are able to rapidly and effectively integrate new immigrants into the mainstream of the economy and society can benefit enormously from the infusion of new energy and talent that they bring. But if the rate of immigration exceeds a country's capacity for assimilation, it can undermine social cohesion, triggering a backlash among the native-born population. Those countries without a long historical tradition of assimilating immigrants, including Japan and most European countries, would do well to study best practices around the world, especially in Australia, Canada and the United States.

The strategies outlined above treat global ageing as if it were simply a national challenge. To some extent, of course, that is precisely what it is. Each country has its own distinct economic, social and cultural institutions—including its own unique set of retirement policies. And each country must forge its own policy responses.

Yet policymakers around the world would do well to remember that global ageing is also a global challenge, and so requires global solutions. Due to the uneven pace of global ageing, differences in population age structures and growth rates will widen steadily over the next few decades across the different countries and regions of the world. As they do, economic growth and prosperity will come to depend even more on globalisation than they do today. The world will need global capital markets to match savers in ageing and more slowly growing developed economies with investment opportunities in younger and faster-growing emerging markets. It will also need global labour markets to match workers with jobs, whether through immigration or outsourcing.

It is thus possible to imagine a hopeful future in which global ageing brings the countries of the world closer together. But it is also possible to imagine a less hopeful one in which ageing societies turn inward, roll back globalisation and shut the door on free trade and free markets. CSIS believes that if policymakers and the public understand the full implications of the challenge before us we can make the first future more likely.

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Increasing life expectancy and falling fertility rates are creating a demographic situation that has become one of the greatest economic and societal challenges of the 21st century.

No doubt, the drivers behind these challenges are major successes such as longer life-times reflecting better health and increasing affluence and education.

However, funding these longer lives will become increasingly difficult under current schemes. The sustainability of public and corporate pension schemes is at risk. Indeed, the cost of funding state pension benefits is set to rise dramatically—by more than double in some countries. This poses a considerable political and economic dilemma about how to keep the burden on the working population bearable whilst not sacrificing the standard of living for those drawing pensions.

Against this backdrop, governments and employers tend to shift responsibility for old-age security to individuals. The financial crisis has further accelerated the underlying shift in responsibility as governments face mounting fiscal pressures and employers contend with a low-growth environment. Insurers can make a meaningful contribution to old-age security if a conducive legal and regulatory framework is in place. So too can they devise and implement innovative solutions appropriate for the broadest possible spectrum of society.

With papers from old-age security experts, industry practitioners as well as the IMF and Center for Strategic and International Studies, this report provides a concise and authoritative overview of the global ageing challenge, its funding and the insurance role amongst the solutions available for its resolution.