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Talking Point

Aging gracefully: What the West can learn from Japan

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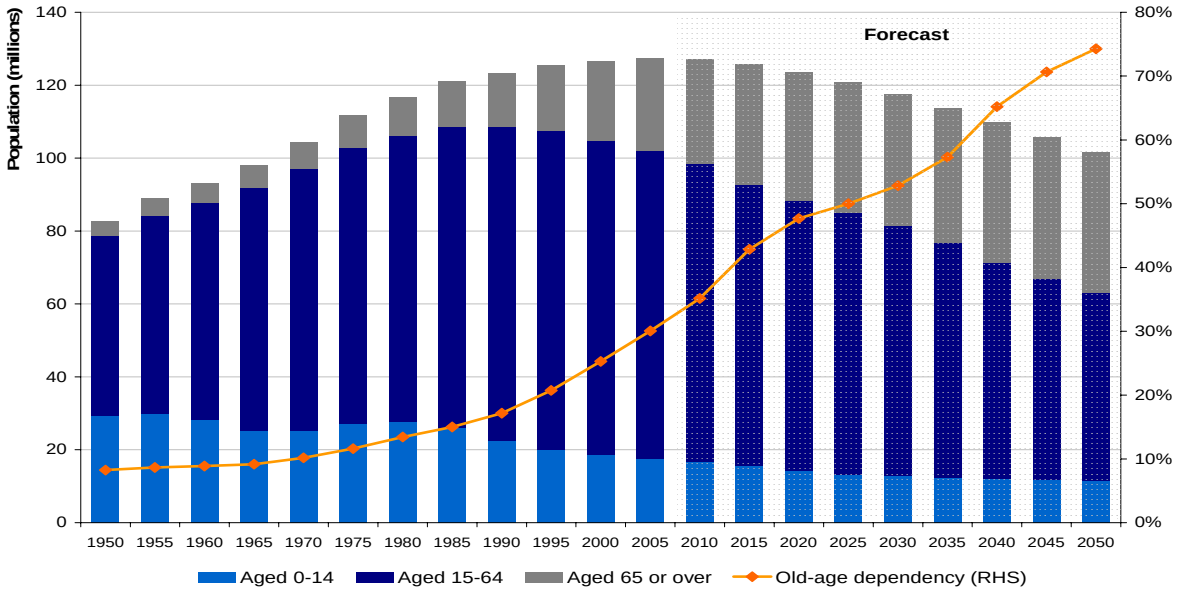
As the world's 'oldest' country, Japan provides a unique example of how countries and companies can respond to the challenges of aging. As we know, it is difficult to reverse or meaningfully alter unfavourable demographic trends, and pre-emptive reforms are essential for successful adaptation. This has, to a certain extent, occurred in Japan, meaning the country is now in relatively good shape to bear the costs of aging in comparison to other developed markets economies. As much of the world begins to face the challenges of demographic change, we explore the lessons that governments, companies and investors can learn from Japan.

Japan is the 'oldest' country in the world, with a median age of 44.7 years: about 5 years higher than the developed country average, and more than 15 years higher than the global average[1]. By 2050, the elderly dependency ratio will be 75%, meaning there will be three retirees for every four people of working age.

Figure 1: Age structure of the Japanese population



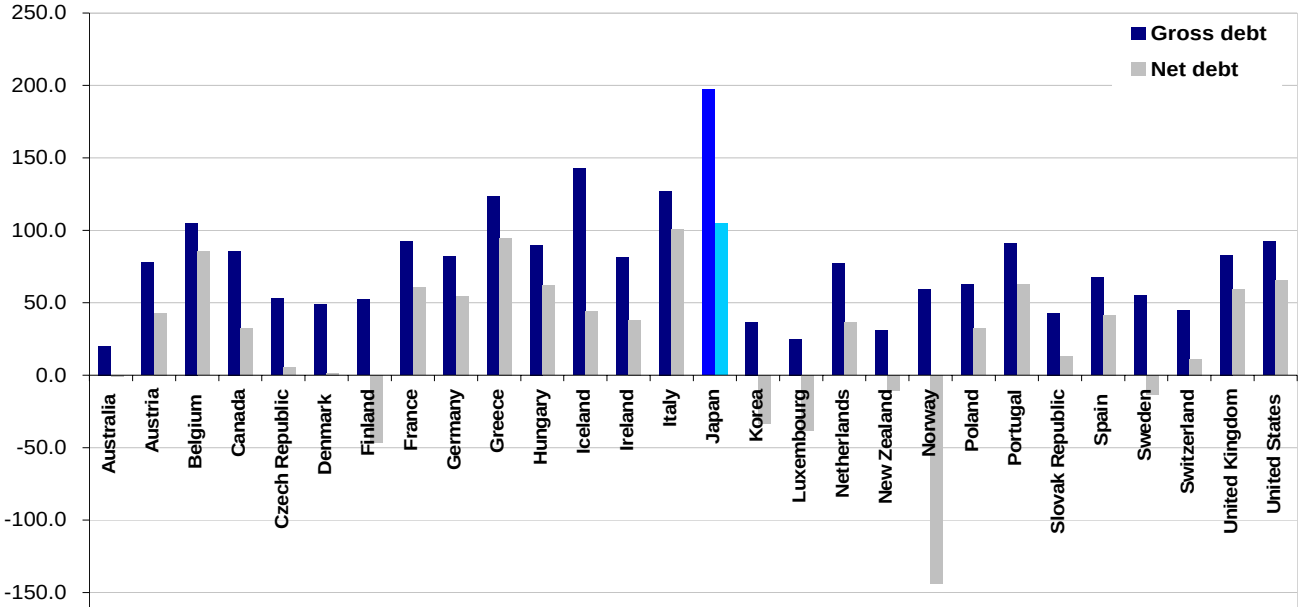
Source: UN World Population Prospects, 2008 Revision.

[1] UN World Population Prospects, 2008 revision. In case you were wondering, the youngest country is Niger, with a median age of just under 15 years!

It also has the most government debt, but neither as much, nor by as large a margin, as is often thought. The number most commonly used when discussing Japanese debt is the 'gross debt' figure, corresponding to the total liabilities of central and local governments, including the social security system. Gross debt stands at just under 200% of GDP. But because of a feature of the Japanese government's accounting system, this figure significantly overstates actual liabilities. In commonly used 'unified' systems, the revenues and expenditures of all departments are pooled and government bonds issued to cover the shortfall. In the Japanese system, however, departments keep their accounts separate, and those in surplus formally lend money to those in deficit via bond issuances or the creation of government deposit accounts. This means an intra-governmental loan stays on the balance sheet as a separate asset and liability, while a unified system would just show the net figure. The 'gross debt' figure includes this liability, while the 'net debt' figure (assets minus liabilities) strips it out.[2]

Figure 2 shows the OECD's forecasts for gross and net debt for the in 2010. On the net measure, Japan's debt is expected to be 105% of GDP- still very high, but less shocking than the 200% figure.

Figure 2: Government debt, 2010e
% of GDP.



Source: OECD (2009).

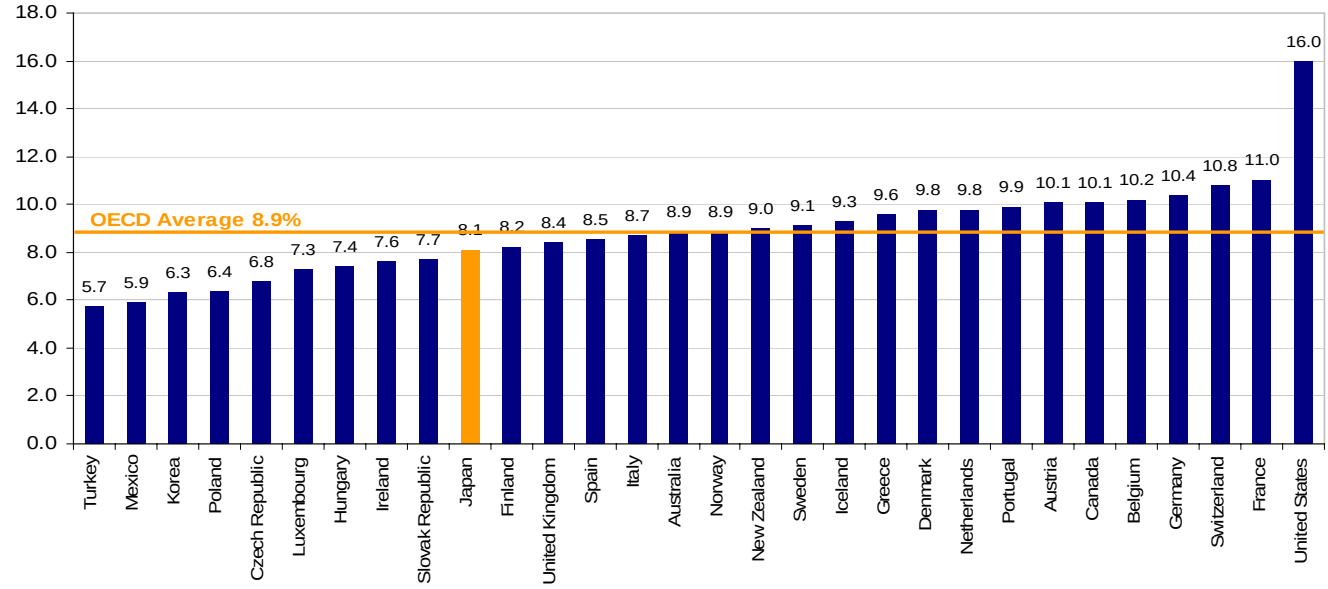
On the challenges generated by demographic trends, the key point is that Japan recognised its aging problem early, and took steps to reform both the health and pension systems to contain age-related spending. It also helps that both employees and companies look favourably on working beyond retirement. As a result, the prospects for Japanese solvency are better than the demographics imply and not as bad as many presume, even compared to other developed countries.

Lessons for governments: health and pensions

Japan undertook large-scale reforms of its public healthcare system as far back as the 1980s, after just 20 years of universal coverage. As a result, Japan spends around 8.1% of GDP on healthcare, below the OECD average of 8.9% ($2581 versus $2964 on a per capita basis). In Germany, which is the next oldest country by median age, spending is 10.4% of GDP. Spending in Japan has also grown at just 2.5% p.a., while in the US the rate is consistently GDP growth plus 2.5%.[3]

[2] As explained in Broda and Weinstein (2004), *Happy News from the Dismal Science: Reassessing Japanese Fiscal Policy and Sustainability.*
[3] OECD Health at a Glance 2009; Reinhardt (2009), *Economic Trends in US healthcare.*

Figure 3: Health expenditure
% of GDP, 2007



Source: OECD Health at a Glance 2009.

Japan and the United States both have 'fee-for-service' systems, where the government or private insurer reimburses the provider for care received. Unless carefully regulated, these systems can provide perverse incentives, resulting in general over-use of healthcare and possibly a disproportionate use of high-cost services.[4] This is one of the key reasons why US healthcare expenditure is almost twice the OECD average, while healthcare outcomes (life expectancy, infant mortality) are no better.[5]

The Japanese system, in contrast, was carefully redesigned to avoid these pitfalls. Prices are stringently controlled and set biannually, with high-tech care priced below cost and basic care above cost to realign incentives. Though this may be counterintuitive, it has been shown to result in more appropriate incentives: quality basic care (cheaper for the government) is provided in most cases, and high-tech care only 'when appropriate'.[6] Bundled pricing (flat reimbursement for a condition/illness rather than per treatment) gives providers an incentive to switch to cheaper alternatives, and post-utilization reviews prevent improper use and fraud. Copayments account for 20-30% of each claim, meaning users have some "skin in the game". Wages for doctors are lower than in the United States, partly because malpractice suits are less common.[7]

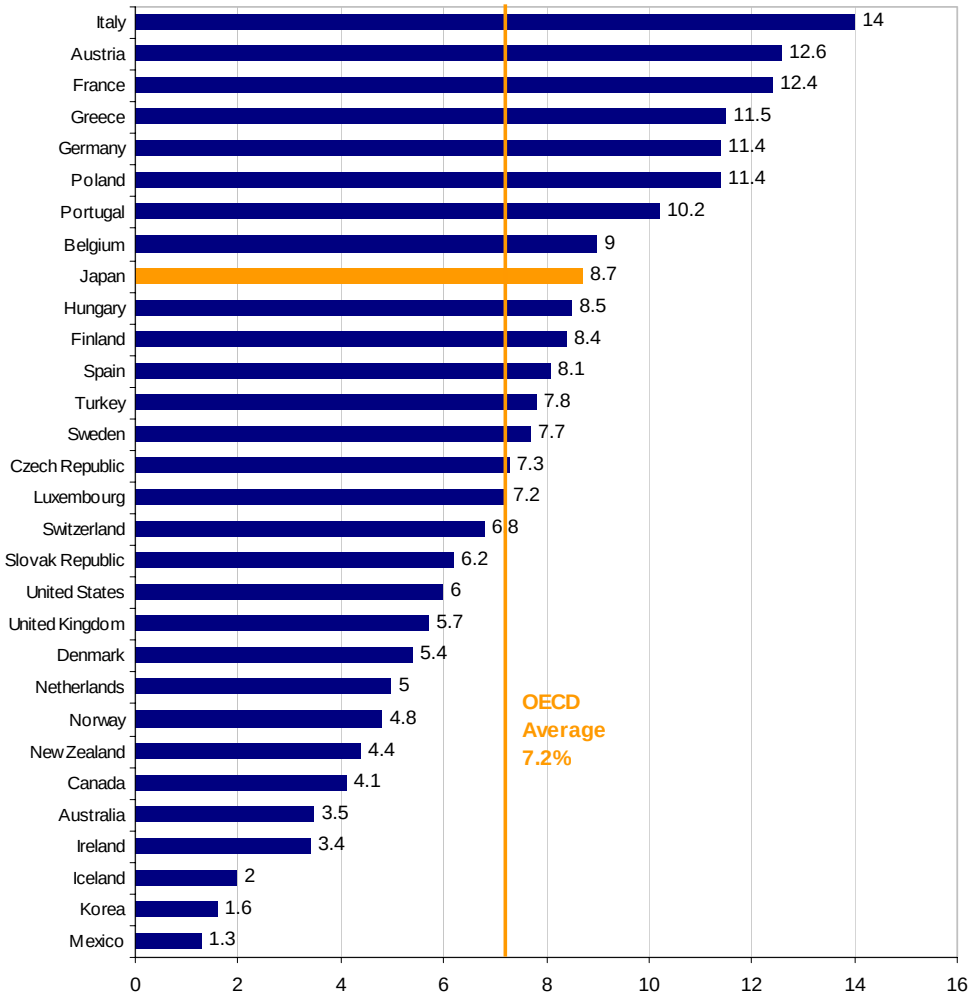
All of these measures help keep healthcare relatively 'cheap' for the government, reducing the burden of aging. Crucially, lower spending is not reflected in the quality of healthcare: Japan has the longest life expectancy and the lowest infant mortality rates in the OECD. It has the lowest incidence of heart disease and obesity in the world and cancer survival rates among the highest, despite low screening rates.[8]

We now turn our attention to the pension system. To begin again with OECD indicators: Japan's public pension spending currently stands at 8.7% of GDP, higher than the average (7.2%) but lower than several 'younger' countries in Western Europe.[9] On a per capita basis, this equates to an outlay

[4] As long as the payment to the provider exceeds their cost, their incentive is to supply- and encourage patients to use- additional services. Reimbursements are generally based on 'cost-plus', so there is no incentive to provide cheaper services. Also, because insured patients bear very little of the cost of healthcare, they are inclined to overconsume.
[5] Carey et al (2009), *Healthcare Reform in the United States;* Anderson et al (2003), *It's the Prices Stupid: Why the United States is Different from Other Countries.*
[6] Commentators suggests this is because high-tech care builds reputation and is more professionally rewarding for doctors, so doctors continue to offer it despite making a small loss on each treatment. Wagstaff, (2005), *Health Systems in East Asia: What can Developing Countries Learn from Japan and the Asian Tigers?*
[7] Fukuwa & Izumida (2004), *Japanese Healthcare Expenditures in a Comparative Context.*
[8] OECD Health at a Glance 2009.
[9] OECD Pensions at a Glance 2009.

of $2637 in Japan compared to an OECD average of $2150 but, interestingly, the spending per retiree (i.e. over 60) in Japan is almost 15% lower than the average figure.

Figure 4: Public pension spending
% of GDP, 2005



Source: OECD Pensions at a Glance 2009.

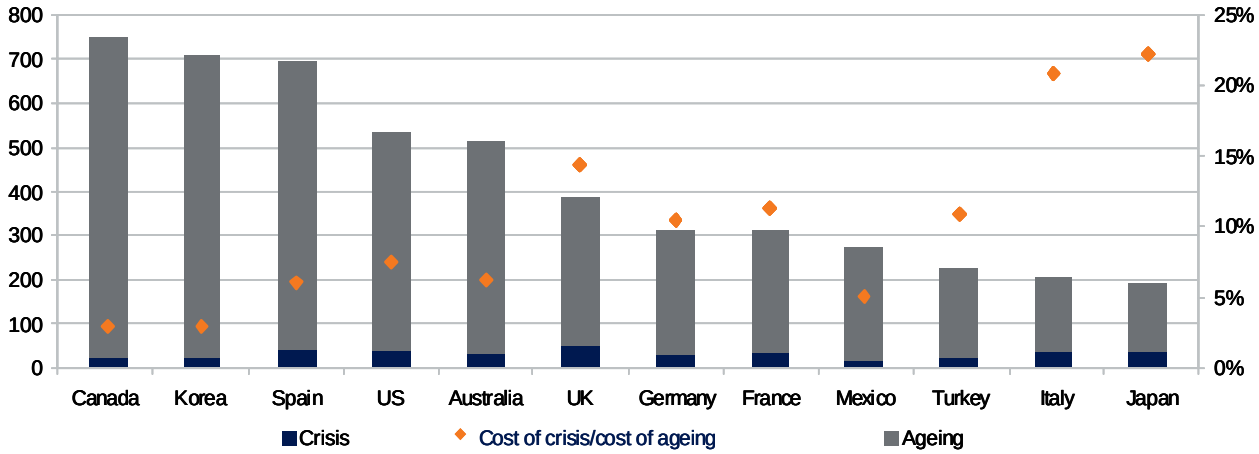
Reform efforts in Japan began in the 1980s, with the most recent round occurring in 2004. The explicit target was to "establish a sustainable and secure pension system that can support the aging population in the future".[10] The key cost-containment features of the system are: relatively low replacement rates (generosity), gradual raising of the pensionable age from 60 to 65 (and possibly further), and price – rather than earnings – indexation. The latter is particularly important given Japan's persistent deflationary environment. Benefits are automatically adjusted (downwards) to reflect increases in life expectancy, though a minimum payment is guaranteed.[11]

Like much of the developed world, Japan has actually enjoyed favourable demographic trends for much of the last 50 years, with a large working age population and a small number of dependents (as lower fertility resulted in fewer children). This means that the Japanese pyramid during the period has been the 'optimal' shape for growth and low expenditures. To take advantage of this 'demographic dividend', since the last world war Japanese pension contribution rates have been set higher than dictated by contemporary needs, and the surplus fed into a reserve fund. This now stands at $1.2 trillion, second only to the United States. According to the latest available data, this equates to a per capita value of approximately $9100 for the Japanese fund, while the US stands at $7938.[12] Official estimates are for this reserve fund to last until 2100, though Japanese economists are now saying that the financial crisis (and embezzlement equivalent to about 1% of fund assets, discovered in 2007) have brought this forward to 2050.[13] This means that the buffer provided by the reserve fund compares favourably with many European retirement funds and the US Social Security Trust Fund, which the latest CBO projections anticipate will be exhausted by 2043.[14]

[10] Japanese Ministry of Health, Labour and Welfare (2009), *Pension Overview.*
[11] Ibid.
[12] OECD (Oct 2009), *Pension Markets in Focus.*
[13] 2100 figure from MHLM (as above), revision from personal correspondence with local sources.
[14] European Commission (2006), *The Impact of Ageing on Public Expenditure;* (2009), *The 2009 Ageing Report;* Congressional Budget Office (2009), *Updated Long-Term Projections for Social Security.*

Although Japan's demographic trends are clearly not propitious for economic growth, these health and pension reforms mean that the country is in some respects better prepared for the consequences of a rapidly aging population than much of the Western world. A recent IMF report on the financial crisis uses estimates from multinational projection exercises to compare the cost of aging with that of the current financial crisis. The chart below shows that, while the financial impact of the crisis, as a percentage of GDP, is broadly similar across the developed world, the lower net present value of the cost of aging implies that Japan is expected to manage its future costs better than most.

Figure 5: NPV of fiscal impact of the financial crisis and population aging
% of GDP

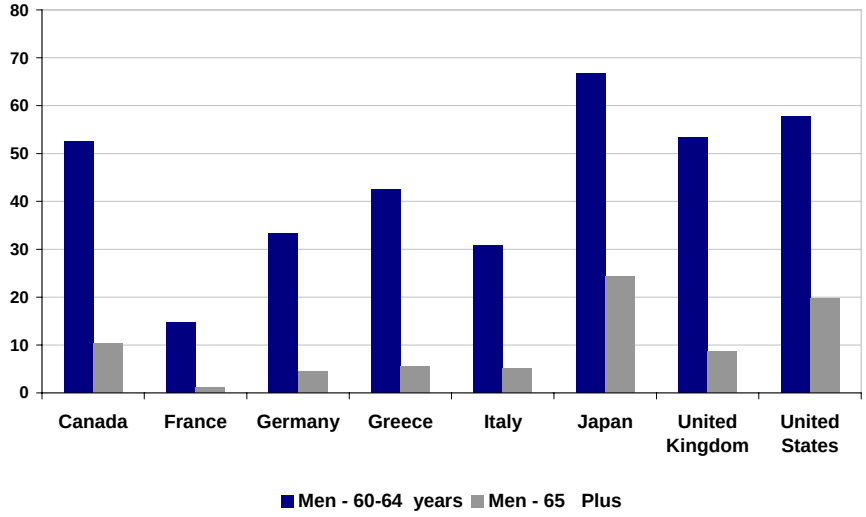


Source: IMF (2009).

Lessons for companies: workers and customers

One of the other factors contributing to Japan's robust old age is the willingness – and ability – of older people to continue working. Despite the fact that most companies have a mandatory retirement age of 60, the majority of workers remain active until at least 65, even once they are entitled to a full state pension.[15] Though Japan's life expectancy is the highest in the world, time spent in retirement is below the OECD average.[16]

Figure 6: Economic Activity Rate, 2009



Source: ILO (2010).

[15] International Labour Organisation. Economic activity rate is the labour force (employed or unemployed and looking for work) divided by the population.
[16] The Economist (June 27th 2009), *Work Till You Drop.*

This is partly because the public pension is ungenerous, but also because attitudes and legislation are more conducive. Older Japanese employees see their work as a source of pride, and around 60% say they would like to stay at the same job when they turn 60.[17] Fortunately for them, a 2004 law requires companies to either raise their mandatory retirement age (in line with the rising pensionable age) or re-hire workers who want to stay on. There are also financial incentives for hiring older workers. The majority of firms, including well-known names such as Toyota, Aeon and Mitsubishi, have embraced re-hiring programmes, and now retain 50-70% of their employees over 60.[18] Employees are often hired part-time and usually on lower pay, allowing for greater flexibility and keeping wages in line with productivity.[19] At a more macro level, higher activity should reduce the impact on economic growth of a falling working age population.

Japan (along with Singapore) is exceptional in this regard. A 2007 survey found that, of 28,000 employers in 25 countries, only 14% had a strategy for employing older workers.[20] There has been very little written on how to manage older workers, and an aging workforce can lead to spiralling wage bills if salaries are driven by seniority. As legal and effective retirement age increases, Western companies will need to become more cognizant of the costs and benefits of older workers.

The Japanese experience demonstrates that most companies will need to make 'subtle and difficult adjustments' as buyers age.[21] Niche businesses have sprung up catering to the 'grey market': cosmetics, robot pets, even indoor vegetable patches and colourful incontinence pads![22] Even global leviathans are adapting their products and services: McDonald's branches in Tokyo have sections with seating designed for older diners, and a number of consumer goods companies have begun to sell smaller packs for smaller retired households. More accustomed to targeting the young, some large companies are now employing managers to focus exclusively on the silver dollar.[23] Financial firms in Japan are offering additional services and perks to attract the business of asset-rich older customers.[24] The beneficiaries are not always in the obvious places: for example, the heavily regulated healthcare market means that branded pharmaceuticals are struggling.[25]

Lessons for investors

Painful reforms in the 1980s and '90s mean that Japan is now in comparatively good shape to bear the cost of aging. Yet, despite its best efforts, demographic change will still present serious challenges for the country: economically, politically and socially. Most significantly, its dramatic aging profile will seriously hamper economic growth. In this respect, the impact of reform is limited and Japanese policymakers are now taking a more direct approach, attempting to raise the birth rate by offering a ¥26,000 monthly childcare allowance and free schools. But even if this is successful, it will be several generations before it improves dependency and economic outcomes.

The same central lesson holds for investors. To profit from changing demographics, investors need to recognise – well in advance – those markets, industries and companies that are best-placed to meet the challenge. Because demographic trends are regarded as very long-term, most investors neglect to include them in their analysis of companies' operating environment and earnings sustainability. Yet demographic change will alter the competitive landscape for each and every company worldwide. Investors must be able to identify the ones that will adapt, survive, and thrive.

[17] Japanese Institute of Policy and Training.
[18] Gross and Minot (2008), *Effects of Japan's Aging Population on HR Management.*
[19] This is a matter for debate, but the weight of evidence suggests productivity declines in old age e.g. Skirrbeck (2003); Kotlikoff and Wise (1989); Hansen (1993); Meghir & Whitehouse (1996).
[20] Manpower (2007), cited in Nomura (2008), *The Business of Ageing.*
[21] FT (August 11th 2009), *Japanese shoppers never retire from aspiration.*
[22] Economist (June 2009), *The Silver Dollar.*
[23] Ibid
[24] FT (August 10th 2009), *Fireflies and seminars: how Japan's older investors are being courted.*
[25] FT (August 6th 2009), *Japan's drugmakers find rich pickings elusive.*

Important Information:

The views and opinions contained herein are those of Virginie Maisonneuve, Head of Global & International Equities, and Katherine Davidson, Research Assistant, and may not necessarily represent views expressed or reflected in other Schroders communications, strategies or funds.

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