

How the Coming Demographic Shock Could Alter the Investing Landscape

Introduction

Major population shifts will begin to occur in less than five years that could affect investors' portfolios, alter retirement plans, and test the economies of developed nations over the longer term. The population changes, commonly referred to as demographic changes, have been dubbed "the new fault line in global financial markets."¹ We believe it could be one of the biggest phenomena to affect the investing landscape for the next few decades.

As the post-World War II baby boomers begin to retire around 2008, developed nations will likely be confronted with a smaller share of workers to support a much greater share of retirees. Longer life expectancies and lower birth rates will contribute to the predicament. The collision of these trends will result in what we term as a global demographic shock. It is like a fissure creeping its way through the surface of the world's leading economic powers.

Federal Reserve Chairman Alan Greenspan spent much of his recent testimony before a congressional committee raising concerns about the issue. He said, "The dimension of the challenge is enormous. The one certainty is that the resolution of this situation will require difficult choices and that the future performance of the economy will depend on those choices."

While the demographic shock is highly predictable and rather slow moving, it could have significant economic and financial market implications even before the trends begin to completely unfold. It will present "daunting challenges" for the United States, according to Greenspan. The situation should be even more severe for Europe and Japan. It will cause investing and planning to become more complicated than ever in the pre-retirement and early retirement phases, in our opinion. It could also change the quality of retirement in America. Demographic shifts may force more workers to postpone retirement past the age of 62, the typical retirement

"This dramatic demographic change is certain to place enormous demands on our nation's resources ... The one certainty is that the resolution of this situation will require difficult choices and that the future performance of the economy will depend on those choices."

*Alan Greenspan, Chairman
of The Federal Reserve Board speaking before
a congressional committee on 2/25/04*

¹ *Global Aging and Financial Markets: Hard Landings Ahead?* By Robert Stowe England of the Center for Strategic and International Studies (CSIS), 2002.



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age today. More Americans may work part-time or be under pressure to self-fund a greater share of their retirement plans. Many retirees will be at greater risk of outliving their savings.

The coming demographic shock points to a need for a comprehensive, disciplined strategy for wealth management. Unfortunately, many investors are unprepared. Their “retirement fantasy” is just that — a fantasy.

We believe there is hope for investors who take action to secure their retirements ahead of the looming population shifts. Individuals who develop a disciplined approach to saving and investing in the pre-retirement and retirement stages can potentially side-step many of the economic consequences. This report reviews the key issues and challenges associated with the coming demographic shock in order to help investors achieve their goals of comfortable retirements.

The Demographic Shock is a Global Dilemma

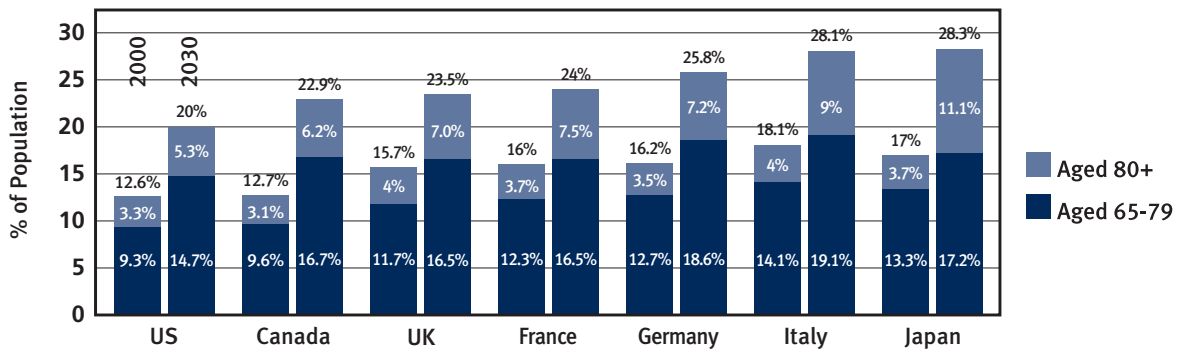
The demographic shock will affect Americans, Europeans, Japanese, and citizens of other developed nations. In less than 30 years, one in four people will be age 65 or older in the developed world, up from about one in seven today, according to the Organization of Economic Cooperation and Development (OECD). By 2030, 71% of the world’s age 65 and older population will live in developed nations such as the United States, Japan, Germany, the United Kingdom, Canada, and France.

The sharpest economic minds in the United States and around the world are beginning to focus on demographic issues. Greenspan addressed the topic frequently in recent months. A year earlier, he told a congressional committee, “... the aging of the population in the United States will have significant effects on our fiscal situation ... [it] is bound to bring with it many changes to our economy — some foreseeable, many probably not.”

The 65+ Age Group Will Grow Rapidly

Projected growth of 65+ age group as a percentage of total population

2000 vs 2030, by country



Source: U.S. Census Bureau, An Aging World: 2001 and 1999 United Nations data.

Global life expectancy has increased significantly, making it more difficult for governments to fulfill retirement and health care promises. Americans who turned age 65 in 2000 are expected to live another 17.9 years, on average, according to U.S. Department of Health and Human Services projections.

“The effects will be felt not just within individual nations but throughout the global economy,” wrote demographers for the U.S. Census Bureau. For many nations, the 80 and older age group is growing the most rapidly. That group requires significant private care and public resources relative to other age groups.

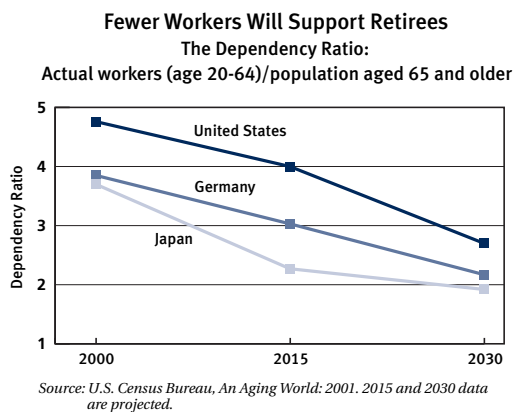
Low fertility rates are expected to exacerbate the problem. In 2000, the fertility rate was 1.4 in Japan and Europe, and 2.0 in North America, according to U.S. Census Bureau estimates. Those levels are below the 2.1 replacement rate necessary to maintain population levels. Consequently, in the coming decades, fewer workers will be available to support a larger pool of retirees.

Peter Peterson, the current chairman of the Council on Foreign Relations and former chairman of the board of the Federal Reserve Bank of New York, has been concerned about the issue for more than a decade. Peterson said, “From private discussions with leaders of major economies, I can attest that they are well briefed on the stunning demographic trends that lie ahead. But so far they have responded with paralysis rather than action. Hardly any country is doing what it should to prepare.”²

Japan and Europe are Cracking

Japan, the world’s second-largest economy, is in the most precarious position, as it is expected to have a greater share of people age 65 and older than any other developed nation. Japan’s demographic problems began in the 1970s and accelerated in the 1980s and 1990s as the nation’s population growth rate fell below the trend of the previous 100 years, according to data from Japan’s National Institute of Population and Social Security Research (NIPSSR). We believe the aging of the population contributed to the economic malaise that has plagued Japan for more than a decade.

Unfortunately, Japan’s demographic condition is worsening. The population growth rate is forecast to turn negative in



The Dependency Ratios for leading developed nations

	U.S.	Canada	U.K.	France	Germany	Italy	Japan
2000	4.76	4.76	3.70	3.70	3.85	3.45	3.70
2015	4.00	3.85	3.23	3.13	3.03	2.78	2.27
2030	2.70	2.44	2.38	2.27	2.17	2.04	1.92

Source: U.S. Census Bureau, An Aging World: 2001. 2015 and 2030 data are projected.

2 Gray Dawn: The Global Aging Crisis, by Peter G. Peterson, Foreign Affairs, January/February 1999 issue, Council on Foreign Relations

2007, according to NIPSSR projections. By 2030, about 11% of the population will be age 80 and older — a staggering proportion — up from 3.7% in 2000, according to U.S. Census Bureau projections. By 2050, Japan is projected to lose 40% of its working-age population compared to 2000.

Europe also faces major challenges, as the demographic situation is expected to deteriorate significantly in the decades ahead. The region's median age is forecast to soar from 37.7 in 2003 to 52.3 by 2050, according to demographer William Frey of the Brookings Institution. Italy and Spain are most threatened by the looming demographic shock. For example, Italy's population age 65-79 is projected to rise 35% from 2000 to 2030, according to U.S. Census Bureau forecasts. Its population age 80 and older is expected to skyrocket by 125%.

Germany, the world's third-largest economy, is overburdened by high taxes, in our opinion, due in part to the demographic changes that are occurring. Combined taxes for public pension, health care, and other social insurance benefits exceed 40%, according to the Cato Institute. "This is already having a severe impact on employment and economic growth that will only get worse," said Cato's William G. Shipman. By 2050, the populations of Germany and Italy could have a greater percentage of people over the age of 80 than under the age of 20, the U.S. Census Bureau estimates.

France's aging trends are somewhat less dire, but its workforce trends are worse due to early retirement incentives. Only 14.5% of people in France age 60-64 are employed compared to 47.1% in the United States, according to International Labor Office statistics.

The United States Faces Daunting Challenges

Americans face serious challenges, although the demographic trends of the United States are not as extreme as Japan and Europe because of slower aging patterns, higher fertility and immigration rates, and a greater share of the population invested in private pensions plans.

Greenspan described the situation in the United States as "daunting" in testimony before a Senate committee in 2003. In 2004, Greenspan has spoken about it with an even greater sense of urgency. He recently told a House committee, "This dramatic demographic change is certain to place enormous demands on our nation's resources — demands we almost surely will be unable to meet unless action is taken. For a variety of reasons, that action is better taken as soon as possible." He also told a Senate committee, "The longer we wait before addressing these imbalances, the more wrenching the fiscal adjustment ultimately will be."

By 2030, when most baby boomers have reached retirement age, the population of Americans age 65 and older should more than double to about 70 million. The 65 and older age group is projected to represent about 20% of the population in 2030, up from about 12% in 2000, according to U.S. Census Bureau estimates. America has never experienced aging of this magnitude in its short history as a nation. How we deal with the demographic transition could set the course for the next 100 years.

One negative demographic trend that concerns us greatly is the decline in the number of workers available to support retirees, known as the “dependency ratio.” The ratio of workers (age 20-64) to retirees (age 65 and older) is forecast to drop sharply from 4.76 in 2000 to 2.70 in 2030, according to conservative projections from the U.S. Census Bureau. That means fewer than three workers would be available to support every retiree. Other government agencies estimate the ratio will fall even lower, in some cases, below two workers for every retiree. For comparison, the dependency ratio was six workers to every retiree in 1960. Not only were there more workers per retiree in 1960, the average life expectancy at birth was lower (age 69 in 1960 versus age 77 today), so retirees were supported for fewer years. Regarding the decline in the dependency ratio, Greenspan recently said, “Without corrective action, this development will put substantial pressure on our ability in coming years to provide even minimal government services while maintaining entitlement benefits at their current level, without debilitating increases in tax rates.”

Furthermore, as baby boomers age, the decline of a key working-age group in America, people age 35-55, could be even sharper than the decline Japan will experience, according to U.S. Census Bureau and United Nations projections. Japan’s population age 35-55 is expected to drop by about 10% from the early 1990s through the middle of this decade. The United States is projected to suffer a more severe drop of about 17% beginning in the latter part of this decade and into the 2020s. This age group represents the heart of the workforce and tends to spend more relative to other age categories. Such a decline in the number of people in this group relative to the total population could affect U.S. economic patterns. About two-thirds of economic activity is a result of consumer spending. Fewer people in this important category would negatively impact total spending, in our opinion. For individual investors, lower spending could weigh on corporate profits and asset returns.

Social Security and Medicare Would be Overburdened

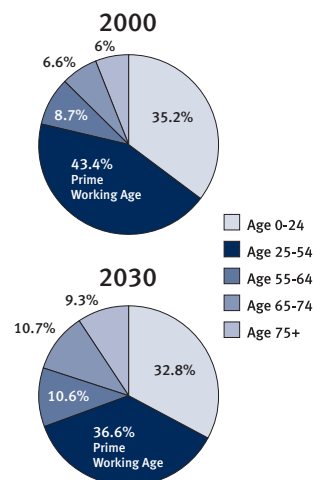
When the U.S. Social Security program was created in 1935, President Franklin D. Roosevelt and Congress set the benefit age at 65, *above* the then average life span of 63 years. Today, the benefit age is far *below* the average life span of 77 years old. Under current law, partial benefits can be collected as early as age 62 and full benefits can be collected at age 65-67, depending on date of birth. The gap could widen even further in the coming decades. By 2050, the median life expectancy could reach 80-83 years old, according government projections.

“Today, many people believe that to work 40 years to retire for an additional 20 years is sensible! Even with a

The American Workforce Will Shrink While Older Age Groups Will Expand

The prime working age category (aged 25-54) in the U.S. is projected to drop from 43.4 percent in 2000 to 36.6 percent in 2030. At the same time, the population of Americans 55 and older is projected to rise from 21.3 percent to 30.6 percent.

The projected population breakdown by age group



Source: U.S. Census Bureau, *An Aging World: 2001*

prosperous economy, this expectation is probably unreasonable,” wrote finance experts Robert Arnott and Anne Casscells. “To the extent that today’s workers are misled and told to expect the rest of society to support them for 20 years or more in retirement after just 40 years in the work force, we could face serious policy gridlock when those promises come due,” they added.³

Currently, it is projected that Social Security contributions could fall short of outlays as early as 2018, according to the Social Security and Medicare Board of Trustees’ 2003 report. By 2042, the trustees forecast that the combined trust fund will be exhausted.

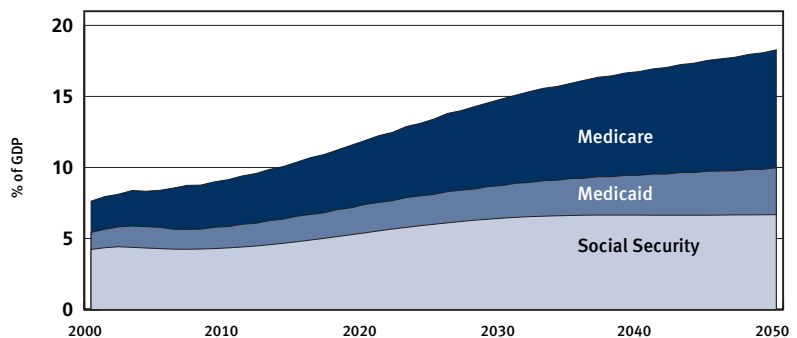
Medicare’s financial position is even more strained. As early as 2013, annual expenses could exceed non-interest income in the Medicare Part B Hospital Insurance Trust Fund, according to the trustees. By 2026, the Hospital Insurance Fund could be exhausted.

By 2050, Medicare and Medicaid expenses could almost triple their share of gross domestic product, according to the Congressional Budget Office’s (CBO) December 2003 Long-Term Budget Outlook. If such a large share of resources is dedicated to health care, it will limit investment in other areas of the economy.

Greenspan recently said, “Most experts believe that the best baseline for planning purposes is to assume that the demographic shift associated with the retirement of the baby-boom generation will be permanent — that is, it will not reverse when that cohort passes away ... If this fundamental change in the age distribution materializes, we will eventually have no choice but to make significant structural adjustments in the major retirement programs. The degree of uncertainty about whether future resources will be adequate to meet our current statutory obligations to the coming generations of retirees is daunting.”

We agree that demographic changes in the United States will seriously strain entitlement programs unless corrective action is taken soon. While there had been little attention paid to the issue in the past few years, Greenspan’s recent comments are likely to raise the level of debate among politicians and policy makers. We anticipate that reforms will ultimately take place. However, at this juncture, it is impossible to determine what form they would take, the

U.S. Government Entitlement Expenses Will Skyrocket
The projected growth as a percentage of GDP



Source: Social Security data from *Status of the Social Security and Medicare Programs — A Summary of the 2003 Annual Reports*, Social Security and Medicare Board of Trustees. Medicare and Medicaid data from the December 2003 Long-Term Budget Outlook, the Congressional Budget Office. Medicare projections include the new Part D prescription drug benefit.

3 *Demographics and Capital Market Returns*, by Robert D. Arnott and Anne Casscells, AIMR, March/April 2003.

magnitude of change they would cause, when they would take place, and how they would affect different age groups.

It is worth noting in Greenspan's comments on the prior page, he said the demographic shift could be "permanent" — meaning that even after the baby boomers pass away, the United States and other developed nations would still have a high percentage of people age 65 and older relative to past decades. So even after 2030, population groups could be out of balance with too few workers supporting too many retirees. In a 2003 speech to a Senate committee, Greenspan said, "... population aging in the developed world is not likely to be a temporary phenomenon, associated solely with the retirement of the baby-boom generation. Rather, under current projections, the retirement of that generation should be viewed as hastening the transition between the current distribution of age and one in which the population is notably older." We recommend, therefore, that investors plan to self-fund a greater share of their retirements, rather than rely on public benefit programs.

Demographics Will Alter the Investing Landscape

The U.S. Economy and Markets Could Benefit This Decade

Before 2010, as the demographic shock approaches, we anticipate that the U.S. economy will grow at a modest pace. On a positive note, most baby boomers will be in the workforce, and the economy should benefit from their peak savings years.

Because of this likelihood, some economists and strategists argue that financial markets will deliver strong returns this decade. They note that as the boomers save during their final working years, higher flows of capital, otherwise known as "fund flows," will come into the financial markets. They believe the fund flows will be comparable to the record-breaking period of 1995-2000, which helped to fuel the recent bull market.

While we agree that U.S. boomers will continue to save and invest this decade, we disagree with those very bullish projections. Instead we tend to side with Greenspan that U.S. capital flows could be pinched as Europe and Japan begin to trim investments in order to meet their promises to retirees. If savings rates fall overseas, the "global capital flows to the United States that have contributed significantly in recent years to financing domestic investments are likely to decline," Greenspan said.

Japan and Europe will experience deteriorating aging and labor force trends before the United States does. Labor force trends are important to monitor because labor supply and productivity tend to be the best broad predictors of economic growth, in our opinion. In major developed nations, including economic leaders such as the United States, Japan, and Germany, labor supply and labor productivity grew steadily each decade since World War II, according to OECD and United Nations records. The positive labor trends provided a foundation for steady growth in gross domestic product (GDP) and rising standards of living.

That global labor trend is probably about to change because of the coming demographic shock. "The history of labor force growth that has persisted over at least the last half century in many developed countries is likely to

be reversed in the relatively near future,” according to the World Economic Forum.⁴ While growth in the U.S. labor force and productivity should be near or above historical averages throughout this decade, we expect poor trends in Japan and Europe to offset the benefits.

Nevertheless, we believe savings from baby boomers will contribute to positive equity returns this decade. However, those who are anticipating a final spurt of boomer-related growth similar to the 1990s are likely to be disappointed, in our opinion.

After 2010, the Investing Landscape Becomes More Uncertain

The demographic shock will no doubt usher in a period of great uncertainty for financial markets and investors after 2010, in our opinion. Global aging and labor trends will likely deteriorate rapidly. Investors should therefore begin to plan now as to how to best handle the uncertainty.

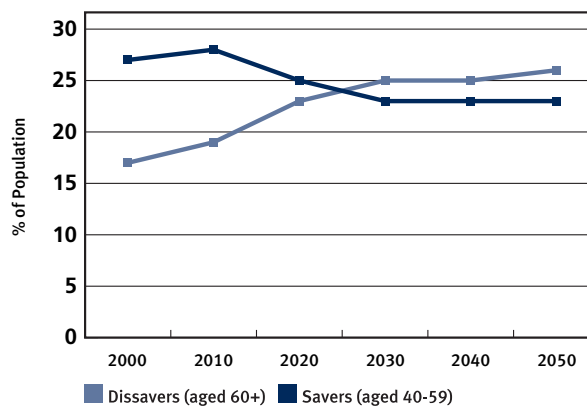
Because there are many moving parts that could alter the demographic situation of developed nations positively or negatively, such as any changes in public benefit programs, health care costs, immigration patterns, productivity growth, global GDP growth, and interest rates, it is difficult to forecast how demographic changes would impact financial markets.

So, investors need to be aware of what *could* happen. The ability to successfully maneuver through the demographic shock period may depend on how prepared individual investors are to confront a wide range of scenarios, including potentially lower returns on assets

compared to historical averages. This is why we believe investing will become more complicated than ever before in the pre-retirement and early retirement phases. Yet, individuals who develop a disciplined approach to saving and investing in the pre-retirement and retirement stages can potentially side-step problems that could arise under various scenarios, in our opinion.

A healthy debate is beginning to occur in the financial and academic communities as to what effect the demographic changes could have on financial markets. Three major scenarios are emerging: 1) a Hard Landing scenario, 2) a Soft Landing scenario, and 3) a Business As Usual scenario.

Private Savings Will Deteriorate in the U.S.
Dissavers (aged 60+) will outnumber prime savers (aged 40-59)



Source: U.S. Census Bureau. Data are projected.

⁴ *Living Happily Ever After: The Economic Implications of Aging Societies*, The World Economic Forum, January 2004

Scenario 1: A Hard Landing

This scenario is a worst-case view regarding the effect of the demographic shock. Proponents argue that financial markets could suffer poor performance for decades — through the 2030s — due to the economic consequences of the demographic changes. This Hard Landing scenario assumes that little reform of retirement benefit plans will take place to correct the demographic situation. It assumes that health care costs will rise at a much stronger pace than inflation. Because of the public benefit liabilities, deficits could skyrocket and interest rates could rise.

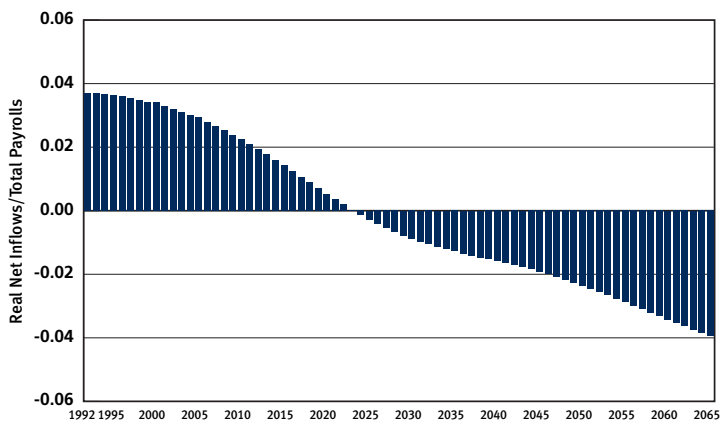
Proponents assume that sluggish economic growth will occur among developed nations due to deteriorating labor trends. And, they argue that emerging economies (China and India, for example) will not be able to pick up the slack. Even if emerging economies experience strong growth, they would not represent a great enough share of total global growth to compensate for the sluggish trends in the developed world.

Proponents of the Hard Landing scenario also argue that poor fund flows will be a major determinant of the performance of financial markets. Their logic follows the basic rules of supply and demand. A large group of retirees would need to sell investments in order to fund their retirements, so there would be a significant supply of financial assets, like stocks. These retirees would be selling to a proportionately smaller working population, so there would be less demand for those assets. Selling would be more pronounced on “riskier” assets under this scenario.

Specifically, they assume that pension outflows will be a primary driver of the supply/demand imbalance. As baby boomers draw down cash from retirement accounts, pension fund flows in particular could stall and eventually decline. Pension fund contributions were a major source of invested capital for the U.S. stock and bond markets during the 1990s, so any declines could weigh on financial markets. After 2005, as the oldest baby boomers approach retirement, the growth of real net pension fund inflows should begin to drop off

Pension Funds Could Experience Net Outflows Projected real net U.S. pension fund inflows as a fraction of total payrolls

Pension fund contributions were a major source of invested capital during the 1990s. After 2005, the growth of real net pension fund inflows should decline dramatically and could turn negative around 2024.



Source: *The Consequences of Population Aging on Private Pension Fund Saving and Asset Markets* by Sylvester J. Schieber and John B. Shoven, March 1994.

dramatically. They are likely to drop off even further from 2010-2020, as the graph on the prior page indicates, according to groundbreaking forecasts by John Shoven, a Stanford University economics professor, and Sylvester Schieber, an executive at The Wyatt Company.

“Pension plans will switch more assets from equities to fixed income investments. They will do this to better match their liabilities for more and more retirees,” wrote Robert Stowe England of the Center for Strategic and International Studies (CSIS).⁵ “This switch will increase the number and volume of sellers of equities. The consequent rise in demand for fixed-income investments could drive down return on bonds,” he added.

Proponents of the Hard Landing scenario generally believe today’s leading financial markets could begin to weaken around 2010 and could enter a particularly challenging period in the 2020s as pension fund outflows occur.

Scenario 2: A Soft Landing

This scenario forecasts positive but modest returns on financial assets relative to historical performance. Proponents assume that developed nations will be forced to reform retirement benefit programs by raising the retirement age or reducing benefits. Therefore, deficit spending would be less severe, and sustained periods of high interest rates would be less likely compared to the Hard Landing scenario. Also, emerging economies in Asia (excluding Japan) would contribute to global economic growth.

The Soft Landing scenario assumes that while developed economies such as the United States, Japan, and Germany could experience periods of sluggish growth and markets may face occasional difficulty, they would ultimately adjust to the demographic shock. Markets would adapt because two opposing forces would counterbalance each other: Higher equity ownership rates would offset lower fund flows.

Proponents believe equity ownership would be embraced by a greater percentage of pre-retirees and retirees during the demographic shock period, particularly in the United States. Longer retirements and longer life spans could encourage pre-retirees and early retirees to remain invested in equities at older ages compared to past decades, which could help support equity valuations. Retirees would be more dependent on investment returns to stretch their savings and maintain working-age standards of living. A low interest rate environment could magnify this trend. Under the Soft Landing scenario, households that are behind in retirement savings would also turn to equities in order to improve financial positions. Equities would represent a greater share of portfolio assets for older Americans.

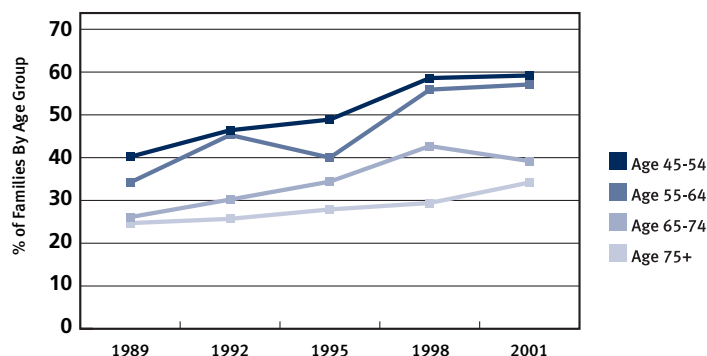
This view is supported by stock ownership trends. Since at least the late 1980s, stock ownership has increased among pre-retirees, early retirees, and older retirees, according to the Federal Reserve Board’s Survey of Consumer Finances (SCF). For example, in 1989, about 26% of households age 65-74 and older owned equities. By 2001, equity ownership among that age group jumped to almost 40%, as the following graph illustrates.

⁵ *England.*

When the opposing forces of higher equity ownership and lower fund flows collide, the perceived need to stay invested in equities could counterbalance some of the outflows that are expected to occur — thus the market would act as an adaptive mechanism.

Having said that, some proponents of the Soft Landing scenario argue that investors should plan for modest returns throughout the demographic shock period relative to the annual double-digit gains frequently experienced during the 1982-1999 bull market. While equity ownership is likely to increase as the population ages, global equity outflows could keep overall returns rather muted.

Equity Ownership Has Risen, Even Among Older Age Groups
Percentage of U.S. families with direct or indirect stock holdings by age group



Source: The Federal Reserve Board's 2001 Survey of Consumer Finances (SCF). 1989 data is from the 1995 SCF report. Indirect holdings refer to stocks in mutual funds, retirement accounts and other managed assets.

Scenario 3: Business As Usual

This scenario forecasts that the demographic shock would have little effect on financial market returns. Proponents argue that there is a weak correlation between asset prices and demographics. They assume normal economic cycles of strong growth, modest growth, and recessions, similar to the past 20 years, with the potential for strong productivity growth.

Proponents believe that baby boomers would not be involved in wholesale selling of financial assets, but instead would draw down assets at a slow rate. Economics professor James Poterba of the Massachusetts Institute of Technology argues that due to wealth trends, many of the assets held by baby boomers will not be sold, but will be passed along to heirs. He also believes that older population groups in the United States would be able to sell their assets to younger people in emerging nations, such as China and Mexico. For these reasons, the reduction in U.S. pension fund flows would not have a negative affect on asset prices, he argues. Finally, Poterba and others assert that demographic changes are already being factored into financial asset prices. So, when the changes actually occur, asset prices would not be jolted.

Other proponents of the Business As Usual scenario believe a “pot of gold” can be found if long-term tax revenues are considered. Economist Michael Boskin of Stanford University points out significant future tax revenue already exists that could fund the projected Social Security shortfalls, Medicare shortfalls, and the public debt. He argues that as the baby boomers withdraw funds from tax-deferred 401k, IRA, and defined benefit retirement accounts, the withdrawals would be taxed at ordinary income levels under current law.

That revenue, which Boskin forecasts could represent around \$8-\$13 trillion, has not been factored into the solvency of retirement programs or the governments' long-term budget projections. Proponents believe the revenue could help bail out the Social Security and Medicare systems.

We Believe the Soft Landing Scenario is Most Likely

It is our view that the odds are low that the worst-case Hard Landing scenario or best-case Business As Usual scenario would occur. We are more comfortable with the Soft Landing scenario for four main reasons:

- Major developed nations will be forced to reform public retirement programs, in our opinion. Many nations are already considering an increase in the retirement age, which would raise the minimum age for public benefits. An increase in the retirement age would accomplish two important objectives. It would increase the number of workers and decrease the number of retirees, which could help improve global GDP growth. Obviously, if these reforms occur in the United States, younger workers would need to plan to work longer. Yet, public benefit reforms are unlikely to completely solve the demographic problem. Even with shifts in the retirement age, the United States would still need to confront the problems associated with an aging population. Also, the tax revenue “pot of gold” that Business As Usual scenario proponents hope to find may not solve the problem, in our view. Even if Boskin’s \$8-\$13 trillion projections are reasonable, we believe there is a real risk that politicians would not earmark retirement account tax revenue for Social Security and Medicare, but would instead use it to increase government spending in other areas or to create new, costly entitlement programs such as a national health care system. Overall, we believe public benefit reforms would help avoid the Hard Landing scenario but would not usher in the Business As Usual scenario.
- Emerging economies should provide an important source of growth in the coming decades, particularly for multinational companies, many of which are domiciled in the United States and trade on U.S. stock exchanges. Leading multinational companies could take advantage of the stronger demographic trends and potentially higher economic growth opportunities in Asia (excluding Japan). While the populations of most Asian nations will age during the next two decades, the pace is projected to be much slower than Japan, Europe, and the United States. And, Asia’s labor force should experience growth. The region is already beginning to benefit from a shift in the global workforce as more multinational companies outsource their labor to China, India, and other countries in the region, away from the United States, Europe, and Japan. Investors who have exposure to this region and to U.S.-based multinational companies that take advantage of the Asian trends will outperform, in our opinion.
- Equity ownership rates should rise among older Americans. The historical data cited in the Federal Reserve study are compelling (see graph on page 11), in our opinion. We anticipate that the trend of higher equity ownership levels would be extended out further in life as a greater share of older Americans need to maximize returns on retirement investments. Equities will provide an important source of growth for investors who need to fund longer retirements, maintain working-age standards of living, or tend to be behind on retirement savings. Because the demographic shock will complicate the investing landscape,

equities will become an even more important component of the retirement planning process, in our opinion.

- Financial markets will adapt to the demographic shock, in our opinion. Historically, financial markets have functioned as an adaptive mechanism. For example, in the last 100 years, they have adapted to booms, busts, depressions, recessions, inflation, world wars, and, more recently, terrorism. During these challenges, leading companies have developed innovative, more efficient methods of improving return on equity and profits. We believe the period of the demographic shock will be no different. Leading multinational companies and U.S. markets will ultimately adapt to the disruption, in our opinion.

Because the future is so uncertain, we recommend that investors become more active in planning for the demographic shock during the pre-retirement and retirement phases. Seemingly small changes in return assumptions can have dramatic effects on portfolios. Investors should prepare for a range of scenarios by taking advantage of the wide array of retirement investing vehicles available and increase exposure to equities in the pre-retirement and retirement phases.

In addition to equities, your RBC Wealth Management Financial Consultant can recommend other investment vehicles and develop a balanced strategy necessary to confront the demographic changes. In an environment with heightened uncertainties and potentially stressed financial resources, a sound understanding of investments and investment horizons, and professional consultation appears more important than ever.

Many Individuals Are Unprepared

From a financial standpoint, many workers and recent retirees are unprepared to face the demographic headwinds that could occur in the global economy and financial markets. Overall, there has been a lack of attention paid to retirement planning and investing, or complacency related to the demographic issue.

Workers and retirees in the United States spend more time planning for social events and holidays than planning for retirement, according to the Retirement Confidence Survey (RSC) conducted by market research firm Mathew Greenwald & Associates. The study indicates that 61% of U.S. workers have not calculated how much money it will take to retire. Of those that have calculated it, 36% do not remember how much it will take to retire. In the United States, 51% of workers believe they will be eligible for Social Security sooner than they actually will, according to the RSC study. The majority of workers are unaware that full Social Security benefits will phase in later than age 65.

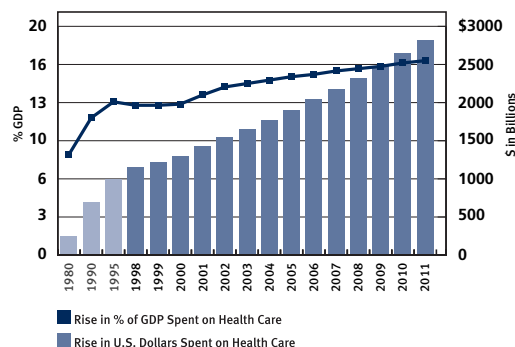
A significant proportion of U.S. workers underestimate how much annual income is necessary to retire comfortably. Financial planners typically recommend that retirees prepare to replace 80%-100% of their working-age income on an annual basis in order to maintain their lifestyle. But, in a recent Towers Perrin study of workers in mid- and large-sized companies, respondents said, on average, they would need just 62% of pre-retirement income to meet their financial goals for retirement.

Also a concern, one in four American workers do not participate in their employer-sponsored 401k retirement

savings programs, according to a study conducted by Alicia H. Munnell and Annika Sunden of the Center for Retirement Research at Boston College. They found that even among workers who do participate, retirement accounts often become a source of funds. Of those workers who change jobs, 55% cash out their 401k accounts during the transition to a new employer. That may be one reason the typical household approaching retirement age had only \$55,000 in 401k/IRA holdings in 2001. That amount would typically provide just \$300 per month in retirement income.

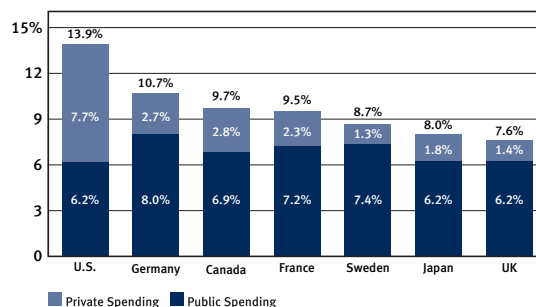
What is troubling is that many people seem unwilling to make the necessary changes to achieve their retirement goals. Only slightly more than one-third of baby boomers believe they will need to scale down their lifestyles in retirement, according to the AARP. Yet some studies suggest half of boomers are not on track to accumulate enough wealth to maintain their working-age lifestyles. We believe many of these households will be faced with a tough choice between lowering their standard of living during retirement or working a few years longer than planned to make up the shortfall.

Health Care Expenses Are Likely to Rise Further
Total U.S. health care expenditures



Source: Centers for Medicare & Medicaid Services, Office of the Actuary. Data include public and private expenditures. Data from 2001-2011 are projected.

Public and Private health care expenditures as a percentage of GDP (2001)



Source: Health Data 2003, Organization for Economic Cooperation and Development (OECD).

While some press reports and academic studies argue that many of the challenges facing pre-retirees and early retirees will be solved by inheritances, the data suggest otherwise. A Federal Reserve Bank of Cleveland study in 2000 said, “As a group, boomers cannot rely on inheritances to fund their retirements any more than their parents could. Furthermore, inheritances have been and will remain very unevenly distributed among the population, making the receipt of a large inheritance a very improbable event.”⁶ The study found that even though bequests could be larger in absolute terms, they are not projected to grow much as a share of inheritors’ economic resources relative to past decades. A windfall for baby boomers is also unlikely because bequests will be split among more siblings. In addition, the study found that because a higher proportion of elderly Americans’ resources are annuitized, a smaller share of bequeathable assets are available. The Federal Reserve’s consumer finance studies indicate that the bequest ethic is declining among older Americans.

6 *The Baby Boomers’ Mega-Inheritance - Myth or Reality?* By Jagadeesh Gokhale and Laurence J. Kotlikoff, Federal Reserve Bank of Cleveland Research Department, October 2000.

Rising Health Care Costs Could Threaten Retirement Savings

The rising cost of health care is the most important issue that Americans are unprepared to face, in our opinion. Total U.S. health care expenditures almost doubled from 1990 through 2000 and could nearly double again by 2010, according to the Centers for Medicare and Medicaid Services, and the Government Accounting Office. Health care costs in the United States are much higher than other developed nations, as a graph on the prior page illustrates.

For people age 65 and older in the United States, out-of-pocket health care expenses already average about 19% of income, according to the AARP. We believe health care costs could continue to spiral much higher because the number of technologically advanced intensive procedures is expected to rise sharply as the baby boomers age. The average retiree could be required to spend an even greater share of retirement income and savings on health care than on other basic needs or leisure purchases.

Unfortunately, a majority of workers have not confronted the possibility of higher health care liabilities. About 56% of RSC respondents have given little or no thought to health insurance needs. Many baby boomers seem to be ignoring health care issues altogether. Only one in six boomers believes they will have “serious health problems in retirement,” according to the AARP.

Many workers are also in denial about long-term care, typically the most costly aspect of health care for retirees. In the RSC study, 79% of respondents said they have given little or no thought to home health or nursing home needs. Only 7% of respondents have purchased long-term care insurance, according to a study conducted by the Center for Aging Research & Education (CARE). The study said, “... there is an overwhelming level of denial regarding the likelihood of needed long term care.”

Conclusion

The coming demographic shock can seem daunting whether you consider the global economic ramifications or the implications for individuals.

On a global basis, we believe Japan, Europe, and the United States can do little to prevent the demographic changes from beginning to take root in the next 5-10 years. The aging and labor force trends seem firmly in place. While reforms of public benefit systems and higher immigration levels would help improve the demographic structure, we believe these nations are certain to age, and their work forces are destined to shrink. These developments will burden the public benefit systems and economies of Japan and Europe, in our opinion.

The United States should experience less severe age and labor force deterioration, but the economy will not escape unscathed, in our opinion. Our society will still have to confront the likelihood that fewer workers will be available to support a greater share of retirees. Ultimately, we believe the U.S. financial markets will adapt as

reforms in the public retirement system occur, emerging economies grow, and equity ownership rates rise among older Americans. However, returns could be modest relative to the 1980s and 1990s due to labor supply imbalances and overhangs in Europe and Japan. Therefore, we believe the investing and planning process will become more complicated than ever in the pre-retirement and early retirement phases. It will require investors to consider a broad range of investing solutions.

The degree to which individuals prepare for the coming demographic changes will determine their ability to overcome them. Individuals who fail to prepare could be faced with disappointing asset returns. The quality of their retirement could be threatened. Pre-retirees could be forced to postpone retirement or work part time.

Yet, individuals who develop a disciplined approach to saving and investing can side-step many of the demographic challenges and avoid potential pitfalls by taking more responsibility for funding their own retirements. During the course of the year, your RBC Wealth Management Financial Consultant will have a broad range of retirement planning and investing solutions to help you maneuver around the coming demographic shock.

ADDITIONAL INFORMATION AVAILABLE UPON REQUEST.

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