

UNSUSTAINABLE PROMISES

BY RHEA WESSEL

“If you don’t understand demographics, you won’t understand how to choose the right stocks or estimate economic growth”

AN INTERVIEW WITH AMLAN ROY

According to management guru Peter Drucker, “Demographics is the single most important factor that nobody pays attention to, and when they do pay attention, they miss the point.”

Amlan Roy, head of global demographics and pension research at Credit Suisse in London, agrees. He argues that demographic trends are putting whole societies at risk and should be incorporated more fully into all forms of investment analysis.

In October 2009, Roy took participants at the CFA Institute European Investment Conference in Frankfurt on a whirlwind tour of how demographics affects capital markets and investments. To avoid a fiscal train wreck, governments around the world must renegotiate the commitments they have made to society. In Europe, for example, the older population costs society 14–19 times more than the younger generation. In the United States, the cost is 26.5 times.

Roy also believes that most pension schemes discriminate against women and can lead to post-retirement poverty for women because, on average, women significantly outlive men and generally pay less into retirement schemes as a result of breaks from employment to care for children and parents.

CFA Magazine followed up with Roy, who regularly advises institutional clients, pension funds, and governments.

Amlan Roy is one of the speakers in the traveling conference “Global Imbalances: Implications for Investment Portfolios” (Milan, Zurich, Geneva, Amsterdam). Get details at the conferences section of www.cfainstitute.org.

What is it that people don’t get about demographics?

Demographics is one of the most important problems facing the world. People see demographics as a long-term strategic issue. But it’s not. It impacts matters right now. Both long-term as well as short-term institutional investors are gradually starting to pay greater attention to the multitude of ways in which demographics affects investment factors.

I have linked demographics to discount rates, yields, equity premiums, economic growth, mortality and longevity risk, geopolitical risk, retirement, pensions, health, inflation, the commodities sector, and society. Not all of these things are long term.

I’ll give you an example. In Europe, 82 percent of taxes are going to old-age survivors, sickness, healthcare, and disability payouts. If you don’t understand demographics, you won’t understand how to choose the right stocks or estimate economic growth.

In what ways do analysts typically incorporate demographics into their investment decisions?

Demographics is just not on the radar.

As Peter Drucker rightly said, most people do not have a good understanding of the deeper implications of demographics. Analysts need to consider how demographics affects economic growth, because economic growth impacts returns in virtually every asset class. The focus of demographics in pensions and insurance has largely been on the liability side, but even here a lot of improvements need to be made in terms of longevity models and products based on them.

David Zion, CFA, who heads accounting research at Credit Suisse, frequently talks about how most pension funds are underfunded. I look at what factors have



Photo: Thomas Engster

contributed to this underfunding—such as asset and liability management—and what the potential solutions are.

What is the cost of this general lack of understanding of demographics?

Pension funds responsible for retirement benefits of members could have achieved better performance had they fully integrated demographic dynamics into their asset and liability analysis. The CFOs and finance directors of this world should always keep this in mind when managing a company. Otherwise, they're only looking at one part of the business and forgetting about the rest, thereby lacking a holistic approach.

It was OK to forget those pension fund promises when assets were growing at three times the level of liabilities. But the reality is different now: If they don't take pensions into account, CFOs will make the wrong cost-of-capital decisions. The data they use to pick out the weighted average cost of capital will be wrong because it will exclude the risks of the pension plan.

One way to begin holding companies accountable would be for analysts to start demanding more information about pension liabilities. Is there enough education available for analysts regarding pension fund liabilities?

There are two problems: First, pension accounting is not very well understood. The accounting standards boards do not agree on how the present-value liabilities should be accounted for. They disagree on which discount rate to use for the liabilities and whether they should be based on market value. It would be useful for the International Accounting Standards Board (IASB) and the Financial Accounting Standards Board (FASB) to come together and agree on a given standard to start with. The problem for

corporates and pension funds is not just that they don't get the liabilities right for cash flows in the future, but they don't get the discount rates right.

Second, many companies don't know the extent of their pension liabilities to their employees or the family members of employees.

Who is to blame for miscalculated pension liabilities?

Collectively, all of us are to blame. It's boards, regulators, and people like me who have been raising this issue but have been unable to convince people to change the system. Pension footnotes should no longer be footnotes. We need to pay better attention to them, scrutinize them harder, and, most of all, we need to think of the pension plan not as an adjunct side but as part of the holistic balance sheet.

Analysts should be looking at how companies report these numbers. Is there something opaque? Is there something they're trying to hide? Particularly for airlines, utilities, and automakers, their biggest problem is not their operating performance but rather their financial risk in conjunction with operational risk. As the scholars Francesco Franzoni and José Marin have shown, the market significantly overvalues firms with severely underfunded pension plans.

How can organizations better deal with the longevity risk in their pension liabilities?

The current capital in the insurance and reinsurance sector is inadequate to combat longevity risk, and the markets for long-dated bonds are small relative to the demands of pension funds and insurance companies. We need a new set of instruments to allow for effective hedging. They need to be economically affordable, homogeneous, and priced transparently.

Governments need to develop the life capital market to help avoid individual poverty, sponsor pension provision withdrawal, and a near total collapse of annuity markets.¹

How are demographic changes impacting emerging economies?

Some of the biggest problems faced by emerging countries are linked to demographics. If you look at the density of people per square kilometer, you'll see that the poorest cities and nations top the list. In 2007, they were Mumbai, India; Kolkata, India; Karachi, Pakistan; Lagos, Nigeria; and Shenzhen, China. In Mumbai, for instance, nearly 30,000 people live in a single square kilometer area. These areas face problems with drinking water, sanitation, electricity, crime, and pollution.

People often ask me about Africa. From an economic growth point of view, some African countries could repeat the success of the Four Asian Tigers—Hong Kong,

¹ For more on longevity risk, see "Degrees of Longitude" on page 36.

Singapore, South Korea, and Taiwan—of the 1980s and 1990s if they were to be able to control two major problems, namely health (i.e., deaths due to HIV/AIDS, malaria, and tuberculosis, as well as infant and child mortality) and law and order (i.e., political stability, coups, genocide, and unrest). The potential can ultimately be unleashed by employing a large proportion of young people that are healthy and educated. To create a demographic dividend in Africa, governments must make advances in public health and public safety combined with significant increases in all levels of education across the board.

I'd like to add something about BRIC (Brazil, Russia, India, and China) countries. BRIC is a sexy marketing acronym without much economic merit. The GDP per capita in BRIC countries—which varies significantly among the four—is a better guide to the economic well being of Brazil, Russia, India, and China than other countries. Further, if you consider the countries from a demographic point of view, you'll see that they're very different. The populations of Russia and China will shrink in the next eight years because of low fertility rates. I am actually bullish on these countries for various reasons—such as China for manufacturing or India for software. But grouping them all together into an aggregate BRIC is doing the individual economies an injustice.

How do demographics impact GDP?

Many people are surprised to learn that South Korea has the lowest birthrate in the world. It also happens to be the country that had the highest GDP growth rate per capita in the world between 1980 and 2008. Its fertility rate is 1.01 children per woman. I believe that South Korea will age far more rapidly than Japan has aged in the last two decades. How will this impact GDP? It's pretty easy to foresee: Population growth rate declines are followed by labor force declines and GDP growth declines.

Hedge funds and the biggest investors have very recently started to incorporate one of our main research points into their investment decisions. It is that demographics explains 40 percent of all the GDP growth of the Asian miracle in the 1980s and 1990s.

In addition, demographics explains most of the GDP growth differentials between Japan, the United States, and Germany. If the GDP growth rate can be explained by demographics, GDP growth rates affect every asset class, whether it's bonds, equities, real estate, hedge funds, infrastructure, or derivatives. Therefore, demographics is a much broader underlying factor to all these things than most people believe.

You also talk about the importance of youth dependency ratios. Please explain.

The three components of GDP growth in any country are working-age population growth, labor force productivity growth, and labor force utilization growth. There are a

few countries that are keeping the world out of a global recession. They are Brazil, China, India, Mexico, Russia, and Turkey. They are doing this by using fiscal stimulus to create jobs for young people—i.e., they're reducing their youth dependency ratios to create labor productivity growth that funnels into GDP growth.

If you compare average growth rates in the United States and in Japan between 1951 and 1973, you will see that Japan's rate was nearly 9 percent while the rate in the United States was roughly 4 percent. This is because Japan's labor productivity rose as the high number of dependent youths in the country were employed as part of Japanese post-war reconstruction efforts.

In Germany as well, population growth rates are foretelling the growth story. Our research shows that Germany's population growth is turning negative compared with world population growth. This means the number of consumers is going down in Germany while the labor force growth rate is turning negative as well.

How can investors trade on demographic analyses?

Equity premium is the single most important financial variable for either tactical or strategic asset allocation. We know that you can use demographics to predict the equity premium. We don't say that demographics alone can predict it, but demographics can enhance your R^2 or the predictability of your equity premium. Our research shows that demographic variables significantly predict excess returns.

Hedge funds are using demographic information for investing by calculating their own estimates for GDP growth rates. For instance, a manager can calculate the estimate for the United States and for Canada. If Canada's growth rate is higher than the rate in the United States, you go long on Canada. If it's not, you go long on the United States. People are doing these trades.

Which asset classes stand to benefit most from demographic changes?

We are bullish on infrastructure, natural resources, leisure and luxury, emerging markets, pharmaceuticals and biotech, and financial services because family structures are changing. The family structures and behavioral characteristics of the elderly and young people are different.

For instance, there has been a 25 percent decline in percentage share of two-parent-with-children households in the United Kingdom over last 25 years, while the number of single-person households has tripled. And the wealth divide in the rich countries has widened with the rich getting relatively—and disproportionately—richer. The wealth of the 60+ age cohort is the highest of all the age cohorts in countries such as the United States, Japan, the United Kingdom, Switzerland, and Germany. This is a new phenomenon and has implications for all sectors of the economy as well as for policy.



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How are women disadvantaged in current pensions systems?

Male-dominated agendas typically leave out the fact that women tend to live longer than men and that they pay less into retirement schemes because they take breaks from employment to care for children and parents. For instance, when people look at longevity and life-expectancy models, although women are considered the reference benchmark in most of the calculations, people don't refer to the fact that women's life expectancies are three to five years longer than men's.

If women's life expectancies are longer and retirement ages are lower, as they are on average in OECD (Organization for Economic Cooperation and Development) countries, the result is that women are likely to be subjected to a much poorer living standard in their post-retirement years, despite the fact that they took care of their children, spouses, and elderly parents. This is very unfair to women. However, people tend to ignore this fact in demographic literature. They focus on people living longer. What about women living longer?

Here's another point. Several large U.S. newspapers published stories about how the subprime crisis will cause Social Security, Medicare, and Medicaid to go bankrupt three to four years earlier than expected. If that is the case, the people who will suffer the most will be women because they outlive men. It's asymmetric suffering.

You also argue that women are a key part of the solution for the world's demographic problems.

Indeed. I tell clients that they need to create more jobs that are women friendly. They need to increase female labor force participation with the use of technology to allow

women to better balance home life with work life. Some governments—such as those in the Netherlands, France, and Scandinavian countries—have been giving women incentives to have more children in addition to a better balance between work and home life. As a consequence, fertility rates

that were going down have marginally started to go up. A key criticism is that when women go to work they'll have fewer children, and there's a trade-off between fertility and labor force participation. But it's not true in many countries, such as the United States and the United Kingdom. The lowest participation rates are in Spain and Italy. There, women neither have many children nor work because the governments aren't creating enough opportunities for them to work.

Society and policymakers should recognize this problem. If they want women to have more children, they should develop programs that promote childcare, tax breaks, and allow men to support women through paternity leave. This is the best practice. In terms of gender parity, the United States is ranked 32nd in the world. Despite this activity differential, women at the age of 18 are much better educated than men. The rich countries of the world want to preach democracy, but they are not being fair to their own women. Women don't get equal opportunities for jobs.

What should governments do about aging populations?

The demographics time bomb question is how to get the rising mass of old people to be supported by a shrinking mass of young people. We need to increase the labor force participation of women with the use of technology, raise the retirement age, promote selective immigration, and allow older, retired workers to come back and work one to two days a week.

What are some of your predictions regarding demographics?

Benjamin Franklin said a long time ago that there are only two constants in life: death and taxes. Demographics affects both death and taxes. I predict that taxes are bound to go up because governments have made promises that they cannot keep. We will all see our tax rates closer to 60 and 65 percent if governments don't wake up to the fact that they need to tell the people in their 40s and 50s that the benefits they had promised are unsustainable. ▀

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