DEMOGRAPHIC DISRUPTION

Why We Need to Save More and Invest Differently

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Unprecedented demographic changes are under way across the world, and their speed and magnitude are greater than ever before. Like the technology disruptions overturning conventional wisdom about industries and business models, demographic disruptions will force countries to rethink foundational policies around retirement, labor force participation, healthcare and much more. Investors will need to rethink savings and spending objectives over much longer time horizons. We believe the impacts of these demographic shifts have not been adequately assessed and accounted for.

Demographics Is About More Than Aging

Demographics are often thought to refer only to increases in life expectancy and the numbers of young versus old. In fact, demographics pertain to a much broader set of "people characteristics," that is, those of every consumer and worker. At a macro level, both consumer and worker behavior affects GDP: the former consumes much of what the latter produces. At a micro level, consumers and workers influence the income statements and balance sheets of individuals, households, companies and countries.

While age is a factor in how people behave, it is not the only one. People behave differently as workers and consumers depending on their gender, income, education, wealth, family background and environment. Technological advances and globalization trends also exert a big influence. This heterogeneity of behaviors has complex effects on economic growth, inflation, debt, asset prices, geopolitics, migration and sustainability,[1] all of which need to be understood in order to formulate the correct policy responses from governments and help investors construct their portfolios.

Five Big Demographic Disruptions

There are many ways in which demographics are disrupting normal economic and financial conditions. Of these, I believe the following five have the greatest impact.

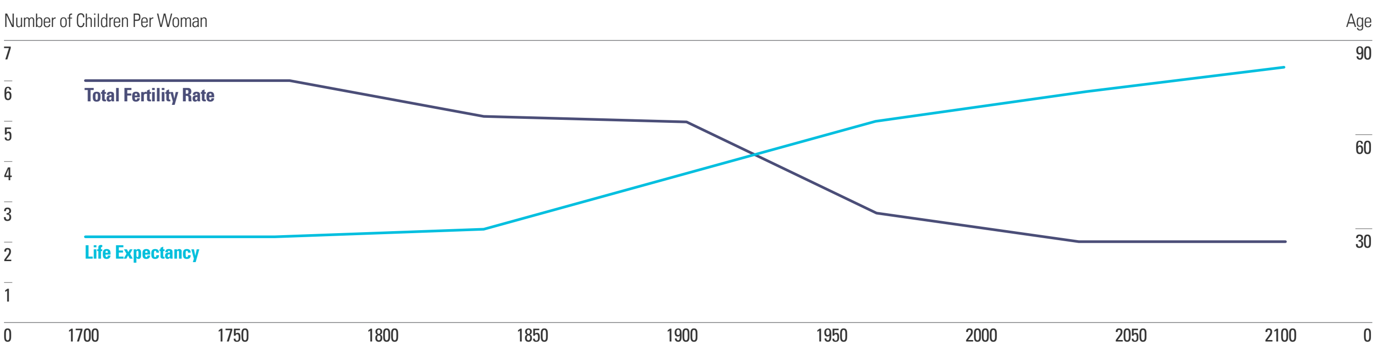
1 Demographic Time Bomb

First is the so-called demographic time-bomb, which describes the combination of big increases in life expectancy with dramatic drops in fertility rates, to an extent that is unprecedented in human history. Below is a chart showing how global life expectancy and fertility rates have changed since 1700 (see Figure 1).

The greatest increase in life expectancy occurred in the 20th century, with the average life span more than doubling from 30 years to 65 years due to advances in medicine and healthcare. Meanwhile, global fertility rates have decreased from five children per woman in 1950–55 to 2.5 children per woman in 2010–15. This has been driven primarily by changes in developed markets, for example, greater female participation in the workforce, better access to contraception and lower infant mortality rates. Such a change is also historically unprecedented.

However, the impact on economic growth of these changes has been significant. Economic growth relies on growth in population, productivity and hours worked. As population growth falls and the available labor force shrinks, GDP growth weakens — something we are already witnessing in some advanced economies, even as they recover from the 2008 financial crisis. Lower growth, inflation and interest rates coupled with rapid urbanization across the world are exacerbating inequality and creating environmental problems. Just under half of us currently live in cities. By 2030, that proportion will be closer to three-quarters.

Figure 1 **Life Expectancy and Fertility Rates since 1700**



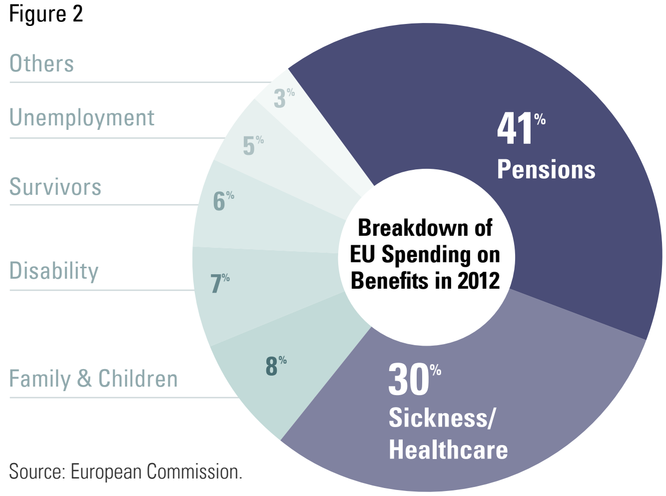
Source: R Lee (2003), "The Demographic Transition: Three Centuries of Population Change."

2 Unsustainable Pressure on National Budgets

The second disruptive change has been the growing pressure on the budgets and national debt of advanced countries from past promises made on pensions, healthcare and long-term care. As people live longer and require more care, but still retire in their 60s, governments are switching money away from public services to fund pensions and health, as we can see in the example for the European Union in Figure 2.

In most countries, age-related expenditures currently account for 20%+ of GDP and are projected to increase further.[2] This is unsustainable now and will become even more so in the future without radical reform. Company pension plans are facing shortfalls for similar reasons and matching or reducing liabilities has become the focus for many schemes.

Figure 2



Source: European Commission.

3 Demographic Dividend in Emerging Markets

The third important disruptor is the "demographic dividend" of emerging markets,[3 4] which is crucial to EM growth. Many assume that this applies to the higher number of young people in emerging markets as opposed to developed markets, which coupled with better population growth, should result in a bigger workforce. While these developments are occurring, they are not enough for emerging markets to grow. To achieve this, countries need to invest in the education and skills of their young people, ensure greater female participation and create more jobs.

4 Mass Migration in a Globalized World

Large flows of people within and between countries for economic or security reasons are proving to be a challenge for even the most liberal countries.[5] From 1990 to 2013, global migration increased by 50% from 154 million to 232 million and has continued to rise in the wake of conflict in the Middle East and the prospects of a better life in the West. Figure 3 shows how migration in 2013 broke down across countries and reasons for migration.

Work, or economic migration, was the main reason for migrant inflows into Japan, while it was family in France, Italy and the US and free movement in Germany and the UK. Such mass movements of people are creating tensions between migrants and natives, furthering geopolitical unrest and triggering surprise electoral outcomes such as Brexit and the election of President Trump.

Figure 3 **Migrant Inflows, 2013**

REASON	US	GERMANY	UK	FRANCE	ITALY	JAPAN
Work	75.9k	24.3k	86.4k	26.8k	73.1k	25.1k
Family	735.0k	56.0k	64.7k	104.6k	81.1k	20.6k
Humanitarian	119.6k	30.7k	20.7k	11.7k	8.8k	0.2k
Free Movement	N/A	354.8k	98.3k	95.5k	77.9k	N/A

Source: OECD, ILO, CS.
Numbers within circles represent the biggest reason for inflows into a given country.

5 Behavioral Differences Between Generations

The final disruptor is unexpected differences in behavior across the generations.[6] Many had assumed that so-called millennials (born in 1983–2000) would behave in the same way as the post-war baby boomers. In fact, millennials are getting married and having children later, not seeking a single occupation for lifetime employment and having a different economic impact.

Today's young adults, for example, consume relatively less than their corresponding cohorts born a generation or two earlier. They start accumulating assets later due to longer years in education. High youth unemployment and high student debt levels have created additional pressures, causing them to embrace the "sharing economy." Job uncertainty is also leading to increased precautionary saving among workers and can affect overall economic confidence. Simultaneously, differences in savings and investment patterns across generations are affecting capital flows and current accounts.[7]

The effects of all these disruptions are deep, long-lasting and accelerating. From an economic standpoint, the greatest consequences will be for growth, inflation, debt and asset prices. Demographics are also weighing on mechanisms such as monetary policy levers and, in some cases, rendering them ineffective amid low interest rates and inflation. (This topic has been widely discussed at central bank conferences over the last decade.[8])

From a social perspective, the most profound impact is on geopolitics, climate change and dealing with the human costs of migration.

How Should Policymakers and Investors Respond?

Governments

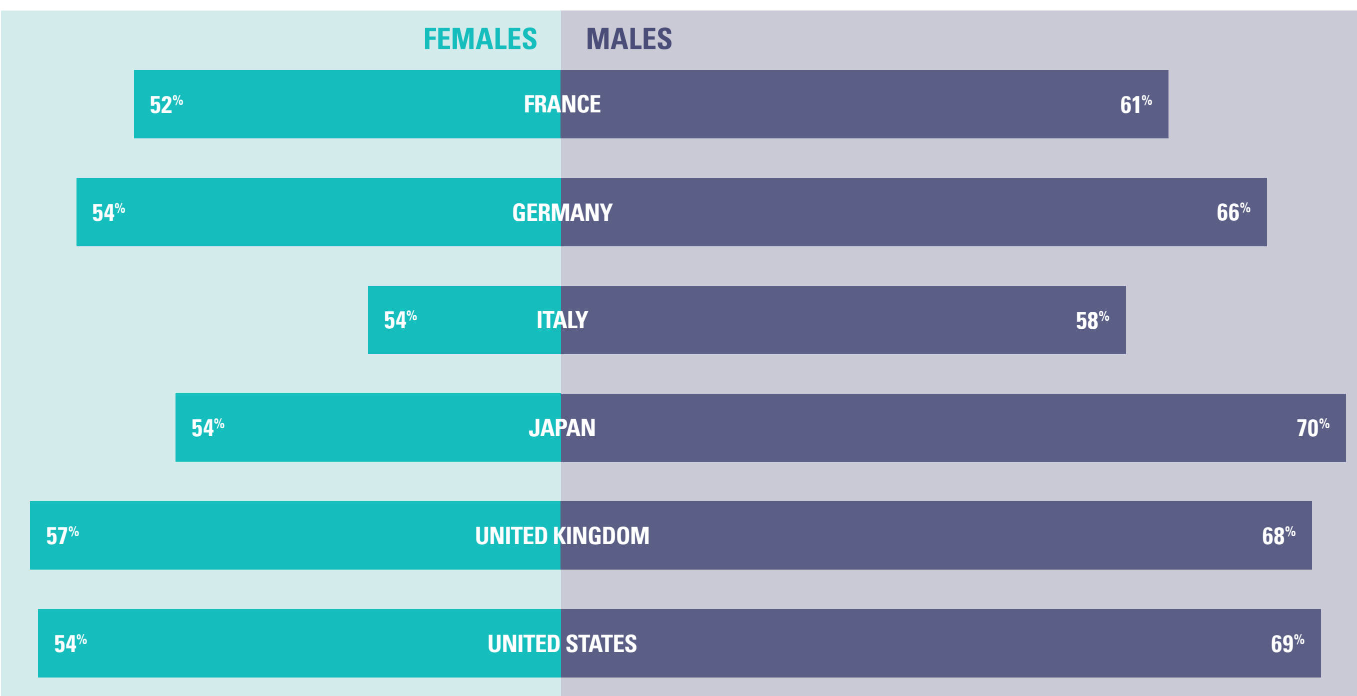
Governments will need to take multiple actions[9] to deal with these complex issues, the most pressing of which is to increase economic growth. Lower long-term growth will mean lower GDP per capita — a measure of prosperity — that is, future generations will be less well off than their parents and burdened by large amounts of public debt. To achieve higher growth, governments need to encourage more people of working age into the labor force, improve their productivity or increase the hours that they work. This has implications for labor market reform, gender equality,[10] immigration, productivity and technology, as well as skills and education.

Figure 4 shows the different rates of labor force participation across advanced countries in the G6. Older countries such as Japan, Germany, Italy and France could all increase growth by encouraging more women to enter and remain in the workplace. Several countries have already switched from incentivizing all workers to retire early to persuading them to work for longer.

One way to encourage people to stay in work is to abolish mandatory retirement ages and allow flexible retirement for workers into their 60s and 70s. Another is to promote lifelong training and education, so that people can switch careers or upskill later in life. There may also be a role for selective migration with benefits to both host and donor countries and the movement of jobs rather than people via outsourcing and offshoring.

Governments also have to wrestle with inequality and youth unemployment even as technology and automation threaten further disruption. The best outcome may be to marry the experience of older employers with the energy and drive of younger ones, making both more productive.

Figure 4 **Labor Force Participation G6 — 2015 Gender Labor Participation Differences**



Source: World Bank, International Labour Organization (ILO).

Investors

Consumers and workers influence economic fundamentals, which in turn drive growth and investment returns, and affect how capital markets behave. So the most important action investors can take is to integrate an understanding of demographic effects into their decision-making.

Pension funds and insurers, in particular, need to evaluate how demographics will affect not only liabilities, but also assets. They also need to encourage pension holders to save more and seek independent advice when considering how to invest for a longer retirement.

To cope with the complexity of the new environment, investors need to adopt multi-period financial models[11] that can handle a broader range of asset classes, time-varying risk premia, correlations and volatility. Finally, they need flexible, lower-cost, multi-asset solutions that factor in future scenarios for growth, inflation and asset prices and can adapt to different market conditions.

Without this appreciation of how demographic forces are disrupting our world and how we should respond, investment opportunities may be missed and longer-term risks may become acute. ■

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9 G. Keating, R. Hokenson and A. Roy, "The Demographic Manifesto: New Jobs, New People," CS Research, 2000.

10 See footnote above: the author has been advocating the need for reduced gender inequality across more than 50 countries

11 A. Roy, "Demographics & Asset Prices," CS Research, 2010.

Glossary

Demographic Dividend describes the rise in a country's economic growth that is fueled by its working-age population becoming a larger share of the population than its non-working-age population.

Group of Six (G6) refers to the US, UK, Germany, France, Italy and Japan.

Time-varying Risk Premia refers to the fluctuations over time in financial compensation demanded by investors.

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