Demographic Transition: The Economic and Investing Implications of an Aging Planet

by Ather Bajwa, CFA, CPA, Senior Lead Research Analyst

Key Private Bank
Ever since the invention of the baby stroller a century ago, the sight of families walking their children around the neighborhood, strolling through the park, or trekking along the beach has been a ubiquitous scene. While the image of people out with their strollers is just as pervasive now as it was a hundred years ago, today’s strollers aren’t just for human babies. In the US, pets outnumber children four to one.

Over the past few decades as urbanization soared and the middle class thrived, we seemed to have decided to replace babies with pets. Our amplified affinity for pets seems a consequence of the modern lifestyle where our focus has shifted to career goals, economic prosperity, and rising longevity, resulting in delayed parenthood and having fewer children. The US Census Bureau projects that, for the first-time in history, by 2034 the number of those age 65 and older will outnumber children under the age of 18. The impact of these unprecedented changes is already having a profound impact on not only our lifestyle, but the makeup and trajectory of the economy.

By 2034, the number of those age 65 and older will outnumber children under the age of 18.
No country for old men

The world’s population was largely stable until the 18th century, when the advent of industrialization and urbanization led to rising food productivity, improvements in public health, and technological innovations that led to a population boom. While the world population grew in the 18th and 19th centuries to around 1.6 billion, it doubled twice during the 20th century to 6 billion. At the end of the current century, population is expected to increase by only about 50% to around 11 billion, as we live longer and become less fertile.

At the turn of the nineteenth century, the US, like much of the rest of the world, was largely agrarian, and the US total fertility rate (TFR)\(^1\) stood at eight children per woman. The advent of the industrial revolution shifted society away from farming, while manufacturing blossomed and urbanization skyrocketed. As a result, the TFR steadily declined throughout the nineteenth century, reaching 3.8 children per woman by 1900 and 2.8 by 1927. The Great Depression led to a sudden plunge in birthrate, to 2.05 by 1930, as economic strife led to delaying parenthood. The post-World War II baby boom led to the TFR rising once again, reaching 3.7 by the mid-1950s before steadying around 2.0 in the 1970s and staying around the replacement rate for the next four decades. The global financial crisis (GFC) of 2007 led to a repeat of the Great Depression, as parenthood once again took a back seat. This time, however, a decade after the GFC, the birthrate has continued to fall and currently stands at 1.76.
We are all Japanese now

Medical advances have helped dramatically improve our health, directly leading to a rising life expectancy. For most of human history, average life expectancy ranged between 25 and 35 years. At the turn of the 20th century, health and technological innovations had helped increase life expectancy to between 40 and 50 years. Today it stands around 70 years globally and is expected to increase to over 80 by the end of the century. For the first time in history, 5-year-olds are outnumbered by 55-year-olds. While lifespans across the globe have increased, the dispersion is quite large. The average age in many African countries (e.g., Chad, Cameroon, Mali) is in the mid-50s, whereas those in the most developed countries can expect to live well into their 80s. By 2100, several Asian countries (China, Japan, South Korea, etc.) are forecasted to reach an average lifespan of between 93 and 95 years.

The demographics of most developed economies are considerably worse than those of the US. Several advanced economies are experiencing population declines (e.g., Japan, Italy), while many others (e.g., Germany, Spain) saw positive population trends largely because of net positive migration. The demographic situation in Japan is among the worst in the world, where chronic low fertility (below replacement rate since the 1970s), longevity, and strict immigration policies have led to the population peaking in 2009. With a median age of 47, Japan also has the world’s oldest population, and by 2050 the median age is expected to rise to 55. Many other developed economies, particularly European ones, are in a similar situation. While the likes of Germany (47 years), Hong Kong, and Austria (44 years) have greying populations as well, their saving grace has been positive net migration. China is in a similar situation. Its one-child policy resulted in the median age leaping from 19 in 1970 to 37 currently, and it is expected to rise to 48 by 2050.

By contrast, most developing nations have much younger populations with considerably higher fertility rates. Sub-Saharan African nations, for example, have a median age around 17. Similarly, the median age of the Indian population, 27 currently, is expected to rise to only about 38 years by 2050. The UN estimates that most of the global population increase will come from African and Asian countries like Nigeria, India, and Iraq.
I have seen the future

The rapid aging that many developed economies are experiencing is leading to an unprecedented phenomenon – falling population. Economic growth (GDP) depends on a growing population, a skilled workforce, and rising productivity. Data suggests that countries with rising old age dependency ratios tend to grow much slower historically and lag behind those with a younger population.

A maturing population also means that an ever-growing portion of government spending will be for healthcare and retirement benefits. US federal outlays for Social Security and Medicare currently account for approximately 8% of GDP and are expected to increase to 12.4% by 2050. The overall federal deficit is projected to increase from 3% currently to around 10% during the same time period. Similarly, in most developed economies (EU, Japan, etc.), age-related expenditures currently account for 20+% of GDP and are projected to increase significantly over the coming years.

The fear is that as the population growth rate falls below the replacement rate, the dependency ratio increases, and society ages, the impact on economic growth can be quite severe – a phenomenon quite evident in many developed economies.

An aging population can lead to peculiar employment dynamics. Older economies tend to have lower unemployment rates and low wage growth as older workers are less keen on changing jobs. Consider the US, where the labor force participation has slowed considerably from around 2.5% in the 1970s to around 0.5% currently. Similarly, the types of in-demand jobs are expected to change considerably. Healthcare-related employment is expected to skyrocket, with many areas already experiencing acute labor shortages. The Republic of Ireland, for example, is running out of priests due to an aging clergy and is increasingly reliant on Asian-born pastors.
A younger population with few assets to their name and wages as their primary source of income prefer inflation, which helps boost their income and spending power. In contrast, older cohorts who work less and depend on their savings and pensions for income prefer low inflation. Similarly, an aging workforce can be less dynamic and is associated with lower productivity versus a younger one, which can lead to lower GDP growth and falling inflation. Most of today’s developed nations experienced a booming economy and rising inflation in the decades following World War II. Facts suggest that as the baby boomers have started to retire, both inflation and growth seem to have materially moderated from decades past, a trend widely expected to continue.

Investing in an aging world

The impact of the choices to delay parenthood and have smaller families is shown not only through demographic statistics – but also in our changing lifestyle choices. In 1990, minivans made up 7.5% of all new car sales in the US. By 2018, the minivan market share had plummeted to 2.5%. The change in cultural attitudes is perhaps most reflective in how we spend money today versus a hundred years ago. In 1900 the average American family spent about 20% of their income on non-necessities, items like recreation, personal care, transportation etc. By 1950 that share had increased to 30%. Today, non-necessities represent approximately 50% of our expenditures.

The shifting demographics are not only shaping trend growth rates and future inflation expectations, but they also will likely change their make-up. Declining fertility and rising longevity will likely result in the need for today’s working population to save significantly more over their working life to acquire adequate assets to finance their retirement. Similarly, both the cost and demand for healthcare will likely continue to increase. An older cohort also means that retirees are unlikely to receive the same level of support from either their employers or the government. Consider Germany, where a budgetary surplus has been sacrosanct. However, if no changes are made to benefits, based on current projections, by 2032 Germany’s budget will exceed 3% and by 2050 it will balloon to 9% of its GDP.
Similarly, an aging population will have a significant impact on housing trends. An older generation’s property needs are very different from those of a family. The location of these units (closer to healthcare facilities), accessibility (public transport), and structure (multi-family) are likely going to increase urbanization trends and population density in already strained metropolises. These changes are likely to place profound stress on affordability as land becomes more expensive and development costs increase. These dynamics place further pressure on already strained individual retirees as well as public finances, but they also create significant investment opportunities in healthcare, infrastructure, and technology.

Rising old age dependency has had a significant impact on monetary policy as well. A higher savings rate, lower future growth expectations, and declining inflation expectations seem to be a major contributing factor to declining interest rates. As global longevity continues to increase and fertility rates fall, interest rates will very likely continue to be pressured to the downside.

The demographic transition has already led to a considerable influence on investments. Technology and healthcare have been garnering the lion’s share of interest, a trend likely to continue. Similarly, markets that have focused on getting ahead of the changing demographic trends have been able to attract a disproportionate amount of capital. In developed economies, coastal cities and areas focused on education, healthcare, and research have been the biggest beneficiaries at the expense of the heartland and rural communities. In the case of emerging and frontier markets, the biggest beneficiaries will be those nations that focus on human resource advancement, skill development, and research and development. Businesses and economies that are focused on innovation are more likely to emerge as tomorrow’s leaders given the current lifestyle and demographic trends.
Demography is not destiny

The world is greying. Rising longevity, falling fertility, increasing old age dependency, and the ensuing financial pressures are all real. However, none of these factors is preordained to deliver falling productivity or slower growth. Many concerns over aging associate longevity with an inevitable demographic disaster. In fact, longevity is a boon where older workers have the chance to make considerably larger economic contributions than prior generations.

Similarly, the notion that older workers are inevitably less productive is not quite accurate. While aging does tend to impact physical capabilities, the overall impact of age on modern day workers is virtually zero. In the modern-day workplace, older workers have proven to be just as productive as younger ones. With the combination of increased automation and the move towards services-based economies, older workers can provide invaluable guidance and acumen through their broad experience, knowledge, and professional networks.

Modest adjustments to legislative and fiscal policies can produce large, positive, and lasting impacts. A slight increase in retirement age, small tweaks to taxation policies (e.g. inflation linked), targeted immigration, etc., can markedly change economic projections. Consider the example of Sweden, a society aging faster than most of the developed world. More than one-half (52%) of 25- to 64-year-old Japanese have upper secondary education, which has helped its GDP per capita to grow by 1.13% from 2010 to 2016.

A keen focus on learning (34% of 25- to 64-year-old Swedes have upper secondary education), research and development, and targeted immigration policies (approximately 20% of the Swedish population is foreign born) has helped drive its annualized GDP per capita growth to 1.36% (from 2010 to 2016) versus 1.33% for the US. Even Japan, the “senior-citizen” of the world, has avoided the demographic disaster narrative by focusing on human development.
While many factors impact prosperity and economic growth, few are as critical today as demography. Changing global demography is creating both opportunities and crises for policy makers, the business community, and society at large. Our key focus should be on investing in human development and building resources. Turning the upcoming potential demographic disaster into a demographic dividend will not happen spontaneously. We should be open to new, innovative ideas and not be afraid to test them, especially in the areas of employment, immigration, capital markets, and trade. Better educated and skilled societies can convert the aging calamity into a demographic dividend by boosting productivity and invigorating growth, increasing competitiveness, and replenishing retirement coffers.

For more information about how these shifting global demographics should influence your portfolio, contact your Key Private Bank advisor.

**About the Author**

Ather Bajwa is a Senior Lead Research Analyst responsible for the areas of Fixed Income, Real and Alternative Assets at Key Private Bank. Ather has more than 15 years of experience working in portfolio analysis roles within fixed income, equities, asset management, funds investing, and alternative asset areas.

Ather collaborates with investment professionals across the firm to develop fixed income and real asset models to optimize investor returns and craft strategic plans for fund managers based on their criteria. In that role, he manages and creates models, identifies new fund opportunities, maintains and develops a strong network of contacts with outside managers, conducts manager meetings, writes due diligence reports, reviews and updates fund reports, and recommends investments funds.

Previously, he served as the Director of Research for SGL Investment Advisors, Inc. While at SGL he built complex financial valuation and pro-forma models to forecast earnings quality, projected financial statements, and evaluated enterprise value.

Ather is a Certified Public Accountant (CPA), holds an MBA in Finance from the University of Montana, and is a Chartered Financial Analyst.