THE WORLD'S NEW POPULATION TIME BOMB: TOO FEW PEOPLE

BY GREG IP

Ever since the global financial crisis, economists have groped for reasons to explain why growth in the U.S. and abroad has repeatedly disappointed, citing everything from fiscal austerity to the euro meltdown. They are now coming to realize that one of the stiffest headwinds is also one of the hardest to overcome: demographics.

Next year, the world's advanced economies will reach a critical milestone. For the first time since 1950, their combined working-age population will decline, according to United Nations projections, and by 2050 it will shrink 5%. The ranks of workers will also fall in key emerging markets, such as China and Russia. At the same time the share of these countries' population over 65 will skyrocket.

Previous generations fretted about the world having too many people. Today's problem is too few.

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This reflects two long-established trends: lengthening lifespans and declining fertility. Yet many of the economic consequences are only now apparent. Simply put, companies are running out of workers, customers or both. In either case, economic growth suffers. As a population ages, what people buy also changes, shifting more demand toward services such as health care and away from durable goods such as cars.

Demographics help explain why a historically weak recovery in the U.S. has nonetheless seen the unemployment rate drop by half. The economy doesn't need as many new jobs to employ the

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smaller net flow of entrants into the workforce. For example, home builders are simultaneously suffering from shrinking demand since the homeownership rate is declining, and from labor shortages as the baby boomers retire.

Karel Peltram, owner of Peltram Plumbing in Auburn, Wash., has about 100 employees, which is down from the market peak in 2007. Nonetheless, he is short of workers. Three have recently retired, and three more are approaching retirement, including his estimator for multifamily units. "I'm going to have a hard time replacing him. I just don't have anyone available with that knowledge yet," he says.

Mounting pensions are an important reason peripheral European countries like Greece have such intractable debt burdens and why Germany is so reluctant to stimulate its own economy despite a balanced budget. Meanwhile, the movement of so many people into the highest-saving period of their lives has produced a bulge of excess savings that has held down interest rates and inflation, making it difficult for central bankers to use their traditional tools to revive economic growth.

Demographic forces are assumed to be slow-moving and predictable. By historical standards, though, these aren't, says Amlan Roy, a demographics expert at Credit Suisse. They are "dramatic and unprecedented," he says, noting it took 80 years for the U.S. median age to rise seven years, to 30, by 1980, and just 34 more to climb another eight, to 38.

There is no simple answer for how business and government should cope with these changes, since each country is aging at different rates, for different reasons and with different degrees of preparedness.

Automation can boost workers' productivity and support the burgeoning ranks of the elderly. Assumptions about aging also need to change. The typical 65-year-old today is roughly as healthy as a 58-year-old was four decades ago and can thus work longer.

Older, richer countries can boost their immigrant intake from low-income economies primarily in Africa and Asia, which will make up a growing share of the world's working-age population—if they can overcome political opposition.

Population questions have long preoccupied economists. In 1798 Thomas Malthus, a British essayist, argued that humanity would reproduce faster than food production could rise, leading to destitution and starvation. He was wrong. The Western world's population grew rapidly over the 19th and 20th centuries, with a dip in 1918-19 because of World War I and the Spanish flu pandemic. But rising agricultural productivity proved more than capable of feeding the extra mouths.

When U.S. population growth slowed in the 1930s, Alvin Hansen, a Harvard University economist and an influential disciple of John Maynard Keynes, said this caused businesses to invest less because they had fewer workers to equip and because elderly consumption patterns favored personal services over capital-intensive homes and durable goods.

In a landmark 1938 speech, Mr. Hansen said this had mired the U.S. economy in "secular stagnation," producing "sick recoveries which die in their infancy and depressions which feed on themselves and leave a hard and seemingly immovable core of unemployment." He advocated expanded government spending to restore full employment.

Mr. Hansen spoke too soon. The population slowdown of the 1930s was a temporary aftereffect of the 1918 flu pandemic and a clamp down on immigration in 1924. World War II led to an explosion in government spending that restored full employment, and the baby boom after the war's end put to rest fears of declining population. The U.S. fertility rate, or number of children a woman has over her lifetime, leapt from 2.3 in the 1930s to 3.6 in 1960.

Indeed, population around the world took off as advances in health care and nutrition caused child mortality to plummet and life expectancy to soar. Fear of overpopulation became widespread, epitomized by Paul Ehrlich's "The Population Bomb" in 1968 and the Club of Rome's "Limits to Growth" in 1972. But right about then, fertility rates began to drop, in both advanced and underdeveloped countries. With a lag, some of Mr. Hansen's predictions began to come true, most prominently in Japan. In 1996, its working-age population began to shrink, and, a few years ago, so did its total population.

Japan is an extreme case, but the rest of the advanced world and many emerging economies are following similar paths. By 2050, the world's population will have grown 32%, but the working-age population (15 to 64 years old) will expand just 26%.

Among advanced countries, the working-age population will shrink 26% in South Korea, 28% in Japan, and 23% in both Germany and Italy, according to the U.N. For middle-income countries it will rise 23%, led by India at 33%. But Brazil's will edge up just 3% while Russia's and China's will contract 21%.

Among rich countries, the U.S. remains demographically fortunate: Its working-age population should grow 10% by 2050. But it will still shrink as a share of total population from 66% to 60%. The demographic drag on growth, in other words, will last decades.

Michael Green, who manages a hedge fund, Ice Farm Capital, that seeks to profit from demographic trends, cites one statistic that suggests Mr. Hansen's prediction is now coming true: The combined population of the southwestern states (California, Nevada, Arizona, New Mexico and Texas), long the country's fastest-growing, is now expanding just 1.5% a year, lower than in the 1930s.

Less labor, less growth

A country's long-term "potential" growth rate depends on two things: the number of workers, and how productive they are. Slower population growth directly chips away at the number of workers.

In 2008, the same year Lehman Brothers failed, the first baby boomers qualified for Social Security, and since then, the number of beneficiaries has ballooned, from 41.4 million to 49 million.

This is an important reason the U.S. labor force has grown only 0.2% a year since 2008, compared with 1.2% in the prior decade, and the labor-force participation rate—the share of adults over 15 years old either working or looking for work—has slumped to 62.4%, the lowest in nearly 40 years, when women were far less likely to be employed outside the home.

This originally seemed the result of the long-term jobless giving up the hunt for work and dropping out of the labor force. But back in 2006 a team of economists at the Federal Reserve predicted this would happen because of long-range structural factors: The aging baby boomers would start retiring; the number of working women would level off; young adults would stay in school longer; and some unskilled workers would bow out.

Those economists now predict the participation rate will fall further to 61% by 2022. That is the main reason Fed officials think the U.S. potential growth rate has dropped to 2% from 3% in the decades before the crisis. Some economists are even gloomier.

People's saving habits change as they age. In their 20s and 30s, they borrow and spend for children and home as they are starting their careers. In their 40s and 50s, those obligations recede and their incomes rise, so they save more. Once they retire, they live off their savings and government support.

When Carla Ponce and her husband got married in 1987, they didn't save anything at first. They bought a house in Las Vegas with no down payment. "With two kids, my husband between jobs, we could barely pay the mortgage," she recalls. They moved to Kenosha, Wis., plowed the profit from their Vegas home into a new home, and Ms. Ponce began steadfastly socking away 10% of everything she earned as an account clerk for the county government. Now 56, she continues to save so that in four years she can join her husband in retirement, buying a boat as a rare indulgence.

This pattern, multiplied across many countries, has a powerful economic impact. How much a country saves is heavily influenced by the difference between the share of its population aged 40 to 65 and the share over 65. For the U.S., eurozone, Japan and six other major economies, that difference rose steadily from the early 1980s to the present, according to Michael Gavin of Barclays, and even more for China, which explains why China runs such a large trade surplus: Chinese households consume less than they earn so they can save for their retirement.

Because capital markets are global, excess savings in one country spill over to another via interest rates. Mr. Gavin argues the rising number of mature workers relative to elderly retirees is a key reason that inflation-adjusted interest rates have steadily declined in recent decades, and are now negative in most advanced countries. Those demographic influences are about to reverse.

This coincides with another demographic factor: Consumption habits change as people age. Younger households spend more on homes, cars and their children's education. For the typical American between 35 and 44, 8% of total consumption goes toward mortgage interest, compared with just 3.6% for someone over 65. By contrast, the typical over-65-year-old devotes 13% of total spending to health care, compared with 6% for a 35- to 44-year-old.

Lowering interest rates works by encouraging consumers to "pull forward" purchases they might otherwise have waited to make. But the elderly have less future consumption to pull forward. William Dudley, president of the Federal Reserve Bank of New York, has argued the aging of the baby boomers has made the economy less responsive to the Fed's monetary medicine "because such age groups tend to spend less of their incomes on consumer durables and housing."

These demographic shifts will have a profound effect on individual companies, anointing new winners and losers. For some, such as Mr. Peltram, the plumber, it means being squeezed between retirements of current workers and shortage of young apprentices. For Seiyu, Wal-Mart Stores Inc.'s Japan unit, it means coping with a shrinking customer base. It opened an outlet on the main shopping street in Otsu, Japan, in the 1970s when Japan was growing rapidly. At its peak the street boasted 45 shops. As the population has aged and shrunk, the shops dropped to just 30, says Takehiko Terada, head of the street's trade group. Seiyu shrank its floor space before finally closing in April. "It was shocking," he says.

Mr. Green of Ice Farm says Abercrombie & Fitch Co.'s sales and stock price aren't languishing because of disenchantment with "ripped jeans or skinny models," but because its target demographic of teenagers is shrinking. Other companies in similar straits are Lululemon Athletica Inc., whose key demographic is women aged 35 to 50, and Anheuser-Busch InBev's Budweiser and Harley-Davidson Inc., whose core customers are white, baby-boomer men. By contrast, pharmaceutical companies will reap a windfall; the average American goes from 3.3 prescriptions in his 50s to 4.4 after 65.

Fixing the problem

Population trends over the next 35 years are challenging but aren't set in stone. Government policies and changing social attitudes can raise fertility. In October China scrapped its one-child policy. Still, evidence from places like Singapore, Australia and the Canadian province of Quebec that have offered cash grants to encourage bigger families and more generous child support for working mothers shows how difficult it is to boost fertility rates; in all, they remain well below the replacement rate of 2.1. Even with higher fertility, it would be decades before population trends changed meaningfully.

As Jens Weidmann, president of Germany's Bundesbank said, "Because Germany's birthrate has been falling for decades, those who would now perhaps be thinking about having children were never actually born."

Companies running short of workers can turn to automation to adjust. China became the world's factory floor thanks to a seemingly limitless supply of rural workers. But with the excess supply now shrinking, Chinese wages are climbing sharply and many Chinese exporters are turning to robots to lift productivity.

Another route is to boost immigration. This faces several problems, though. The biggest suppliers of immigrants to the U.S., such as Mexico and China, are themselves aging, and the cohort that traditionally sought a better life abroad is shrinking. Mexico's fertility rate has dropped from 5.4 in the late 1970s to 2.3 now and by 2030 will be 1.9, the same as the U.S.—and below replacement rate.

The countries with high fertility are mostly in Africa and Asia. In 2050 India will be the world's most populous country, Nigeria will be third and Indonesia fifth, according to the U.N. Most, though, will still be poor. Indeed, low-income countries will make up 14% of the world's population in 2050, compared with 9% now. These are, therefore, the countries that are likeliest to provide immigrants.

In many rich countries, worker-hungry businesses are eager for more immigrants. But to stabilize the elderly share of advanced countries' population would require an immediate eightfold increase in immigration from less-developed countries, according to the International Monetary Fund. This isn't politically feasible given the resistance even current levels of migration have generated.

Probably the most promising way to cope with an aging population is to encourage today's workers to work longer. This has already been proven in Japan where 22% of those over 65 work compared with 18% in the U.S. That suggests there is plenty of potential for workers in Europe and the U.S. to retire later.

Business will have to adapt to an older workforce. In 2007 the German car maker BMW AG redesigned a gearbox production line to fit the older profile of workers it expected in 2017. Among the changes: wooden floors and special shoes to ease joint strain; flexible magnifying glasses for working with small parts; and larger typefaces on computer screens. The changes brought the productivity of older workers up to that of younger workers at minimal cost and have since been applied across the company.

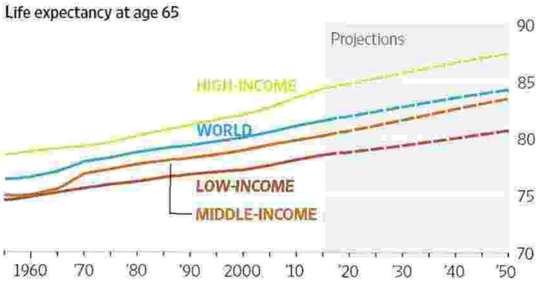
Indeed, several studies have found that older workers are as, and often more, productive than their younger colleagues. As the Bundesbank's Mr. Weidmann notes, "The young can run faster, but the old know the shortcuts."

—Miho Inada contributed to this article.

Challenging Future

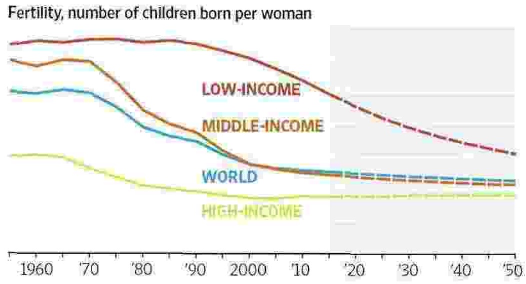
Life expectancy has risen around the world and will keep climbing in coming decades...

Life expectancy at age 65



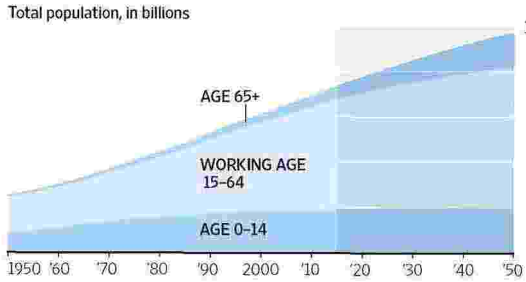
...while falling fertility rates have reduced the inflow of children and new workers to the labor force...

Fertility, number of children born per woman



...which will squeeze the supply of working-age people to support the global economy.

Total population, in billions



Note: Data for life expectancy and fertility are in five-year periods ending in the year shown. Fertility rates shown above are for the average number of children a woman would have by age 50 if she were subject to the age-specific fertility rates observed in a given year.

Source: United Nations, 2015 Revision of World Population Prospects (medium variant)

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