

Yardeni Research



MORNING BRIEFING

January 30, 2019

The Global Birth Dearth

See the collection of the individual charts linked below.

(1) Household count increases as households last longer. (2) More owner-occupied households led by more of those 65 years of age and older. (3) Demographic forces netting out, as some may be causing a shortage, others a glut, of housing inventory. (4) More Millennial women are working and having fewer babies. (5) The baby bust may be weighing on global growth. (6) A very skewed male/female ratio in China. (7) The case for having fewer children. (8) Productivity is the only good response to low fertility.

US Demography I: A Drag on Housing. There is some good news and some bad news in the latest data on US household formation. The good news is that the number of households is increasing, led by owner-occupiers rather than by renters. That should be good for both new and existing single-family home sales. The bad news is that some of this relatively new cyclical trend in household formation may simply reflect the secular trend of people living longer, resulting in longer lifetimes for households. The change in households reflects new minus terminated households. If fewer are terminating, the net will increase. Consider the following:

- (1) Household count increasing, led by owner-occupiers. Over the past four quarters through Q3-2018, the number of households rose by 1.56 million, led by a 1.50 million increase in owner-occupiers of their homes, while the number of renting households rose only 60,000 (*Fig. 1* and *Fig. 2*).
- (2) Baby Boomers living longer. Annual data available through 2017 show that the number of owner-occupied households 65 years old and older rose by 4.4 million from 2011, when the oldest Baby Boomers first turned 65 (*Fig. 3*). They accounted for 31.0% of all owner-occupied households, up from 26.2% during 2011 (*Fig. 4*). The Millennial cohorts remained near their 2016 lows during 2017 at 11.7 million for the under 35 crowd and 15.5 million for the 35-44 group of owner-occupied householders.
- (3) A shortage of housing. The longer lives of the Baby Boomers may be weighing on the supply of existing homes for sale. In turn, the tight supply of these homes is depressing sales (<u>Fig. 5</u>). Of course, not only are fewer houses for sale but also their rising prices reduce their affordability for first-time homebuyers (<u>Fig. 6</u>). The rise in mortgage rates last year exacerbated the affordability problem. The recent drop in those rates should help, but the tight supply may be driven by the demographics of people living longer and staying put in their homes.
- (4) A glut of houses. While home prices have been rising in response to the shortage of inventory, they could soon start to flatten or decline if more Baby Boomers retire and decide to sell their homes. Their kids are now young adults with their own households, so it may be time for the Baby Boomers to turn into minimalists. The problem is that the demand for their homes may by stymied by the minimalist tendencies of the Millennials.

US Demography II: Millennials Aren't Procreating Enough. According to a <u>report</u> from Bloomberg, women between the ages of 25-34 accounted for 46% of the gains in the prime-age labor pool in the

US from 2015 until December 2018. That may be good news for the labor force for now. But it could also signal further delays in child-rearing among these young women.

An Evercore ISI analysis found that the increase was driven by single mothers, while married women without kids came in second. The fact that women getting married later is a critical factor behind declining fertility rates comes as no surprise. Also, couples today may simply have a cultural proclivity toward smaller families. These developments would certainly explain why the number of live births in the US over the 12 months through March totaled just 3.8 million, the lowest pace since 1997 (*Fig.* 7). Here are a few more relevant points:

- (1) Too late to reproduce? The oldest Millennials are now in their late 30s, the women nearing the end of their reproductive years. Even the promise of treatments involving medication and in vitro fertilization can only skew the stats so far. Those who have delayed having children will soon need to decide whether to have any at all in their lifetimes.
- (2) Debunking a fertility rebound. Is it possible that many Millennials could change their minds on having kids, causing a reversal in the US fertility rate? A 9/26 article in Forbes observed that the US Social Security Trustee's Report's projections "assume that the total fertility rate rebounds from its present 1.76 back up to 2.0 births per woman." That's possible. However, a 2018 report by the Center for Retirement Research also mentioned in the article—titled "Is the Drop in Fertility Temporary or Permanent?"—debunked expectations of a fertility rebound.

The report disproved any relationship between the latest recession and delays in having children. It attributed the drop in the US rate to the following, among other factors: increased education levels, which is correlated with lower fertility; the decline in religious practice, as less religious women tend to have lower fertility rates; and the decline in the wage gap (between men and women), as the opportunity costs of having children have increased. None of these trends are likely to be temporary.

Global Economy: Does Declining Fertility Matter? Fertility rates around the world have fallen below a level that can support population growth. The global average total fertility rate of 4.7 children per woman of child-bearing age in 1950 fell to 2.4 in 2017, according to a comprehensive November 2018 global health <u>study</u> published in *The Lancet* medical journal (<u>Fig. 8</u>). All countries and territories examined in the study saw declines in the total fertility rate, which represents the average number of children a woman would have if she lived through all her reproductive years.

The latest rate of 2.4 is just above the 2.1 rate considered necessary for a population to sustain itself absent other factors. That is slightly higher than the 2.0 parent-replacement rate, because not all children survive past childhood and babies are slightly more likely to be male (so the number of males doesn't line up with the number of females 1:1).

Does that mean that some countries around the world are doomed to population decline? Before older people meet their demise, will some countries lack enough working-age people to support them? For those countries, would that spell social and economic disaster?

In the US, immigration is a big offsetting factor to declining fertility. For countries with stricter immigration policies like China, the decline in the fertility rate is a much bigger problem. I've been saying it for a while, and I'll say it again: "China is destined to become the world's largest nursing home." Today, I've asked Melissa to further explore the global decline in fertility and what that means for the global economy:

(1) What areas are below replacement? Fertility rates by region may indicate which populations are

sustainable and which are not. The US fertility rate is 1.8 children per woman, which is not much higher than China's rate of 1.5 (*Fig. 9* and *Fig. 10*). In Western Europe, the rate is 1.6 (*Fig. 11*).

Despite reductions in the total fertility rate, the global population has increased by 197.2% since 1950, from 2.6 billion to 7.6 billion people in 2017 (*Fig. 12*). That has been driven by the growing proportion of the global population in sub-Saharan Africa and South Asia. The study reported that these regions have total fertility rates of 4.6 and 2.3, respectively.

(2) Where are the working-aged? The fertility rate is important not only as a predictor of total population growth but also as a determinant of population-age composition. But it is not the only factor, as discussed below. Nevertheless, population-age composition is a critical driver of a nation's ability to achieve and maintain economic prosperity. Societies that lack a robust and flourishing working-age population to support younger and older dependents at any point in time are unlikely to perform as well as those that do.

Populyst, an independent website focused on demographic trends, reviewed working-age population data around the world starting from 1960 and projected to 2100 in a 2015 <u>post</u>. These data were compiled from the 2015 edition of the UN's "World Population Prospects." The post analyzed the annual rate of change in the population aged 15-64 for various regions.

It showed the following growth rates for 1960-1990, 1990-2015, 2015-2050, and 2050-2100: US (1.3%, 1.0%, 0.3%, 0.2%), Europe (0.7, 0.1, -0.6, -0.2), and China (2.5, 1.1, -0.7, -0.8) (*Fig. 13*, *Fig. 14*, and *Fig. 15*). Thus, the US working-age-population will grow for the rest of the century, but at a much lower rate than in earlier years. "Barring a massive inflow of immigrants or a sharp rise in the birth rate," the working-age population of Europe will decline steadily for the rest of this century. Over the same timeframe, the growth in China's working-age-population will decline sharply.

(3) *Is migration the silver lining?* Population growth is determined not only by fertility but also by mortality and migration. Longer life spans account for the population growth in regions where the fertility rate has fallen below the replacement rate. Longer life spans along with lower fertility rates have resulted in aging populations around the world. The demographic key to economic growth is workingage population growth. In regions where fertility rates have declined, immigration is an important balancing factor.

The US is one of those places where immigration has been a crucial offset to population decline. But in regions like Europe and China, immigration policies have been more restrictive. An expert quoted in a 12/26 <u>article</u> in *The Guardian* shared an interesting view on Europe's challenges: "I believe that one of the reasons why Angela Merkel took the million refugees was because she desperately needed to boost her working population."

Data from the UN's "World Population Prospects: The 2017 Revision" confirms that the US's net migration rate, at 2.9 for 2010-2015, significantly exceeds Europe's (at 1.1) and China's (-0.2). From 1999-2000, the US rate was all the way up to 6.3. The net migration rate represents the number of immigrants minus the number of emigrants over a period, divided by the person-years lived by the population of the receiving country over that period. It is expressed as average annual net number of migrants per 1,000 people in the population.

(4) More Chinese grandparents than children? Especially without immigration to save the day, the damage done from China's recently lifted "one-child" policy may be insurmountable. The medical journal's study shows that for every 100 girls born in China in 2017, there were 117 boys born, implying "substantial sex-selective abortion and even the possibility of female infanticide." One can safely

assume that the sex ratio was skewed even more male over the years when the one-child policy was in effect (1979-2015). As a result, there may not be enough reproductive-age women in the foreseeable future to overcome the decline in the fertility rate.

The working-age population in China has already started to decline, which "has an immediate effect on economic growth potential," observed the study's author Dr. Christopher Murray, director of the Institute for Health Metrics and Evaluation at the University of Washington, according to a CNN article.

Brookings sounded the alarm about China's pending demographic demise back in 2010 in an article titled "China's Population Destiny: The Looming Crisis." Brookings' observations are becoming reality today: "Such a compressed process of demographic transition means that, compared with other countries in the world, China will have far less time to prepare its social and economic infrastructure to deal with the effects of a rapidly aging population. ... While China continues to transform itself from an agrarian to an industrial and post-industrial society and from a planned to a market-based economy, it ... will need ... to provide health care and pensions for a rapidly growing elderly population."

(5) Why have less children? But why have fertility rates declined in nations without population-control policies as seen in China? Reporting on *The Lancet* study, the BBC <u>collected</u> insights from women around the world who decided to have fewer or no kids. Several of the reasons cited were as follows: wanting to give fewer children "the best" rather than spreading resources among multiple children, the ability to afford vacations, concern for the effect of population growth on the environment, and careerminded focus over family. By the way, lower teen births were cited in multiple sources as a "good" reason why fertility rates have declined.

Aside from couples' greater control over their reproductive capacity with the advent of birth control in the 1960s, pursuing higher education later in life and prioritizing work seem to us to be the most prevalent reasons for US families to have fewer children. Moreover, many working women don't have parental leave and pay policies at work—or generous enough ones—to make having a lot of children economically feasible.

Even if the baby bust suddenly reverses, that won't help the working-age population in the near term, as more babies will add to the number of dependents who need to be supported for at least the next couple of decades.

(6) Are the children our future? Will the future of our societies be held in the hands of those who more frequently procreate? The late Swedish professor and demographic expert Hans Rosling was quoted in a 3/16/17 BBC article saying that fertile countries have a far brighter future. And as such, they are a good place to invest. We agree that declining fertility rates are an important trend for global investors to monitor, but focusing only on that may be short-sighted.

The 12/26 article in *The Guardian* linked above explored the views of Sarah Harper, an expert on population change working at the University of Oxford. Harper pointed out that artificial intelligence, migration, and a healthier old age mean that countries can grow economically without booming population growth.

The bottom line is that declining fertility rates may not be the end of the world for many countries, especially those that have more relaxed immigration policies. Even countries with high fertility rates may not have the resources to raise all those babies to productive adults. Education, infrastructure, and technology matter for a society's ability to produce and utilize productive human resources. Productivity matters more in a world where humans aren't procreating sufficiently to replace themselves.

CALENDARS

US. Wed: ADP Employment 174k, Pending Home Sales 0.3%, MBA Mortgage Applications, EIA Petroleum Status Report, FOMC Announcement 2.375% (2.25% to 2.50%), Fed Chair Press Conference. Thurs: Jobless Claims 220k, Employment Cost Index 0.8% q/q, Chicago PMI 62.5, Challenger Job-Cut Report, EIA Natural Gas Report. (Econoday estimates)

Global. Wed: Eurozone Economic Confidence 106.8, Germany Gfk Consumer Confidence 10.3, Germany CPI -0.8%m/m/1.6%y/y, France GDP 0.2%q/q/0.9%y/y, Japan Industrial Production - 0.5%m/m/-2.3%y/y, Australia CPI 0.4%m/m/1.7%y/y, Mexico GDP 0.2%q/q/2.0%y/y. **Thurs:** Eurozone GDP 0.2%q/q/1.2%y/y, Eurozone Unemployment Rate 7.9%, Germany Unemployment Change & Unemployment Rate -10k/5.0%, Germany Retail Sales -0.5%m/m/1.5%y/y, Italy GDP - 0.1%q/q/0.3%y/y, Canada GDP -0.1%m/m/1.5%y/y, Japan Jobless Rate 2.5%, China M-PMI & NM-PMI 49.3/53.9. (DailyFX estimates)

STRATEGY INDICATORS

S&P 500 Q4 Earnings Season Monitor (*link*): With over a quarter of the S&P 500 companies finished reporting earnings and revenues for Q4-2018, y/y revenue and earnings growth remains strong, but the surprise metrics have weakened relative to Q3's results due to Q4's trading turmoil and rising loan loss provisions in the Financials sector. Of the 135 companies in the S&P 500 that have reported through mid-day Tuesday, just 73% exceeded industry analysts' earnings estimates. Collectively, the reporters have averaged a y/y earnings gain of 13.2% and exceeded forecasts by an average of 2.2%. On the revenue side, just 61% of companies beat their Q4 sales estimates so far, with results coming in 0.7% above forecast and 8.2% higher than a year earlier. Q4 earnings growth is positive y/y for 79% of companies, vs a higher 94% at the same point in Q3, and Q4 revenues have risen y/y for 79% vs a higher 84% during Q3. Looking at earnings during the same point in the Q3-2018 reporting period, a higher percentage of companies (82%) in the S&P 500 had beaten consensus earnings estimates by a greater 4.1%, and earnings were up a higher 25.3% y/y. With respect to revenues at this point in the Q3 season, a higher 63% had exceeded revenue forecasts by a slightly lower 0.6%, and sales rose a tad greater 8.3% y/v. The early results for Q4 indicate a slowdown in revenue and earnings growth from Q3, but that comes as no surprise to investors. Q4-2018 should mark the tenth straight quarter of positive y/y earnings growth and the 11th for revenue growth. Looking at the Q4 results ex-Financials and Real Estate, the earnings surprise improves to 3.0% from 2.2%, but earnings growth falls to 9.9% from 13.2%. The ex-Financials and Real Estate revenue surprise would be 0.8% instead of 0.7%, with revenue growth improving to 9.3% from 8.2%.

US ECONOMIC INDICATORS

Consumer Confidence (<u>link</u>): The Consumer Confidence Index (CCI) in January fell for the third straight month, though remains at historically high levels, with consumer expectations driving the recent slump. The CCI sank to an 18-month low of 120.2 this month from a cyclical high of 137.9 in October, with the expectations component tumbling from 115.1 to a 27-month low of 87.3 over the same period—due to financial market volatility and the government shutdown. The Conference Board's Senior Director of Economic Indicators Lynn Franco explained: "Shock events such as government shutdowns (i.e. 2013) tend to have sharp, but temporary, impacts on consumer confidence. Thus, it appears that this month's decline is more the result of a temporary shock than a precursor to a significant slowdown in the coming months." She went on to say, however, "if expectations soften further in the coming months, the pace of growth is likely to begin moderating." While expectations have been sliding, the consumers' read on the present situation remains very bright. The present situation index has barely budged from November's cyclical high of 172.7, edging down to 169.6 this month.

Most of this enthusiasm reflects a very favorable job market: Respondents saying that jobs are plentiful (to 46.6% from 45.4%) was just shy of November's peak rate of 46.8%—which was the highest since January 2001—while those saying jobs are hard to get (12.9 from 12.2) was little changed from August's cyclical low of 12.1%. Meanwhile, the six-month jobs outlook shows a very different picture: For the first time since August 2016, the percentage expecting more jobs (14.7%) was below the percentage of those expecting fewer jobs (16.5), with the spread between them plummeting to -1.8ppt from 11.7ppts in October—which was the highest spread since the 1980s.

Contact us by email or call 480-664-1333.

Ed Yardeni, President & Chief Investment Strategist, 516-972-7683
Debbie Johnson, Chief Economist, 480-664-1333
Joe Abbott, Chief Quantitative Strategist, 732-497-5306
Melissa Tagg, Director of Research Projects & Operations, 516-782-9967
Mali Quintana, Senior Economist, 480-664-1333
Jackie Doherty, Contributing Editor, 917-328-6848
Valerie de la Rue, Director of Institutional Sales, 516-277-2432
Mary Fanslau, Manager of Client Services, 480-664-1333
Sandy Cohan, Senior Editor, 570-775-6823

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