

Yardeni Research



MORNING BRIEFING

January 8, 2019

Deflationary Demographic Developments

See the collection of the individual charts linked below.

- (1) Humans on a demographic path to self-extinction. (2) Crowded nursing homes. Empty maternity wards.
- (3) China will soon be world's largest nursing home. (4) Japan is leading the way with more deaths than births. (5) China's misguided one-child policy now turning into a demographic nightmare. (6) Births fall in US to lowest since 1979. (7) Too many minimalists? (8) Prices-paid indexes taking a dive along with oil prices.

(9) Q4 earnings season starting.

Global Demography: Death Toll. In Chapter 16 of my book <u>Predicting the Markets</u>, I observe that fertility rates have dropped below replacement rates around the world as a result of urbanization. Only in India and Africa are couples having enough babies to replace themselves. Humans are on a demographic path of self-extinction.

Leading the way has been Japan. I have often described the country as the world's largest nursing home. That distinction undoubtedly will soon belong to China. All around the world, nursing homes will be bulging with more occupants, while the maternity wards will have lots of vacant cribs.

The economic consequences of these demographic trends will be slower growth and subdued inflation, if not outright deflation. That means that interest rates most likely will remain historically low for a very long time. That could be positive for the valuation multiples that investors are willing to pay for the stocks of companies that are able to grow their earnings at an above-average rate. It should also be very positive for the stocks of companies that are able to grow their dividends in this demographically challenged environment.

A global shortage of workers should stimulate more labor-saving and labor-replacing technological innovations. The result should be faster productivity growth. That should give a lift to real wages that should offset some of the slowdown in employment growth attributable to labor shortages.

The scenario I just sketched isn't a forecast. It is a description of exactly what has been happening in Japan. The forecast is that most of the rest of the world will follow suit. Japan is the poster child for the rest of us who aren't having enough babies to replace ourselves. Consider the following:

(1) Japan. On a 12-month basis, the number of deaths in Japan exceeded the number of live births for the first time during July 2007 (<u>Fig. 1</u>). On this basis, during July of this year, deaths exceeded live births by a record 351,000 (<u>Fig. 2</u>). The situation has been exacerbated by a record low of only 586,700 marriages over the past 12 months through July (<u>Fig. 3</u>).

So Japan's population has been falling in recent years and rapidly aging. The percentage of the population that is 65 or older has increased from 25.2% at the start of 2014 to 28.2% at the end of last year (*Fig. 4*). Yet the total labor force has actually been rising gradually over the past few years (*Fig. 5*). That's because the labor force participation rate has been moving higher (*Fig. 6*). The problem is that

more Japanese women have been entering the labor force and not getting married, which depresses the number of births. If that continues, the number of births will remain depressed.

These demographic trends go a long way toward explaining why Japan's inflation rate remains near zero, despite the ultra-easy monetary policies of the Bank of Japan, which has been targeting a 2.0% inflation rate since January 22, 2013 (*Fig. 7*). Older people and fewer children aren't conducive to home-building, car-buying, or the consumption of other durable goods.

(2) China. The demographic profile of China isn't as geriatric as Japan's, but it is heading in the same direction, accelerated by the government's one-child policy that was in force from 1979 through 2015 (*Fig. 8*). For the first time ever, the percentage of seniors in the population, at 6.6%, matched the percentage of children under five years old during 1998 (*Fig. 9*). By the middle of this century, the former is projected by the UN to rise to 26.3%, while the latter falls to 4.6%.

Young married adults who have no siblings must accept the burden of taking care of four aging parents. Now that the government has declared that couples can have more than one child, many are likely to be overburdened having even one child.

As I've noted in recent months, all this is weighing on Chinese real retail sales growth, which has been on a downtrend for the past several years (*Fig. 10*).

(3) *United States.* The good news in the US is that the fertility rate is in line with the replacement rate. However, the demographic trends are heading in the wrong direction. Young people are staying single longer. Newly married older couples are likely to have fewer children than younger couples. The cost of college education is also a downer for many couples, forcing them to consider how many children they can afford.

The proof is in the maternity wards. Over the past 12 months through March, live births in the US totaled 3.84 million, the lowest since November 1997 (*Fig. 11*). Over the same period, the number of deaths totaled a record 2.36 million. So births exceeded deaths by 1.48 million, the lowest reading on record, dating back to December 1972 (*Fig. 12*).

Meanwhile, as the Baby Boomers age, they are turning into minimalists. They don't need their big houses anymore. They don't need minimalists to take the kids to soccer practice. The Millennials are natural-born minimalists, for reasons that Melissa and I have reviewed in the past on many occasions.

We don't view this as necessarily bad news for the US economy. Rather, we see these demographic trends as reducing the likelihood of an economic boom, which reduces the likelihood of a bust. The business-cycle expansion should continue, and inflation should remain subdued.

Inflation: Moderating Cost Pressures. While wage inflation has been moving higher, price inflation remains subdued, as Fed Chairman Jerome Powell observed at the end of last Friday. The day before he said so, the Institute for Supply Management (ISM) reported that the prices-paid index in their December manufacturing survey dropped sharply. It was down to 54.9 last month from 60.7 during November and a 2018 high of 79.5 during May. The sharp drop in the price of oil since October 3 clearly has contributed to the drop in this price index. So has the weakness in other commodity prices (*Fig. 13* and *Fig. 14*).

Yesterday, the ISM reported a noticeable easing in inflationary pressures in the service sector as well, with the price index sinking from 64.3 to a 17-month low of 57.6, as three-quarters of respondents reported no change in prices-paid, while 8% reported lower prices. The index peaked at 65.9 during

September 2017, remaining at an elevated level above 60.0 until last month's 6.7-point drop.

Strategy: Earnings Season Starting. The Q4 earnings reporting season is about to get underway. We think there will yet another positive surprise, but it's sure to mark the beginning of the slowdown in profits growth. Analysts expect S&P 500 earnings to rise 13.4% y/y in Q4, down from 27.5% in Q3-2018. Still, that marks the tenth straight quarter of positive y/y earnings growth and the fifth with double-digit percentage gains.

Of the 10 sectors expected to record positive y/y earnings growth, six are forecasted to rise at a double-digit percentage rate, down from 10 during Q3. Here are the latest forecasted Q4-2018 earnings growth rates on a proforma same-company basis versus their final Q3-2018 growth rates: Energy (64.3% in Q4-2018 versus 114.2% in Q3-2018), Industrials (24.8, 18.9), Financials (22.1, 44.8), Communication Services (17.5, 26.1), S&P 500 (15.1, 28.4), Consumer Discretionary (13.2, 25.4), Health Care (11.1, 16.5), Tech (8.9, 29.1), Real Estate (6.9, 5.3), Materials (6.0, 30.1), Consumer Staples (2.8, 11.4), and Utilities (-9.0, 10.9).

CALENDARS

US. Tues: NFIB Small Business Optimism Index 104.0, JOLTS Report, Consumer Credit \$19.0b. **Wed:** MBA Mortgage Applications, EIA Petroleum Status Report, FOMC Minutes, Bostic, Evans, Rosengren. (Econoday estimates)

Global. Tues: Germany Industrial Production 0.3%m/m/-0.8%y/y, Eurozone Economic Confidence 108.2, Japan Consumer Confidence 42.8. **Wed:** Eurozone Unemployment Rate 8.1%, Germany Trade Balance €24.8b, Mexico CPI 4.85% y/y, BOC Rate Decision 1.75%, Carney. (DailyFX estimates)

STRATEGY INDICATORS

S&P 500/400/600 Forward Earnings (*link*): Forward earnings rose last week for all three of these indexes for the first time in four weeks. LargeCap's forward EPS remains 0.8% below its record high of \$175.48 in late October. MidCap and SmallCap are still 0.4% and 3.1% below their mid-October highs, respectively. Forward earnings momentum remains healthy compared to the past due to the boost from the Tax Cuts and Jobs Act (TCJA), as the yearly change in forward earnings is up from six-year lows in early 2016, but has clearly peaked. In the latest week, the rate of change in LargeCap's forward earnings fell to an 11-month low of 17.3% y/y from 18.1%. That's down from 23.2% in mid-September, which was the highest since January 2011 and compares to a six-year low of -1.8% in October 2015. MidCap's y/y change was down to a 12-month low of 18.8% from 19.4%, which compares to 24.1% in mid-September (the highest since April 2011) and a six-year low of -1.3% in December 2015. SmallCap's dropped to a nine-month low of 25.4% from 26.3%, which is down from an eight-year high of 35.3% in early October and compares to a six-year low of 0.3% in December 2015. Analysts had been expecting double-digit percentage earnings growth in 2019, but those forecasts are dropping now. Here are the latest consensus earnings growth rates for 2018, 2019, and 2020: LargeCap (22.7%, 7.2%, 11.1%), MidCap (21.6, 9.4, 11.2), and SmallCap (22.6, 14.6, 15.5).

S&P 500/400/600 Valuation (*link*): Forward P/E ratios rose for a second straight week from multi-year lows. LargeCap's weekly forward P/E of 14.6 is up from 14.3 a week earlier and a five-year low of 13.9 the week before that. That compares to a six-month high of 16.8 in mid-September, a multi-year high of 18.6 on January 26 (highest since May 2002), and of course is well below the tech-bubble record high of 25.7 in July 1999. Last week's level remains above the post-Lehman-meltdown P/E of 9.3 in October 2008. MidCap's forward P/E gained points to 13.6 last week from 13.3. That's up from 13.0 the week before that, which was the lowest reading since November 2011. MidCap's P/E is down from a 15-year

high of 19.2 in February 2017 and the record high of 20.6 in January 2002. MidCap's P/E has been at or below LargeCap's P/E for most of the time since August 2017—the first time that alignment has prevailed since 2009. SmallCap's P/E rose to 14.5 last week from 14.2, and from 13.6 several weeks earlier, which had also marked its lowest reading since November 2011. That's well below its 51-week high of 20.2 in December 2017 (which wasn't much below the 15-year high of 20.5 in December 2016, when Energy's earnings were depressed). Furthermore, SmallCap's P/E is now below LargeCap's P/E for the first time since 2003.

S&P 500 Sectors Quarterly Earnings Outlook (*link*): Analysts continued cutting Q4 forecasts last week, particularly for the commodities-related sectors. The S&P 500's blended Q4-2018 EPS forecast of \$40.86 is down 4.0% since the end of Q3, but remains up 6.0% since the passage of the TCJA. The \$40.86 estimate represents a forecasted pro forma earnings gain for Q4-2018 of 15.1%, down from 15.8% a week earlier and from 20.1% at the end of Q3. That would mark the slowest growth since Q4-2017 and comes on heels of 28.4% v/v growth in Q3, which is sure to mark the peak of the current earnings cycle. The blended Q4-2018 growth rate compares to Q3-2018's 28.4%, Q2-2018's 24.9%, Q1-2018's 26.6%, Q4-2017's 14.8%, Q3-2017's 8.5%, Q2-2017's 12.3%, and Q1-2017's 15.3%. The S&P 500's Q4-2018 forecasted earnings gain of 15.1% y/y would be its tenth straight gain after four declines. Ten of the 11 sectors are expected to record positive v/v earnings growth in Q4-2018, with six rising at a double-digit percentage rate due to the lower corporate tax rate. That compares to all 11 positive during Q3, when 10 rose at a triple- or double-percentage rate. Four sectors are expected to beat the S&P 500's blended y/y earnings gain of 15.8% during Q4, compared to four beating the S&P 500's 28.4% gain during Q3. Analysts expect Energy to report another large profit jump in Q4 relative to very low earnings a year ago, with the pace slowing substantially from Q3. The latest forecasted blended Q4-2018 earnings growth rates versus their Q3-2018 growth rates: Energy (64.3% in Q4-2018 versus 114.2% in Q3-2018), Industrials (24.8, 18.9), Financials (22.1, 44.8), Communication Services (17.5, 26.1), S&P 500 (15.1, 28.4), Consumer Discretionary (13.2, 25.4), Health Care (11.1, 16.5), Tech (8.9, 29.1), Real Estate (6.9, 5.3), Materials (6.0, 30.1), Consumer Staples (2.8, 11.4), and Utilities (-9.0, 10.9). On an ex-Energy basis, analysts expect S&P 500 earnings to rise 13.1% y/y in Q4, well below the 25.0% in Q3; that compares to 21.9% in Q2-2018, 24.5% in Q1-2018, 12.7% in Q4-2017, and 6.1% in Q3-2017 (which was the slowest growth since ex-Energy earnings rose just 2.2% in Q2-2016). The Q4 estimate has fallen for all 11 sectors since the end of Q3. Materials is the biggest decliner, with its Q4-2018 forecast down 14.8% since the end of Q3, followed by Utilities (-8.5), Real Estate (-7.3), Industrials (-5.4), Energy (-4.7), Financials (-4.2), Consumer Staples (-4.1), Consumer Discretionary (-4.0), Communication Services (-4.0), Tech (-3.5), Financials (-2.9), and Health Care (-1.2).

S&P 500 Q4 Earnings vs Past Quarters Trend (*link*): Earnings estimate revisions activity for Q4-2018 is returning to the usual pattern of falling just before the earnings reporting season. This follows the unusual pre-reporting estimate increases seen for Q1- and Q2-2018 due to the TCJA. With the December-quarter books closed, the current Q4-2018 EPS forecast of \$40.86 is down 4.0% over the 13 weeks since the quarter's start. That's well below the 1.2% drop for Q3, but matches the average decline of 4.0% over the same time period in the 98 quarters dating back to 1994, and the TCJA-boosted gains of 5.1% and 0.6% during Q1 and Q2, respectively. Analysts expect EPS for Q4-2018 to be up 13.4% y/y on a frozen actual basis, which would mark the tenth straight quarter of higher EPS on a y/y basis and the fifth straight quarter of double-digit percentage growth. Since 1994, the Q4 earnings surprise has been positive in 16/24 years, with the last miss occurring in 2008. Q4 should mark the S&P 500's record 40th straight quarter of positive surprises—a streak dating back to Q1-2009.

GLOBAL ECONOMIC INDICATORS

Global Composite PMIs (link): Global economic activity slowed to a 27-month low at the close of

2018. The JP Morgan Global Composite Output Index (C-PMI) slipped to 52.7 in December after improving slightly the prior two months from 52.8 September to 53.2 in November. It was at a 3.5-year high of 54.8 in February. The Global M-PMI (to 51.5 from 52.0) continued to slide, falling to its lowest reading since September 2016, while the Global NM-PMI (53.1 from 53.7) remained on a volatile downtrend, falling back near September's two-year low of 52.9. Looking at C-PMIs for the developed (52.7 from 53.4) and emerging (52.5 from 52.7) economies, they're now growing at basically the same pace. Looking at December C-PMIs, the US (to 54.4 from 54.7) remained one of the best performers, despite an easing in growth last month, while the Eurozone (51.1 from 52.7) was the main source of the slowdown—recording its slowest pace since November 2014. Within the Eurozone, C-PMIs for both Ireland (55.5, 9-month low) and Spain (53.4, 3-month low) slowed—though remained above the global average of 52.7—while Germany's (51.6, 66-month low) and France's (48.7, 49-month low) continued to deteriorate. Meanwhile, Italy's C-PMI (50.0, 3-month high) moved back up to the breakeven point after contracting for two months. Aside from the US, Ireland, and Spain, above-average rates of expansion were also recorded in India (53.6 from 54.5), Russia (53.9 from 55.0), and Australia (52.9 from 53.9). While C-PMIs for the UK (51.4 from 50.8), China (52.2 from 51.9), and Brazil (52.4 from 51.6) were all below the global average, they all posted a modest growth acceleration last month.

Global Non-Manufacturing PMIs (*link*): December saw the rate of expansion in the global services economy slow again, after a slight acceleration the prior two months, influenced by recent movements in emerging economies. JP Morgan's NM-PMI slipped to 53.1 in December, after rising from a two-year low of 52.9 in September to a four-month high of 53.7 in November. The NM-PMI for emerging economies eased to 53.6 last month, after jumping the prior two months from 52.1 to 53.8 in November, but surpassed growth in the developed economies. The latter saw their NM-PMI sink to a 27-month low of 52.8. A country comparison shows the best growth was recorded in Ireland (56.3, 13-month low), the US (54.4, 3-month low), Russia (54.4, 4-month low), Spain (54.0, holding at 3-month high), and China (53.9, 6-month high), with only the latter recording an acceleration. The top two Eurozone economies were a big drag: France's NM-PMI (49.0, 30-month low) fell -6.2 points last month—contracting for the first time since June 2016—while Germany's (51.8, 27-month low) has slowed sharply in recent months.

US Non-Manufacturing PMIs (*link*): The ISM measure shows growth in the US service sector last month slowed considerably, though remained at a robust pace, while the IHS Markit measure held near recent highs. Inflationary pressures continued to ease last month, according to both surveys. ISM's NM-PMI (to 57.6 from 60.7) sank to a five-month low after peaking at 61.6 in September. Of the four components, only the new orders (to 62.7 from 62.5) measure showed a slight acceleration in December—recording a reading of 60.0 or above for the 10th time during 2018—as export orders (59.5 from 57.5) improved. The business activity (59.9 from 65.2) gauge slipped just below 60.0, while the employment (56.3 from 58.4) measure slowed for the third month since peaking at 62.4 in June; supplier deliveries (51.5 from 56.5) sank to its lowest reading in 16 months. IHS Markit's NM-PMI (54.7 from 54.4) eased slightly for the second month, with new orders expanding at a 14-month low as service sector firms noted a fall in foreign client demand; the new export business index contracted for the first time since August. Meanwhile, concerns surrounding the longevity of the upturn in new business led to the weakest expected rise in future output since December 2017.

Eurozone Retail Sales (*link*): November retail sales posted another strong performance, jumping to a new record high. Sales advanced 0.6%, matching October's upwardly revised gain to double the initial estimate. This was the best two-month performance since October 2016. Spending on both non-food products (excluding auto fuel) and auto fuel posted increases of 1.2% in November—with the former up 1.8% during the two months through November and the latter up 2.5% the past three months. Meanwhile, spending on food, drinks & tobacco contracted -0.9% in November after a 0.7% gain and a -0.4% loss the prior two months. November sales for two of the four largest Eurozone economies are

available: Sales in Germany jumped 1.4% after a 0.1% uptick in October, while France's slowed to 0.1% after a 1.1% jump the prior month. Among other Eurozone economies for which data are available, the largest increases in retail sales were registered in Latvia (2.4%), Estonia (2.1), Portugal (1.6), and Finland (1.3), while only two countries posted declines, Slovenia (-1.6) and Austria (-0.5).

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

Copyright (c) Yardeni Research, Inc. Please read complete copyright and hedge clause.