MORNING BRIEFING
April 10, 2018

Meet John Williams

See the collection of the individual charts linked below.

(1) A big promotion at the Fed. (2) A voter for all seasons. (3) Williams is a gradualist. His dots are in the middle of the pack. (4) Fed aiming for 3.50% by 2020. (5) Fed study says new normal for real GDP growth is 1.6%. (6) Williams agrees that's the trend, which is counter to the projections of Trump's supply-siders. (7) Demography is determining weak labor force growth. (8) Waiting for technology to boost productivity growth. (9) Why aren't wages up 3%-4% by now? (10) Baby Boomers aren't retiring and aren't getting paid more.

The Fed I: New Vice Chairman. The Fed's own John Williams has been internally promoted from president of the Federal Reserve Bank of San Francisco (FRBSF) to president of the FRBNY. The powerful role means that Williams is now a permanent voter on the Federal Open Market Committee (FOMC) rather than a rotating one. It also means that Williams is now the vice chairman of the FOMC.

Will the increasing influence of Williams make any difference for the course of monetary policy in the near term? Melissa and I don't think so. In fact, we don't have to guess. We know that Williams will aim to stay the course because he said so himself on Friday. In his first speech as the new FRBNY president, Williams said: "[O]ur recent projections indicate that the center of the distribution of FOMC projections foresees a total of three to four rate increases this year and further gradual rate increases over the next two years, bringing the target federal funds rate to around 3 1/2 percent by the end of 2020. In my view, this is the right direction for monetary policy."

Williams won the role mainly because of his experience in crafting monetary policy. Unlike the new FRB chairman, Jerome Powell, Williams spent nearly his entire career at the Fed. During his speech, Williams clearly laid out his view on all the major monetary policy variables, revealing that his dots are in the middle of the Fed's anonymous dot plot. The dot plot displays Fed officials' projections for the major monetary policy variables within the Summary of Economic Projections. That may be all that investors need to know about John Williams for now. But since his influence at the Fed is likely to grow, let's get a little deeper understanding of his point of view:

(1) *Tailwinds*. An important keyword that Powell and Fed Governor Lael Brainard recently used in describing the present state of the US economy is "tailwinds"; with Williams' use of the word in his recent speech, that makes three tailwinds-talking Fed officials. Supporting the "healthy expansion," which Williams describes as happening "nationwide" and "across a full range of sectors," he cites a trifecta of factors: global growth, fiscal stimulus, and financial conditions. Collectively, they "have all created tailwinds that account for growth running above trend."

Williams' message was that the US economy is performing well, all things considered, in the face of secular trends in the labor force and in productivity that are weighing on trend growth. In his opinion, US GDP will grow 2.60% this year, above the trend growth rate of 1.75%. He explained: "I'm often asked what the trend growth rate is and how it differs from GDP growth. The trend growth rate is the rate of growth that can be sustained by the economy over the long term. It has two main drivers: labor force growth and productivity growth."

Williams said that labor force growth is declining as the Baby Boomers are retiring and fertility rates are down. He also noted that technological innovation hasn't shown up in the productivity numbers. In previous comments, Williams called for fiscal policy makers to help combat these forces. It seems that Williams got his wish with the current fiscally proactive administration and its recent passage of tax reform.

(2) *Mandate*. While he opened his speech discussing growth, Williams acknowledged that his focus is on the Fed's dual mandate. "I'm judged on what happens to employment and inflation," he said. In his opinion, unemployment should continue to decline from 4.1% currently to 3.5%, which would be the lowest unemployment rate since 1969. Further, Williams observed that wage growth has been "slowly ratcheting up," and he expects it to intensify as the competition for workers increases.

More broadly on inflation, he said: "I expect that we'll see inflation reach and actually slightly exceed our longer-run 2% goal for the next few years." Williams attributes the "underrun" of the 2% inflation target to date to the weakness following the recession, the strong dollar weighing on the price of imports, and temporarily abnormal price fluctuations in certain price categories.

(3) *Unobservable.* One topic visibly missing from the speech was the natural rate of interest. Back in 2001, Williams developed—along with another economist, Thomas Laubach—an important model for estimating this unobservable variable and has more recently revised it. The Laubach-Williams model aims to evaluate "the short-term real (inflation-adjusted) interest rate that balances monetary policy so that it is neither accommodative nor contractionary in terms of growth and inflation," as Williams himself defined it in an 8/15/16 *FRBSF Economic Letter*.

The natural rate of interest is an input to the Taylor rule, which is an equation that John Taylor introduced in a 1993 paper that prescribes a value for the federal funds rate. (Taylor happens to have been Williams' PhD thesis adviser at Stanford.) According to the formula, the lower the natural rate of interest, the lower the federal funds rate should be set. Williams sees the natural rate as "very low" compared to what we've seen in the past, and he expects it to stay that way.

(4) *Alternative targets?* In his view, this is a problem because it would prescribe the short-term rate to be set at the new abnormally normal low neutral level. In that case, the Fed would have little room to adjust conventional monetary policy in the event of a future recession. To combat this, Williams suggested in his 2016 letter that the Fed consider two entirely different alternative approaches to monetary policy: pursuing a higher inflation target or replacing inflation targeting with output or price-level targeting.

Even so, Williams said in the 8/15/16 letter that he was "not advocating an abrupt reversal of course; after all, you don't change horses in the middle of a stream. And in monetary policy, 'abrupt' and 'disrupt' have more than merely resonance of sound in common." In this vein, we doubt that Williams will be spearheading much disruption as the new head of the FRBNY.

Fed II: New Normal GDP Growth. As noted above, in his 5/6 speech, Fed Vice Chairman John Williams matter-of-factly stated: "Last year real gross domestic product, or GDP, increased 2.6 percent. This is a solid performance. Importantly, it's above the trend growth rate, which I peg at about 1¾ percent."

We were surprised by his comment that the trend in real GDP is only 1.75%. That certainly is at odds with the predictions of President Donald Trump and his supply-side advisers, who believe that their policies will boost real GDP growth up to 3.0% and even 4.0%. Debbie and I have been expecting more of the same, i.e., 2.0%-2.5%.

Williams referenced a 10/11/16 *FRBSF Economic Letter* titled "What Is the New Normal for U.S. Growth?" by John Fernald. Sure enough, the article starts by stating: "Estimates suggest the new normal for U.S. GDP growth has dropped to between 1½ and 1¾%, noticeably slower than the typical postwar pace." The article explains the reasoning behind this lackluster outlook for real GDP as follows:

"This estimate is based on trends in demographics, education, and productivity. The aging and retirement of the baby boom generation is expected to hold down employment growth relative to population growth. Further, educational attainment has plateaued, reducing the contribution of labor quality to productivity growth. The slower forecast for overall GDP growth assumes that, apart from these effects, productivity growth is relatively normal, if modest—in line with its pace for most of the period since 1973." Here's more:

(1) *Labor force growth.* "[T]he population is now growing relatively slowly, and census projections expect that slow pace to continue. Second, these projections also suggest the working-age population will grow more slowly than the overall population, reflecting the aging of baby boomers. Of course, some of those older individuals will continue to work. Hence, the Congressional Budget Office (CBO) projects the labor force will grow about ½% per year … over the next decade—a little faster than the working-age population, but substantially slower than in the second half of the 20th century" (*Fig. 1* and *Fig. 2*).

(2) *Productivity growth.* The article is much more pessimistic (or perhaps realistic) about the outlook for productivity growth than are today's supply-siders. Fernald concedes: "The major source of uncertainty about the future concerns productivity growth rather than demographics. Historically, changes in trend productivity growth have been unpredictable and large." Nevertheless, he estimates that the new normal trend growth rate in real GDP is 1.6%, implying that productivity won't grow much faster than 1.0% (*Fig. 3* and *Fig. 4*).

(3) *Information technology.* But won't the IT revolution boost productivity? It hasn't been doing so in recent years. Fernald observes: "Starting around 1995, productivity growth was again exceptional for eight or nine years. Considerable research highlighted how businesses throughout the economy used information technology (IT) to transform what and how they produced. After 2004, the low-hanging fruit of IT had been plucked."

Again, he concedes: "Looking ahead, another wave of the IT revolution from machine learning and robots could boost productivity growth. ... But, until such a development occurs, the most likely outcome is a continuation of slow productivity growth."

US Economy: What's Up with Wages? In his speech, Williams observed that wage growth has been "slowly ratcheting up" and expects it to intensify as the competition for workers increases. We beg to differ. Wage inflation remains remarkably subdued even as the labor market has tightened significantly. Back in her first press conference as Fed chair, on March 19, 2014, Janet Yellen said that she would like to see wages growing at a pace of 3%-4%. So far, that hasn't happened; wages have remained below this range according to the widely followed average hourly earnings (AHE) measure of wages. That's important because wages are one of the only indicators suggesting that the job market may still have some slack in it. So what's going on? Consider the following:

(1) *Subdued wage gains*. During March, the yearly percent change in AHE for all workers rose 2.7% y/y. Included in that are production and nonsupervisory workers, whose wages rose 2.4% (*Fig. 5*).

These workers account for 82.4% of employment (*Fig. 6*).

(2) *Low unemployment.* Most measures indicate that the job market is much tighter than it was when Janet Yellen discussed her 3%-4% wage inflation target. During March 2014, the unemployment rate was 6.7%. It fell to 4.1% last October, which was the lowest reading since December 2000, and has held there through March (*Fig. 7*).

(3) *Flattening curve*. The Phillips Curve Model posits an inverse relationship between the unemployment rate and wage inflation. Several Fed officials, including Powell, recently have observed that the relationship has flattened.

Separately, the Conference Board's jobs-plentiful series historically has been correlated to the AHE series. That relationship recently has broken down. During the past three business cycles, wage inflation rose to about 4.0% when the jobs plentiful reading was as high as it is now (*Fig. 8*).

(4) *Scarcity of truckers*. Some anecdotal evidence indicates that wage inflation is on the rise for certain sectors. For example, truck drivers and airline pilots are in short supply, so there have been stories of wages on the rise to attract workers to these sorts of jobs. However, the transportation & warehousing wage growth series was up only 3.0% y/y during March.

Here is the performance derby for AHE y/y growth rates for the major economic sectors: Financial Activities (5.3%), Information (3.8), Transportation & Warehousing (3.0), Leisure & Hospitality (3.0), Construction (2.9), Utilities (2.6), Education & Health Services (2.6), Retail Trade (2.4), Professional & Business Services (2.3), Natural Resources (1.9), Manufacturing (1.7), and Wholesale Trade (1.2).

(5) *Boomers still working*. So again we ask: What's going on? The answer may be that many Baby Boomers aren't retiring. Many of them are likely making good salaries, but their pay has flattened in recent years. The Atlanta Fed's Wage Growth Tracker (WGT) shows that the 12-month moving average of median wage growth for prime aged workers (aged 25 to 54 years old) was 3.5% as of February 2018. Meantime, the comparable figure for those 55 and over was just 1.9% (*Fig. 9*). Also significant is that this metric shows the median wage of 16- to 24-year-old workers was 7.5% during February 2018, as compared to 4.4% during March 2014. The bottom line is that wages are going up, just not much for working, highly paid (maybe overpaid) Baby Boomers!

(6) *Tracking wages*. The WGT uses a different methodology for tracking wages than the AHE. The WGT measures the wage growth of continuously employed unique workers, discounting the impact of people entering and exiting the workforce, as we discussed in our 8/16/17 *Morning Briefing*. Wages, according to the comparable 12-month moving average from the WGT, were up 3.2% overall during February 2018 (*Fig. 10*).

CALENDARS

US. Tues: NFIB Small Business Optimism Index 106.5, PPI-FD Headline, Core, and Core Less Trade Services 0.1%/0.2%/0.3%, Wholesale Trade Inventories 1.1%. **Wed:** Headline & Core CPI 2.4%/2.1% y/y, Atlanta Fed Business Inflation, Treasury Budget -$186.0b, MBA Mortgages Applications, EIA Petroleum Status Report, FOMC Minutes. (*Wall Street Journal* estimates)

Global. Tues: China New Yuan Loans 1200b, China Aggregate Financing 1900k, China M2 8.9% y/y, Japan Machine Orders. **Wed:** UK Headline & Manufacturing Industrial Production 2.9%/3.3% y/y, UK NIESR GDP Estimate 0.3%, China CPI & PPI 2.6%/3.3% y/y, Draghi, Lowe, Yi Gang. (DailyFX estimates)

STRATEGY INDICATORS

S&P 500/400/600 Forward Earnings (*link*): Forward earnings rose to record highs last week for all three indexes. LargeCap's forward earnings has been up in 36 of the past 37 weeks, and MidCap's was higher last week for a 32nd straight week, which now exceeds its prior record streak, ended in mid-2002. Earnings momentum remains healthy, as the yearly change in forward earnings is up from six-year lows in early 2016 and should remain strong in 2018. In the latest week, the rate of change in LargeCap's forward earnings was steady at 20.1% y/y, down slightly from a seven-year high of 20.3% in mid-March, and compares to a six-year low of -1.8% in October 2015; MidCap's rose to 23.8% from 23.3%, which compares to a seven-year high of 24.0% in mid-March and a six-year low of -1.3% in December 2015; and SmallCap's rose to a seven-year high of 27.7% from 26.9%, which compares to a six-year low of 0.3% in December 2015. Here are the latest consensus earnings growth rates for 2018 and 2019: LargeCap 19.7% and 10.1%, MidCap 19.8% and 12.2%, and SmallCap 23.3% and 17.1%.

S&P 500/400/600 Forward Valuation (*link*): Last week saw forward P/E ratios improve from post-election lows for these three indexes. LargeCap's weekly forward P/E fell to 16.1 from 16.3 the prior week, but is down from 18.6 on January 26—the highest since May 2002. These recent levels are well above the post-Lehman-meltdown P/E of 9.3 in October 2008 but well below the tech-bubble record high of 25.7 in July 1999. MidCap's forward P/E dropped to a 25-month low of 16.1 from 16.4, but remains down from a 15-year high of 19.2 in February 2017 and the record high of 20.6 in January 2002; however, it is up from a three-year low of 15.0 in January 2016. MidCap's P/E has been at or below LargeCap's P/E since August for the first time since 2009. SmallCap's P/E edged down to 17.2 from 17.3, which compares to a post-election low of 17.0 in mid-March. That's well below its 51-week high of 20.2 in December (which wasn't much below the 15-year high of 20.5 in December 2016, when Energy's earnings were depressed), but is comfortably above its three-year low of 15.5 in February 2016. Looking at their daily forward price/sales (P/S) ratios, the three indexes were little changed w/w and remain well below their recent highs in January: LargeCap's P/S of 1.95 is down from a record high of 2.19 on January 26; MidCap's 1.27 compares to its record high of 1.40, also on January 26; and SmallCap's 0.96 is down from 1.05 then, which compares to its record high of 1.17 in November 2013, when Energy revenues were depressed.

S&P 500 Sectors Quarterly Earnings Outlook (*link*): With the Q4 earnings season and post-TCJA guidance complete, the Q1-2018 earnings forecast was surprising flat w/w during a period when forecasts typically move lower. The S&P 500's Q1-2018 EPS forecast was steady at $36.16, which is up 5.1% since the end of Q4 and 5.7% since the passage of the TCJA. The $36.16 estimate represents a forecasted pro forma earnings gain for Q1-2018 of 18.5%, which compares to Q4-2017's 14.8%, Q3-2017's 8.5%, Q2-2017's 12.3%, and Q1-2017's 15.3% (which then was the strongest growth since Q3-2011 owing mostly to easier comps for Energy). Since the end of Q4, Q1-2018 estimates are higher for 10 sectors and down for one. Energy's Q1 forecast has jumped 15.4%, followed by the forecasts for Telecom (up 14.4%), Financials (11.8), and Utilities (6.4). Real Estate is the sole decliner, with its Q1-2018 forecast down 6.8%, followed by small gains for Materials (0.5), Tech (1.2), Consumer Staples (2.1), Industrials (3.6), Health Care (3.9), and Consumer Discretionary (4.5). The S&P 500's Q1-2018 forecasted earnings gain of 18.5% y/y would be its seventh straight gain after four declines and its strongest since Q1-2011. All 11 sectors are expected to record positive y/y earnings growth in Q1-2018—with eight rising at a double-digit percentage rate—and four are expected to beat the S&P 500's forecasted y/y earnings gain of 18.5%. That's better than the 10 sectors rising y/y during Q4-2017, when seven rose at a double-digit pace or better. Analysts expect Energy to report another large profit jump in Q1 relative to very low earnings a year ago, but the pace will slow from triple digits in Q4. All 11 sectors last rose y/y during Q2-2017, which was the first time that had happened since Q3-2011. The latest forecasted Q1-2018 earnings growth rates vs their Q4-2017 growth rates: Energy (70.8% in Q1-

2018 vs 120.4% in Q4-2017), Materials (27.0, 35.9), Financials (24.6, 14.6), Tech (23.4, 20.1), S&P 500 (18.5, 14.8), Industrials (14.1, 1.8), Telecom (12.8, 4.8), Health Care (11.0, 9.1), Consumer Staples (10.7, 12.1), Utilities (9.8, 13.0), Consumer Discretionary (9.4, 10.7), and Real Estate (2.9, -4.1). On an ex-Energy basis, S&P 500 earnings are expected to rise 16.7% y/y in Q1, up from a 12.7% in Q4 and 6.1% in Q3 (which was the slowest growth since ex-Energy earnings rose just 2.2% in Q2-2016).

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