Yardeni Research

MORNING BRIEFING
October 20, 2020

Is the Fed Pegging the Bond Yield?

Check out the accompanying chart collection.

(1) Why isn't the bond yield over 1.00%? (2) Copper/gold price ratio pegs yield at 1.61%. (3) Economic surprise index should be bearish for bonds, but it hasn't been so far. (4) Same can be said of M-PMI. (5) TIPS market still open for inflation bets. (6) Fed continues to buy all the bonds that the Treasury issues. (7) Gravitational pull from bond yields in Japan and Germany. (8) Dividend-yield model remains bullish for S&P 500. (9) China's recovery challenged by geriatric demographic profile. (10) Some bad news and some not-so-bad news on the pandemic in US. (11) Editorial: We agree with Great Barrington Declaration on the pandemic.

Bonds I: De Facto Yield-Curve Targeting. The 10-year US Treasury bond yield has been trading in a tight range between 0.52% and 0.88% since March 23, when the Fed implemented QE4ever (*Fig. 1*). The average yield since then through Friday's close was 0.68%. The Fed lowered the federal funds rate by 100bps to zero on March 15 (*Fig. 2*). However, so far, Fed officials haven't announced that they intend to peg the bond yield below 1.00%. But that seems to be what they are doing. If they weren't doing so, the bond yield would probably exceed 1.00% based on its past relationship with various economic indicators. Consider the following:

(1) *Copper/gold price ratio.* The ratio of the nearby futures prices of copper to gold multiplied by 10 has been a reasonably good indicator of where the bond yield should be (*Fig. 3*). When the yield traded below (above) this ratio for a short while, it typically moved higher (lower). On Friday, the bond yield was 0.76%, while the yield implied by the ratio was at 1.61%. The spread between the two has ranged between -128bps and 188bps since 2004 (*Fig. 4*). It's currently at -85bps.

(2) *Economic surprise.* The 13-week change in the bond yield has been highly correlated with the Citigroup Economic Surprise Index (CESI) (*Fig. 5*). This year, the CESI has soared from a record low of -144.6 on April 30 to a record high of 270.8 on July 16. The index was down to 134.2 on Friday, remaining well above all its previous cyclical peaks prior to this year. Yet the 13-week change in the bond yield was just 12bps on Friday. (By the way, the CESI has had a

seasonal tendency to rise during the second half of most years since 2009—a pattern that also has been reflected in the 13-week change in the bond yield but not so far this year.)

(3) *Purchasing managers index.* Since 2010, there has been a fairly good correlation between the M-PMI and the bond yield (*Fig. 6*). It continued to hold earlier this year when both dropped sharply together during the two-month lockdown recession in March and April. The M-PMI has rebounded from 41.5 during April to 55.4 during September, while the bond yield remains under 1.00%.

(4) *The TIPS yield.* The Fed's QE4ever should have raised concerns in the bond market about the possible inflationary consequences of such open-ended ultra-easy monetary policy. But assuming, as we do, that the Fed is keeping a lid on the bond yield, investors have snapped up Treasury Inflation-Protected Securities (TIPS) for protection against inflation since they can't get that in nominal yields. The result has been that the 10-year TIPS yield plunged from -0.04% on March 23 to -0.95% on Friday (*Fig. 7*). The yield spread between the bond yield and the TIPS, which is a widely used proxy for expected inflation over the next 10 years, jumped from this year's low of 0.50% on March 19 to 1.71% on Friday (*Fig. 8*).

By the way, the 10-year TIPS yield is very closely correlated with the real bond yield, defined as the 10-year nominal yield less the yearly percentage change in the PCED (personal consumption expenditures deflator) inflation rate (*Fig. 9*). The correlation between the inflation proxy and the PCED inflation rate isn't as high (*Fig. 10*).

Interestingly, the inflation proxy is much more highly correlated with the nearby futures price of copper and with the inverse of the trade-weighted dollar (*Fig. 11* and *Fig. 12*).

(5) *Fed buying bonds.* From February through September, the Treasury issued $259 billion in publicly held marketable bonds, with the outstanding amount rising to a record $2.67 trillion (*Fig. 13*). Over the same period, the Fed purchased $338 billion in Treasury bonds, holding 37% of the outstanding supply.

(6) *Yield-curve targeting.* As Melissa and I observed last week, at his June 10 press conference, Fed Chair Jerome Powell was asked by Nick Timiraos of the *WSJ* about the possibility of "yield caps." Powell revealed that at the latest meeting of the Federal Open Market Committee (FOMC), the participants received a briefing on the historical experience with yield-curve targeting (YCT) and said that they would evaluate it in upcoming meetings.

We also provided an excerpt on this subject from the June 9-10 FOMC meeting Minutes, in which the Fed's staff presented a two-handed assessment of YCT. On the one hand, they said that it could be achieved without the Fed having to buy lots of bonds. On the other hand, it might require the Fed "to purchase very sizable amounts of government debt." It seems to us that by not formally announcing a target for the bond yield, the Fed has had to purchase lots of bonds to keep it under 1.00%.

The staff also warned that under YCT, "monetary policy goals might come in conflict with public debt management goals, which could pose risks to the independence of the central bank." You think? It seems to us that by lobbying so publicly and frequently for more fiscal stimulus in recent weeks, the Fed has already ceded its independence in the interest of implementing Modern Monetary Theory in response to the Great Virus Crisis.

(7) *Global perspective*. There is another explanation for why the US government bond yield is so low. It may have finally succumbed to the gravitational pull of government bonds yielding around zero in Japan and -0.50% in Germany since mid-2019 (*Fig. 14*). While the core CPI (Consumer Price Index) inflation rate in September was 1.7% in the US, it was a record low of 0.2% in the Eurozone, and Japan's rate was -0.4% during August (*Fig. 15*).

Bonds II: Valuing Dividends Under ZIRP. Joe and I previously have observed that the stock market is working on answering a very relevant question these days: What is the fair-value forward P/E of the S&P 500 when the 10-year US Treasury bond yield is near zero? The answer on Friday was a forward P/E of 21.9. Multiplying this forward P/E by forward earnings of $159.16 per share during the October 15 week implies that the S&P 500 was fairly valued on Friday at its closing price of 3483.81.

Of course, that's the wrong answer if the latest forward P/E is either too high or too low relative to the fundamentals, implying the market is actually either overvalued or undervalued. Joe and I are in the fairly valued camp for now given that interest rates remain so close to zero from the front end to the back end of the yield curve.

Focusing on actual dividends rather than forward earnings supports the view that stocks are appropriately valued, if not undervalued, given that the bond yield is so low. As we observed in our September 14 Topical Study #85: *S&P 500 Earnings, Valuation & the Pandemic*, "The focus on valuing earnings is a relatively new phenomenon that started with the bull market of the 1990s. Before then, most valuation models for individual stocks focused on dividends, not earnings. Investors compared the dividend yield, not the current earnings yield, to the bond yield. Corporations were valued on their ability to pay and grow dividends, which represented a tangible return to investors. Retained earnings—profits after taxes and dividends—were reinvested in the business, presumably to increase the capacity of the corporation to pay more dividends in the future."

In our study, we extended our Blue Angels framework to show the hypothetical value of the S&P 500 (P) using the actual dividends (D) paid out by the S&P 500 companies divided by dividend yields (D/P) from 1.0% to 6.0% (*Fig. 16*). Currently, in October 2020, the conclusion of this Blue Angels analysis is that stocks are attractive relative to bonds because the dividend yield, at 1.75% during Q3, well exceeds the bond yield, and the long-term uptrend in S&P 500 dividends has been roughly 6% since the end of 1946 (*Fig. 17*).

As noted above, the real bond yield is negative. The core PCED inflation rate is currently 1.7%, while the 10-year yield is under 1.00%. The 10-year TIPS yield was -0.95% on Friday. So the bond yield is unattractive to investors not only because it is historically low but also because it is below inflation. When the bond yield exceeded the inflation rate, it was an alternative to stocks. Now, it is a losing proposition in real terms. In the past, the S&P 500 dividend yield usually kept pace with inflation, while the S&P 500 forward earnings metric has always well exceeded inflation (*Fig. 18*).

China: Continuing To Recover. The pandemic started in China during January and February. It then spread to the rest of the world, which is still struggling with the virus. Yet remarkably, China recovered from this health crisis, and so has its economy since March. We are hard-pressed to explain that divergence unless it's simply that the virus flourishes more in democratic societies than authoritarian ones. That's the most we're willing to open this toxic petri dish today. Instead, let's assess China's latest economic performance:

(1) *Real GDP* rose 4.9% y/y during Q3 (*Fig. 19*). It rose 12.6% q/q (saar) following Q2's 49.5% rebound from Q1's -43.0 plunge.

(2) *Industrial production* also rebounded impressively from a y/y growth rate of -13.6% during January to 6.9% during September (*Fig. 20*).

(3) *Real retail sales* on a y/y basis dropped by a record 20.1% during March but rose 1.6% during September. Jackie and I continue to monitor developments in China. We believe that the legacy of the Chinese Communist Party's disastrous one-child policy from 1979 through 2015 has come back to haunt China's consumers, as they are burdened now by an increasingly geriatric population profile.

Epidemiology I: The Grim Reaper. Melissa and I previously have compared the pandemic to a world war against the virus. In most wars, there tend to be more than one front. In this one, there are health, economic, and financial fronts. We clearly have made lots of progress on the economic and financial fronts. But that won't be sustainable if we lose the battles on the health front.

There's still no vaccine, though at least one might be available for widespread distribution by mid-2021. There's still no cure, though the medical community has developed treatment protocols that increase the chances of surviving the disease. Lockdowns earlier this year worked, but at a terrible cost to jobs and mental health. They were supposed to flatten the curve so that hospitals wouldn't be overwhelmed with cases. Yet now that lockdown restrictions have been lifted, cases are going up and some hospitals are facing shortages of capacity and equipment once again. Reinstating lockdowns on a widespread basis seems too draconian after our first experience with them. So instead, governments are resorting to targeted restrictions in response to outbreaks.

For the US, we monitor the case data compiled by the COVID Tracking Project. Here are the latest developments:

(1) *Tests.* On a 10-day moving average basis, new positive test results rose from a recent low of 36,000 on September 15 to 52,000 on October 16, the highest since August 14 (*Fig. 21*). That's mostly because the number of new tests has jumped from 705,000 to 995,000 over this same period (*Fig. 22*). The positivity rate remains relatively low at 5%.

(2) *Hospitalizations and deaths.* Following the increase in the number of positive cases, current hospitalizations are up from a recent low of 29,750 to 35,000 on October 16. The number of deaths may soon move higher following the increase in hospitalizations. However, for now, the trend has been down from the summer's peak of 1,195 deaths per day to 737 on October 16.

A September 1 blog post by the COVID Tracking Project team reported that deaths in long-term care facilities—which house less than 1% of the US population—represented a shocking 43% of all US Covid-19 deaths relative to just 7% of all US cases identified in these facilities. The death percentage decreased only slightly to 41% in the month since, according to an October 8 COVID Tracking Project blog post.

The good news is that the positivity rate remains low, as more testing has increased the likelihood that people will be quarantined and treated more quickly before they spread the disease and succumb to its worst outcome. However, the available test positivity data may be unreliable, as detailed in the blog linked above. The data issues we've often discussed since the pandemic began continue. So consider any virus data with caution.

Epidemiology II: Editorial. Melissa and I agree with the "Focused Protection" approach to the pandemic endorsed by several infectious disease epidemiologists and public health scientists in the Great Barrington Declaration.

Our viewpoint: We needed to lock down the economy earlier this year, because we didn't know much about this virus. So far, the evidence is clear that it poses the most risk to the very elderly and those with severe underlying pre-existing medical conditions. We need to protect those groups, but the rest of us need to go back to our lives and develop herd immunity through natural infection. Masks should be required to slow the spread until an effective and safe vaccine is approved for widespread distribution.

The Declaration rightly observes:

(1) "Current lockdown policies are producing devastating effects on short and long-term public health. The results (to name a few) include lower childhood vaccination rates, worsening cardiovascular disease outcomes, fewer cancer screenings and deteriorating mental health—leading to greater excess mortality in years to come, with the working class and younger members of society carrying the heaviest burden. Keeping students out of school is a grave injustice.

"Keeping these measures in place until a vaccine is available will cause irreparable damage, with the underprivileged disproportionately harmed."

(2) “Fortunately, our understanding of the virus is growing. We know that vulnerability to death from COVID-19 is more than a thousand-fold higher in the old and infirm than the young. Indeed, for children, COVID-19 is less dangerous than many other harms, including influenza.

“As immunity builds in the population, the risk of infection to all—including the vulnerable—falls. We know that all populations will eventually reach herd immunity—i.e. the point at which the rate of new infections is stable—and that this can be assisted by (but is not dependent upon) a vaccine. Our goal should therefore be to minimize mortality and social harm until we reach herd immunity.”

(3) “The most compassionate approach that balances the risks and benefits of reaching herd immunity, is to allow those who are at minimal risk of death to live their lives normally to build up immunity to the virus through natural infection, while better protecting those who are at highest risk. We call this Focused Protection.”

CALENDARS

US: **Tues:** Housing Starts & Building Permits 1.45mu/1.51mu, API Crude Oil Inventories, Quarles, Evans. **Wed:** MBA Mortgage Applications, EIA Crude Oil Inventories, Beige Book, EIA Crude Oil Inventories, Brainard. (DailyFX estimates)

Global: **Tues:** Balz, Vlieglie. **Wed:** UK Headline & Core CPI 0.5%/1.3% y/y, Canada CPI -01%m/m/0.4%y/y, Lagarde, Guindos, Balz, Lane, Ramsden, Debelle. (DailyFX estimates)

STRATEGY INDICATORS

S&P 500/400/600 Forward Earnings (*link*): Forward earnings rose for all three of these indexes last week. In a typically V-shaped recovery, LargeCap’s forward earnings has risen for 22 straight weeks, MidCap’s is up in 19 of the past 20 weeks, and SmallCap’s posted its 19th gain of the past 22 weeks. LargeCap’s forward earnings is now up 12.9% from its lowest level since August 2017; MidCap’s has risen 26.9% from its lowest level since May 2015; and SmallCap’s is up 41.3% from its lowest point since August 2013. These indexes had been on a forward-earnings uptrend from November 2019 until mid-February, before tumbling due to the Covid-19 economic shutdown. LargeCap’s forward earnings is now 11.1% below its record high at the end of January. MidCap’s and SmallCap’s are 15.7% and 22.6% below their October 2018 highs. The yearly change in forward earnings soared to cyclical highs during 2018 due to the boost from the Tax Cuts and Jobs Act (TCJA) but began to tumble in October

2018 as y/y comparisons became more difficult. In the latest week, the yearly rate of change in LargeCap's forward earnings improved to -10.4% y/y from -10.7%. That's up from mid-May's -19.3%, which was the lowest since October 2009, and down from 23.2% in September 2018, which was the highest since January 2011. The yearly rate of change in MidCap's forward earnings rose w/w to -12.3% y/y from -13.4% y/y, and is up from a record low of -32.7% at the end of May; that compares to a TCJA-boosted 24.1% in September 2018 (the highest since April 2011). SmallCap's rate improved to -15.7% y/y from -17.7% y/y, and is up from a record low of -41.5% in early June. SmallCap's prior record low in its y/y percent change occurred during July 2009 and compares to the TCJA-boosted eight-year high of 35.3% in October 2018. Analysts' y/y earnings growth forecasts for 2020 are down substantially since early March but have been relatively stable since late May. Here are the latest consensus earnings growth rates for 2020 and 2021: LargeCap (-19.5%, 26.5%), MidCap (-30.2, 48.3), and SmallCap (-51.1, 108.7).

S&P 500/400/600 Valuation (*link*): Valuations mostly edged lower last week, and remain below their recent cyclical and record highs. LargeCap's forward P/E remained steady at 21.9. That compares to a 19-year high of 22.7 at the end of August and is up from 13.3 in mid-March, which was the lowest since March 2013. MidCap's fell to 19.0 from 19.2 and is down 3.9pts from its record high of 22.9 in early June. SmallCap's was down to 19.4 from 19.9 and is down 7.3pts from its record high of 26.7 in early June. That compares to MidCap's 10.7 and SmallCap's 11.1 in mid-March, which were their lowest readings since March 2009. LargeCap's forward P/E in mid-February—before COVID-19 decimated forward earnings—was 18.9, the highest level since June 2002. Of course, that high was still well below the tech-bubble record high of 25.7 in July 1999. Last week's level compares to the post-Lehman-meltdown P/E of 9.3 in October 2008. MidCap's P/E was below LargeCap's P/E yet again last week, where it mostly has been since August 2018. It was last solidly above LargeCap's from April 2009 to August 2017. SmallCap's P/E was below LargeCap's for a ninth week and for the first time since May. SmallCap's P/E had been mostly below from May 2019 to May 2020 after being solidly above since 2003. During mid-March, SmallCap's P/E was briefly below MidCap's for the first time since July 2008.

S&P 500 Sectors Quarterly Earnings Outlook (*link*): Since the Q2 earnings season—which came in substantially better than greatly reduced forecasts—analysts have been raising all of their future quarterly forecasts instead of lowering them as is the norm. In the latest week, the S&P 500's Q3 blended EPS estimate/actual rose 105 cents w/w to $34.05. That $34.05 estimate represents a decline of 19.3% y/y on a frozen actual basis and -18.7% y/y on a pro forma basis. That compares to a pro forma 30.6% decline in Q2-2020, a 12.8% decline in Q1-2020, a 3.1% gain in Q4-2019, a 0.3% decline in Q3-2019, and y/y gains of 3.2% in Q2-2019, 1.6% in Q1-2019, 16.9% in Q4-2018, and 28.4% in Q3-2018 (which marked the peak of the current earnings cycle). The last time earnings fell markedly y/y was during the four quarters through Q2-2016. All 11 sectors had been expected to record negative y/y earnings growth for Q2 when that earnings season began, but three recorded positive y/y earnings growth: Health Care, Tech, and Utilities. That was a big improvement from Q1 when all 11 sectors posted a y/y decline in earnings. For Q3, a y/y earnings decline is expected for ten of the 11 sectors, but seven are expected to post less worse growth on a q/q basis, reflecting the reopening of the US economy. Energy is expected to report a second straight quarterly loss during Q3. Here are the S&P 500 sectors' latest Q3-2020 earnings growth rates versus their Q2-2020 growth rates: Health Care (0.1% in Q3-2020 versus 6.8% in Q2-2020), Information Technology (-0.4, 5.6), Consumer Staples (-3.0, -4.2), Utilities (-4.4, 6.4), Real Estate (-14.1, -15.2), Materials (-12.8, -28.6), Financials (-7.5, -46.7), Communication Services (-20.1, -16.8), Consumer Discretionary (-32.6, -64.6), Industrials (-65.7, -85.3), and Energy (-120.9, -168.1).

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