MORNING BRIEFING
June 12, 2018

Do US Budget Deficits Matter?

See the collection of the individual charts linked below.

(1) Swelling deficits are baked in the cake. (2) How to avoid shutting down the government: Spend more! (3) US budget deficit goes from automatic stabilizer to late-expansion booster. (4) Social Security trust fund is an accounting fiction. (5) From surpluses to deficits as the Baby Boomers retire. (6) Lots of retiring old NILFs. (7) Fed's balance-sheet tapering adding to supply of Treasuries. (8) A report full of mumbo-jumbo about a fake trust fund. (9) So why aren't bond yields higher? (10) Don't go with the flows.

US Budget I: Lots More US Debt Coming. The short answer to the question posed in the title of this morning's commentary is that we are all going to find out because the US budget deficit is set to swell in coming years. That's what is likely to happen as a result of the Tax Cuts and Jobs Act (TCJA) of 2017. Additionally, at the beginning of this year, congressional Democrats and Republicans agreed to keep the government from shutting down by authorizing more spending on programs that benefit their respective constituencies.

Exacerbating the deficit outlook further is that the Social Security Trust Fund is on the verge of running mounting deficits as the Baby Boomers retire. Meanwhile, the Fed started to taper its balance sheet at the end of October 2017. Let's have a look at the numbers and then examine why bond yields haven't risen higher given the deluge of Treasury debt that the capital markets will have to finance:

(1) *The budget deficit.* The Congressional Budget Office (CBO) released *The Budget and Economic Outlook: 2018 to 2028* during April. It projects that the US federal budget deficit, which has been mostly shrinking since FY2009, is about to widen significantly over the next 10 years (FY2019-FY2028) to $12.4 trillion, i.e., more than $1.0 trillion per year on average (*Fig. 1* and *Fig. 2*).

Invariably in the past, deficits have widened during recessions and early recovery periods as tax revenues fell relative to GDP and were often reduced by tax cuts aimed at stimulating the economy (*Fig. 3* and *Fig. 4*). Federal expenditures typically rose relative to GDP during recessions. In other words, the deficit acted as an "automatic stabilizer," as we were all taught in Econ 101.

During expansions, tax revenues tended to rise faster than GDP, while outlays would increase less rapidly relative to GDP. There's no precedent for the large tax cuts and outlay increases passed in recent months this late in an economic expansion—especially not with the unemployment rate so low. The current unemployment rate is tied for its lowest since 1969; the only other time the rate was this low was April 2000 (*Fig. 5*).

This explains why the CBO isn't buying the supply-side argument that the tax cuts will pay for themselves. That makes more sense when there are lots of jobless workers who can find jobs and boost economic growth and tax revenues. It makes less sense today when the economy is at full employment.

(2) *Social Security.* Boosting the CBO's budget deficit projections are government outlays on social welfare "entitlement" programs. With the exception of unemployment insurance and food stamps, the major programs (Social Security, Medicare, and Medicaid) have only uptrends and no cycles (*Fig. 6*).

The biggest program is Social Security, with outlays totaling a record $968 billion over the past 12 months through April. However, in the past, payroll taxes that funded this program more than covered these outlays, with the surplus squirreled away in the Federal Old-Age and Survivors Insurance Trust Fund. It has risen from $589 billion at the start of 1998 to $2.8 trillion during May of this year (*Fig. 7*).

Now the bad news: The fund is a scam! It has been invested entirely in so-called "intragovernmental holdings" of nonmarketable Treasury securities. In other words, the Treasury borrowed and spent all the surplus. There is nothing in the fund but IOUs from the Treasury to itself!

Now for even more bad news: The Social Security surplus has been dwindling since 2008 (*Fig. 8*). As a result, the bogus trust fund has stopped growing and is about to run deficits that will boost the overall federal budget deficit. The CBO's projections account for this development.

The Baby Boomers, born from 1946 to1964, are currently 54-72 years old. There are roughly 76 million of them. They started to retire in 2011, when the oldest turned 65. Since then, the number of people 65 years old and older who are NILFs (i.e., not in the labor force) soared by 8.7 million through May of this year to a record 40.9 million (*Fig. 9*). Growth of these senior NILFs' ranks is outpacing growth of the labor force (of actual or potential taxpayers). The ratio of senior NILFs to the total labor force is up from around 20% during 2011 to 25% now (*Fig. 10*). And the youngest of the Baby Boomers won't hit the traditional 65-year-old retirement age until 2029!

(3) *The Fed.* Paying no heed to the demographic forces swelling the federal budget deficit, the FOMC announced last year on June 14 a schedule for tapering the Fed's holdings of US Treasury securities as well as mortgage-backed securities that was implemented last October. If it stays on schedule, the Fed's holdings of US Treasuries will drop by $2.46 trillion, to below $200 billion by the end of 2024 (*Fig. 11*). Over the same period, the Fed's holdings of mortgage-backed securities will drop by $1.62 trillion, also just below $200 billion (*Fig. 12*).

If we think of the US Treasury and the Fed on a consolidated basis, then the Fed's QE programs financed a significant portion of the federal budget deficit from November 2008 through October 2014 by monetizing the debt. Now, the CBO's deficit projections in effect will be increased by the tapering of the debt on the Fed's balance sheet.

US Budget II: Social Insecurity. *The 2018 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds* was released on June 5. The report's title appropriately matches the typically dry and lengthy content of the Social Security trustees' report. But that's not the case for this 78th instance of the report, which garnered more interest than usual.

Backing up for a moment, the Old-Age and Survivors Insurance (OASI) and Federal Disability Insurance (DI) programs make monthly income available to retired workers, disabled workers, and their families. Payments are made to the respective beneficiaries out of the two related, but separately managed trust funds, namely the OASI and DI Trust Funds, as required by law. The hypothetical combined net results and projections for the collective trusts ("OASDI") are discussed below.

The trustees project that this year Social Security's total cost will exceed its total income for the first time since 1982. As a percent of GDP, the cost of Social Security will increase from 4.9% in 2018 to about 6.1% by 2038. Driving these projections is the retiring in droves of the massive Baby Boom generation over the coming decades, as discussed above.

To keep the trust funds from running out of money, the report concludes that changes to the program are necessary. Combined, the reserves in the trust funds are projected to be depleted in 2034. At the time of depletion, continuing income to the combined trust funds would be sufficient to pay just 79% of the program's scheduled benefits.

Based on alternative scenarios presented in the report, however, there may not be a 2034 emergency. The report contains many assumptions, which may or may not be politically motivated. Responsible for the oversight of the trust funds and the annual report are the six members of the Board of Trustees, led by the Secretary of the Treasury, who is the managing trustee.

Nevertheless, the fact that the trusts will need to dip into reserves this year is concerning. Melissa and I found some additional details and insights in the 270-page report as follow:

(1) *Rainy-day fund declining*. Total trust fund income of $997 billion exceeded total expenditures of $952 billion during 2017. "At the end of 2017, the OASDI program was providing benefit payments to about 62 million people: 45 million retired workers and dependents of retired workers, 6 million survivors of deceased workers, and 10 million disabled workers and dependents of disabled workers." During 2017, "an estimated 174 million people had earnings covered by Social Security and paid payroll taxes on those earnings."

For the first time since 1982, however, the program's cost is projected to exceed total income for 2018, which means that asset reserves will decline during 2018. Such reserves may be used to continue paying beneficiaries in the event of a deficit. The reserves also generate interest income for the trusts. The money is held in special-issue US Treasury securities, i.e., nonmarketable but interest-bearing securities. Those grew to $2.892 trillion at the end of 2017. The combined reserves are projected to decrease to $2.189 trillion at the end of 2027.

(2) *Depleted by 2034*. Combined, the reserves and projected program income of the OASI and DI Trust Funds are "adequate to cover projected program cost over the next 10 years under the intermediate assumptions." However, the ratio of reserves to annual cost declines from 288% at the beginning of 2018 to 137% at the beginning of 2027. Nevertheless, by remaining at or above 100%, the combined trust funds pass the short-range test for adequate coverage.

But over the longer term, the reserves in the trust funds are projected to become depleted in 2034. Through 2039, the projected cost of the combined program "increases more rapidly than projected non-interest income" as "the retirement of the baby-boom generation will increase the number of beneficiaries much faster than the number of covered workers increases." It doesn't help that fertility rates for subsequent generations are lower than in the past.

(3) *Changes required for solvency…* For the 75-year period, the open group unfunded obligation, an approximation of the level of the accumulated deficit, is a present value of $13.2 trillion, $0.7 trillion higher than the level measured last year. For the combined trust funds to remain fully solvent, the report concludes that some combination of the following approaches would be necessary: (i) "[R]evenues would have to increase by an amount equivalent to an immediate and permanent payroll tax rate increase" of 2.78pps; and (ii) "[S]cheduled benefits would have to be reduced by an amount equivalent to an immediate and permanent reduction of about" 17% for all current and future beneficiaries, or about 21% "if the reductions were applied only to those who become initially eligible for benefits in 2018 or later." If the action is deferred, the report warns, the changes to keep the trust funds

solvent would need to be even more substantial.

(4) *… Or not?* Projecting 75 years cannot be an easy task for even the best of actuaries. The report acknowledges: "Significant uncertainty surrounds the intermediate assumptions." It's under the intermediate scenario that the trust funds are projected to deplete in 2034. While the "intermediate" assumptions are behind the data in focus in the report, two alternative scenarios are referenced. See Table II.C1 of the report for the key demographic, economic, and programmatic assumptions for three alternative scenarios. Also, see Figure II.D6 in the report, titled "Long-Range OASI and DI Combined Trust Fund Ratios Under Alternative Scenarios."

Under the "high-cost" alternative, the funds become depleted a few years earlier, in 2030. In contrast, under the "low-cost" alternative, the combined trust funds are projected to remain above 100% of annual cost. That scenario "includes a higher ultimate total fertility rate, slower improvement in mortality, a higher real-wage differential, a higher ultimate real interest rate, a higher ultimate annual change in the CPI, and a lower unemployment rate." The bottom line is that if the low-cost assumptions were to materialize down the road, the combined trust funds would not become depleted.

(5) *The bottom line.* Notwithstanding all this mumbo-jumbo, the fact is that the funds' outlays are about to exceed receipts. That means that rather than offsetting some of the overall federal budget deficit, the trust funds will be boosting the deficit. The trust funds will be cashing in some of their nonmarketable securities, requiring the Treasury to raise more directly from the public with marketable securities.

Bonds: Not Going With the Flows. Given all the above, why is the 10-year Treasury bond yield still trading around 3.00% and not closer to the y/y growth of nominal GDP, which was 4.72% during Q1 (*Fig. 13*)? In my book *Predicting the Markets*, I referred to the relationship between the two as the "Bond Vigilante Model." Why aren't the bond vigilantes being more vigilant given the fiscal excesses that are set to significantly increase the supply of government bonds? Why aren't they fretting that all this fiscal stimulus might revive inflation?

All good questions. In my book, I observed that over the years I've learned that supply and demand analysis doesn't work very well when it comes to forecasting the bond yield. More significant is the market's perception of what is important to the Fed. The bond yield is driven by the federal funds rate and the yield curve spread, which in the past was a leading indicator of the business cycle (*Fig. 14*).

My interpretation of the current situation is that bond investors believe that the Fed is aiming to raise the federal funds rate a few more times to 2.75%-3.00%. They seem to believe that the Fed is ahead of inflation, so there is no reason to demand a big inflation premium in the yield curve. Of course, global bond investors must view US government bond yields as much more appealing than comparable German and Japanese yields, which remain near zero.

The bottom line is that the US budget deficit doesn't matter … for now. It might matter at some point. However, if inflation remains subdued and the Fed is nearing its long-run target for the federal funds rate, then yields may stay well below the growth in nominal GDP.

CALENDARS

US. **Tues:** NFIB Small Business Optimism Index 105.3, Headline & Core CPI 2.8%/2.2% y/y, Treasury Budget -$144.0b, FOMC Meeting Begins.**Wed:** PPI-FD Total, Core, Core Ex Trade Services 0.3%/0.2%/0.2%, Atlanta Fed Business Inflation Expectations, MBA Mortgage Applications, EIA Petroleum Status, FOMC Announcement 1.875% (1.75% to 2.00%), FOMC Forecasts, Powell. (*Wall Street Journal* estimates)

Global. Tues: Germany ZEW Economic Sentiment, UK ILO Unemployment Rate (3-month), UK Jobless Claims Change & Claimant Count Rate, Australia Business Confidence. **Wed:** Eurozone Industrial Production -0.7%m/m/2.7%y/y, Eurozone Employment, UK Headline & Core CPI 2.4%/2.1% y/y, Lowe. (DailyFX estimates)

STRATEGY INDICATORS

YRI Weekly Leading Index (*link*): The week ending June 2 marked a third week of contraction in our Weekly Leading Index (WLI)—which is the average of our Boom-Bust Barometer (BBB) and Bloomberg's Weekly Consumer Comfort Index (WCCI) and a good coincident indicator that can confirm or raise doubts about stock market swings—following four weeks of advances to a new record high. Our WLI sank 3.6% during the three weeks ending June 2, after a four-week jump of 3.8%. Our BBB dropped 6.0% over the three-week span, following a four-week surge of 7.8% to a new record high, as jobless claims—one of the components of our BBB—continued to rise from its cyclical low. Jobless claims climbed for the third week to 225,500 (4-wa) during the week of June 2, after dropping from 231,500 to 213,500 the previous four weeks—which was the lowest reading since December 1969. The CRB raw industrial spot price index, another BBB component, has been climbing since bottoming in mid-May and jumped last week to its highest reading since August 2014. Meanwhile, the WCCI fell for the fifth time in seven weeks, by a total of 5.7%, since reaching a new cyclical high.

S&P 500/400/600 Forward Earnings (*link*): Forward earnings for these three indexes rose to record highs last week, with MidCap and SmallCap hitting that level for the first time in three weeks. Forward earnings activity has been relatively strong in the past 10 months, as LargeCap's forward earnings has risen in 44 of the past 45 weeks, MidCap's is up in 40 of the past 41 weeks, and SmallCap's is up in 38 of the past 41. 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 edged down to 21.3% y/y from 21.4%, which compares to a seven-year high of 21.7% in mid-May and a six-year low of -1.8% in October 2015; MidCap's rose to a seven-year high of 24.0% from 23.1%, which compares to a six-year low of -1.3% in December 2015; and SmallCap's jumped w/w to a seven-year high of 31.1% from 28.9%, 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 22.0% and 9.6%, MidCap 21.2% and 12.7%, and SmallCap 27.2% and 15.5%.

S&P 500/400/600 Valuation (*link*): Last week saw forward P/E ratios rise for these three indexes to 12-week highs, but are at levels that are not much above their recent post-election lows. LargeCap's weekly forward P/E improved to 16.6 from 16.3, which is up from a post-election low of 16.0 in late March and down from 18.6 on January 26—the highest since May 2002. That compares to the post-Lehman-meltdown P/E of 9.3 in October 2008, but is well below the tech-bubble record high of 25.7 in July 1999. MidCap's forward P/E rose to 16.8 from 16.6, which is up from its 25-month low of 16.1 in early April. MidCap's P/E is down from a 15-year high of 19.2 in February 2017 and compares to 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 had mostly been at or below LargeCap's P/E from August to March for the first time since 2009. SmallCap's P/E edged up to 18.1 from 18.0, 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 daily forward price/sales (P/S) ratios, they also improved w/w for all three indexes, but remain at levels well below January highs: LargeCap's P/S of 2.05 is down from a record high of 2.19 on January 26; MidCap's 1.34 compares to its record high of 1.40, also on January 26; and SmallCap's 1.04 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 Q1 earnings reporting season essentially finished, analysts have become less busy adjusting their forecasts. The S&P 500's Q2-2018 EPS forecast dropped 1 cent w/w to $39.03. That's up 0.1% since the end of Q1, 7.4% ytd, and 8.1% since the passage of the TCJA. The $39.03 estimate represents a forecasted pro forma earnings gain for Q2-2018 of 20.1%, unchanged from a week earlier. That compares to Q1-2018's blended 26.6% (which is the strongest since Q4-2010), Q4-2017's 14.8%, Q3-2017's 8.5%, Q2-2017's 12.3%, and Q1-2017's 15.3%. Since the end of Q1, Q2-2018 estimates are higher for six sectors and down for five. Energy's Q2 forecast has risen 12.1%, followed by the forecasts for Real Estate (up 1.7%), Materials (1.3), Health Care (1.1), Tech (0.6), and Utilities (0.3). Consumer Staples is the biggest decliner, with its Q2-2018 forecast down 4.6% since the end of Q1, followed by Consumer Discretionary (-2.0), Financials (-1.8), Telecom (-1.6), Industrials (-1.7), and Telecom (-1.6). The S&P 500's Q2-2018 forecasted earnings gain of 20.1% y/y would be its eighth straight gain after four declines. All 11 sectors are expected to record positive y/y earnings growth in Q2-2018—with nine rising at a double- or triple-digit percentage rate—and four are expected to beat the S&P 500's forecasted y/y earnings gain of 20.1%. That compares to all 11 sectors rising y/y during Q1-2018, when ten rose at a double-digit pace and four outpaced the S&P 500. Analysts expect Energy to report another large profit jump in Q2 relative to very low earnings a year ago, with the pace improving from Q1. The latest forecasted Q2-2018 earnings growth rates vs their blended Q1-2018 growth rates: Energy (137.6% in Q2-2018 vs 86.5% in Q1-2018), Materials (32.0, 39.4), Tech (24.2, 36.4), Financials (21.0, 30.7), S&P 500 (20.1, 26.6), Consumer Discretionary (15.6, 19.4), Industrials (15.0, 24.8), Telecom (13.0, 14.7), Consumer Staples (9.8, 12.7), Health Care (11.2, 16.3), Real Estate (2.3, 3.2), and Utilities (0.7, 16.6). On an ex-Energy basis, analysts expect S&P 500 earnings to rise 16.6% y/y in Q2, down from a blended 24.6% in Q1; that compares to 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).

US ECONOMIC INDICATORS

UK Industrial Production (*link*): UK industrial output unexpectedly contracted in April for the first time in four months, as British factories recorded their worst month in 5.5 years. Headline production dropped 0.8% in April after climbing 1.4% the first three months of the year. It was only the second monthly decline in 13 months; the other was a 1.2% drop in December—which reflected a temporary shutdown of a North Sea oil pipeline. Meanwhile, manufacturing output slumped 1.4%, the sharpest monthly drop since October 2012; it hasn't posted a gain yet this year, contracting 1.6% ytd. Factory output had increased 3.1% during the final eight months of 2017. Capital goods production plunged 2.5% in April after rebounding 3.5% during the four months ending March to a new record high; consumer durable goods production slipped 1.1% after a five-month surge of 5.5% to a new cyclical high. Meanwhile, intermediate goods production sank for the fifth straight month, down 3.4% during the five months through April, while production of consumer nondurable goods declined for the fourth time in five months, by a total of 1.6%. Looking forward, May's M-PMI (to 54.4 from 53.9) showed a slight improvement from April's 17-month low, though Markit's report warned it masked several areas of potential concern: "Although growth of production accelerated to its best during the year-so-far, this was mainly achieved through the steepest build-up of finished goods inventories in the 26-year survey history and a sharp reduction in backlogs of work."

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