Second-Quarter U.S. Economic Update
August 2018

Summary of Recent Economic Developments

The U.S. economy expanded 4.1% in the second quarter after starting the year slowly. Economists forecast solid real GDP growth of 2.9% in 2018, 2.5% in 2019 and 1.8% in 2020. Employment again grew strongly and wage growth held steady in Q2. Real personal consumption expenditures jumped 4.0% as consumers came back to life, and revisions to historical data sharply increased the personal savings rate. Personal income rose 4.3% before inflation on rising employment, lower taxes and higher investment income. Residential investment slipped again, but business investment jumped 7.3%. Productivity probably increased along with GDP. The trade deficit narrowed and inventories shrunk, with nearly offsetting contributions to Q2 real GDP. However, trade tariffs expanded and present downside risks to the economy. Government spending rose moderately, but federal spending is slated to pick up over coming quarters and widen already-large budget deficits. Inflation is near the Federal Reserve's target and likely to rise further, but we do not expect it to accelerate rapidly. The Federal Reserve tightened monetary policy, and 10- and 30-year Treasury rates edged up. Credit spreads mostly widened during the quarter despite strong credit fundamentals, but they have narrowed since quarter-end. Benchmark interest rates currently incorporate most of the monetary tightening we expect in this cycle. We believe preferred securities continue to offer an attractive combination of good credit quality, high income and moderate interest-rate risk for long-term investors.

Figure 1: Key Macroeconomic Indicators and Interest Rates

Economic Indicator*	2018:2	2018:1	2017:4	2017:3	2017:2	2017:1	2016:4	2016:3
Real GDP, Chg QoQ (%, SA, AR)	4.1	2.2	2.3	2.8	3.0	1.8	1.8	1.9
Real Personal Consump Expnds, Chg QoQ (%, SA, AR)	4.0	0.5	3.9	2.2	2.9	1.8	2.6	2.7
Real Business Inv ex Stuctures, Chg QoQ (%, SA, AR)	5.9	10.9	5.8	5.9	8.3	8.7	0.3	2.6
Real Residential Investmt, Chg QoQ (%, SA, AR)	-1.1	-3.4	11.1	-0.5	-5.5	11.1	7.7	-1.7
Real Private Domestic Final Sales, Chg QoQ (%, SA, AR)	4.3	2.0	4.4	2.3	3.1	3.3	2.4	2.8
Nominal GDP, Chg QoQ (%, SA, AR)	7.4	4.3	5.1	4.8	4.2	3.9	3.9	3.5
Corporate Profits, After Tax, Chg YoY (%, SA, AR)	7.1f	15.1	7.3	6.4	6.2	6.0	7.3	-2.0
Nonfarm Productivity, Chg QoQ (%, SA, AR)	N/A	0.4	0.3	2.6	1.7	0.2	1.2	2.4
Nominal Personal Income, Chg YoY (%, AR)	4.9	4.3	4.6	4.6	4.3	4.3	3.2	2.3
Personal Savings Rate (%, SA)	6.8	7.2	6.2	6.6	6.6	7.0	6.3	6.3
Unemployment Rate (%, SA)	4.0	4.1	4.1	4.2	4.3	4.5	4.7	5.0
Nonfarm Payrolls, Chg QoQ (000, SA)	691	655	662	425	569	532	492	764
Household Employment, Chg QoQ (000, SA)	398	1157	-303	1074	186	831	418	651
Federal Budget, 12-mo Def or Surp (% of GDP)	-3.8	-3.7	-3.5	-3.5	-3.7	-3.4	-3.1	-3.2
Consumer Price Index, Chg YoY (%, AR)	2.9	2.4	2.1	2.2	1.6	2.4	2.1	1.5
CPI ex food & energy, Chg YoY (%, AR)	2.3	2.1	1.8	1.7	1.7	2.0	2.2	2.2
Capacity Utilization (%, SA)	78.0	77.5	77.3	75.7	76.2	75.5	75.7	75.1
Rate or Spread (End of Quarter)	**2018:2**	**2018:1**	**2017:4**	**2017:3**	**2017:2**	**2017:1**	**2016:4**	**2016:3**
Federal Funds Rate Target (%)	2.00	1.75	1.50	1.25	1.25	1.00	0.75	0.50
3-month LIBOR (%)	2.34	2.31	1.69	1.33	1.30	1.15	1.00	0.85
10-Yr Treasury Note Yield (%)	2.85	2.74	2.41	2.32	2.30	2.39	2.43	1.59
30-Yr Treasury Bond Yield (%)	2.98	2.97	2.74	2.86	2.84	3.01	3.05	2.32
ICE-BofAML US Corporate Index Yield to Worst vs Gvt	129	116	97	104	112	120	126	138
10-Yr Interest Rate Swap Spread (bp)	7.5	3.8	-1.5	-4.5	-2.3	-0.8	-11.3	-14.0

* Figures are either quarterly or, if more frequent, end of period. f = Forecast[1] ; N/A = not available Source: Macrobond, ICE, Bloomberg LP

Legend for all Figures: AR = Annual Rate; SA = Seasonally Adjusted; MA = Moving Average; C.O.P. = Change over Period

Economic Outlook

After a sluggish start to 2018, the economy roared back to life in the second quarter. Inflation-adjusted gross domestic product (real GDP) expanded by 4.1% in Q2 compared to 2.2% in Q1. Higher growth came from private domestic final sales – not big boosts from government spending, trade and inventories. Economists expect 2.9% real GDP in 2018 overall, although first-half strength may boost that forecast when updates are available later in August.[1] We now expect 3.0-3.3% growth in 2018, up from 2.7-3.2% when the year began. For 2019 and 2020, economists project 2.5% and 1.8% growth, respectively. We broadly agree with that 2019 outlook but think 2020 should be a little better, assuming productivity improves modestly.

There are four key expectations underlying our outlook. First, tax reform should prompt greater business investment and boost labor productivity. Second, higher wages due to a shrinking pool of available workers should support income growth above 4%, even as job growth slows as the economy reaches full employment. Third, global economic activity – which expanded by 3.8% in 2017 – should remain near that level in 2018. Finally, we assume that immigration and trade policies do not lead to worker shortages or trade wars that damage U.S. and global growth.

With the first half of 2018 behind us, we feel confident in the first three views, but we are considerably less confident on trade and immigration policy. We cannot predict what direction trade negotiations ultimately will take or their impact on U.S. economic growth, but with tariff barriers now expanding in the U.S. and abroad, longer-term economic risks are skewed to the downside. Immigration policy appears similarly unpredictable. We still think an optimistic economic outlook remains warranted, but risks have increased.

Figure 2: Employment Growth Remains Strong

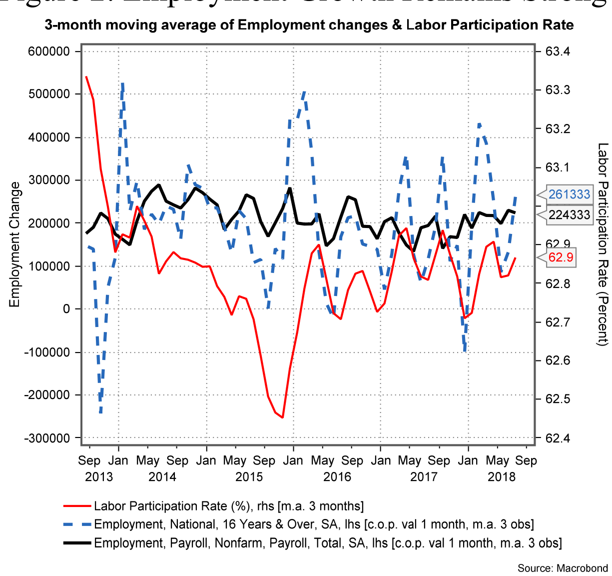
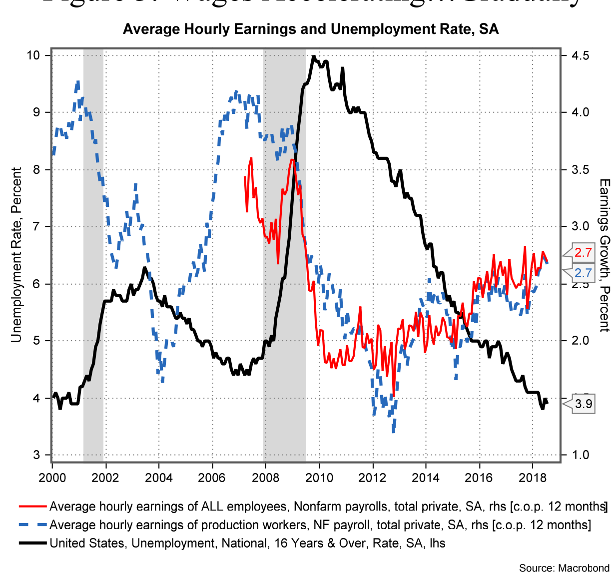


Figure 3: Wages Accelerating…Gradually



The **labor market** continued to post impressive job gains (Figure 2). Payroll jobs rose by an average of 230,000 jobs per month in the second quarter and added another 157,000 in July 2018. The household employment survey recorded only modest gains of 133,000 per month in Q2 but

[1] Unless noted otherwise, forecasts are from the *Livingston Survey*, Federal Reserve Bank of Philadelphia, June 15, 2018 and Bloomberg® *U.S. Monthly Economic Survey*, July 12, 2018.

jumped by 389,000 in July. Over the past 12 months, the two surveys showed very similar job growth: an average of 155,000 jobs per month for the household survey and 148,000 for the payroll survey. By each measure, jobs were up 1.6% YoY in July.

The unemployment rate dipped to 3.9% in July from 4.1% in December 2017, while labor participation rose to 62.9% from 62.7% over the same period. Despite demographics that present headwinds to labor force growth, ready job availability and higher wages have pulled people back into the labor market. Over 12 months ending in July, the labor force grew by 1.1% compared to an average of 0.7% in 2017. Although that is still slower than job growth – meaning the unemployment rate remains under downward pressure – it suggests there may be some remaining slack in labor markets that would allow for continued employment gains without prompting a surge in wage inflation. Wage data bears that out. Average hourly earnings rose 2.7% YoY in July, in-line with its pace so far this year and unchanged from its pace a year ago (Figure 3). We expect that wages will continue a gradual acceleration since 2012 and support continued growth in personal income.

Figure 4: Spending Up, but Savings Higher

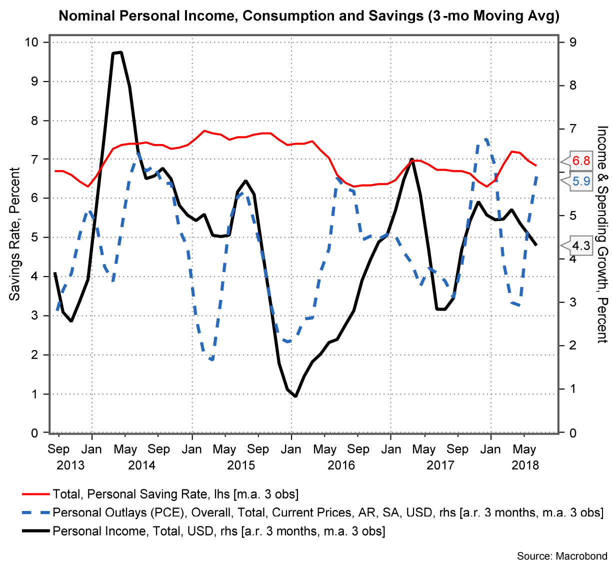
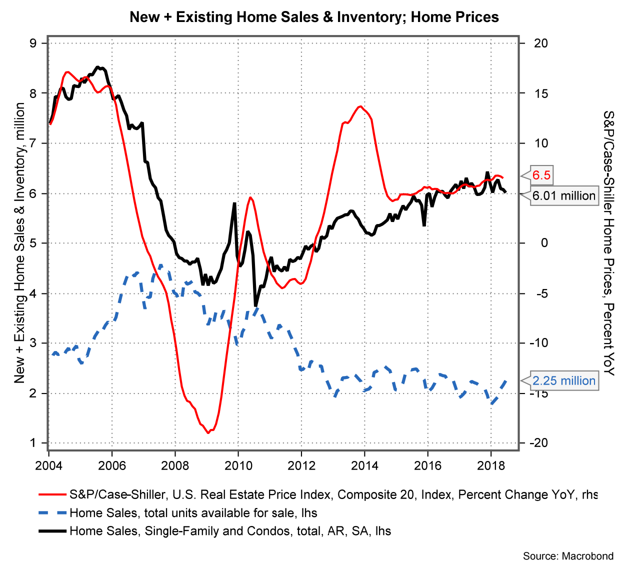


Figure 5: Housing Slower, Price Gains Ease



Despite strong job gains, nominal **personal income** growth slowed in the second quarter, rising 4.3% in compared to 5.1% in Q1 (Figure 4). On a longer-term basis, however, personal income rose by 4.9% YoY in June compared to 4.3% in March; investment income showed especially large gains, up 7.0% YoY on rising stock markets and higher interest rates. Lower personal income tax rates contributed to strong growth in disposable personal income (+5.4% YoY in June), which is reported on an after-tax basis.

While income growth slowed in the second quarter, nominal **personal consumption expenditure** (PCE) surged, up 5.9% compared to 3.0% in Q1 (Figure 4). After inflation, real PCE rose by 4.0%, up from just 0.5% in Q1; it rose 2.8% YoY. Given such divergent quarterly data, it makes sense to look at growth for the first half of 2018 as a whole. On that basis, real PCE was up 2.4%, and we see upside to that in the second half given labor market strength and elevated consumer confidence.

As part of a major overhaul of GDP accounts released this quarter, personal income – especially proprietors' income – was revised up substantially, while personal consumption was little changed. As a result, the **personal savings rate**, which had been reported at 3.2% in May 2018 (last report prior to revisions), jumped to 6.8% in both May and June. As shown in Figure 4, the savings rate now looks both higher and broadly stable in recent years rather than on a distinct downward trend, as prior data showed. This makes PCE growth look much more sustainable than it did before revised data was available. We expect real PCE will slow from Q2's blistering 4.0% pace, but we now think it will expand about in-line with personal income, not lag behind income growth as we expected when savings looked significantly weaker. This is a key reason for our upgraded real GDP forecast.

The **housing market** exerted a mild drag on economic growth in the first half of 2018. Real residential investment fell 1.1% in Q2 after a 3.4% drop in Q1, although it was up a scant 1.4% YoY. Combined new and existing home sales slipped to a 6.0 million unit pace in June, and inventories of unsold homes, while still relatively low, increased (Figure 5). Home price gains remained elevated, however. The S&P/Case-Shiller 20-city home price index rose 6.5% YoY in May (latest data available), up from 5.7% a year earlier. Rising home prices, higher mortgage rates and tax reform's limitations on deductibility of state and local taxes – including property taxes – have combined to raise home ownership cost, which likely dampened demand. In addition, worker shortages in construction trades have made it difficult for homebuilders to rapidly meet demand in many areas. We think residential investment will add to GDP growth over coming years, but it may be a more modest contributor than we previously expected.

Figure 6: Output and Orders Rebound

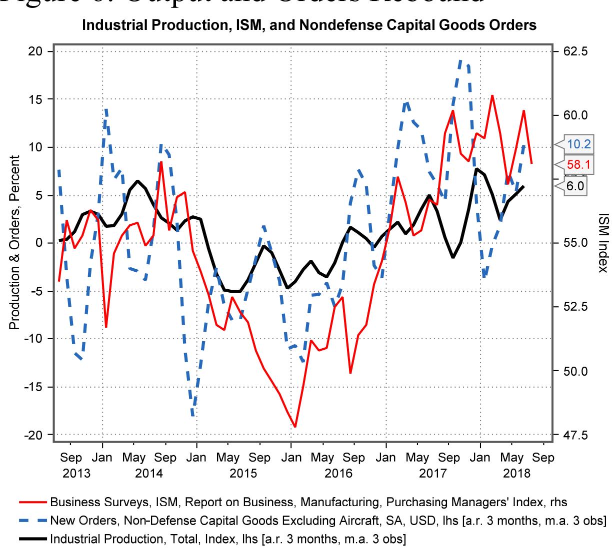
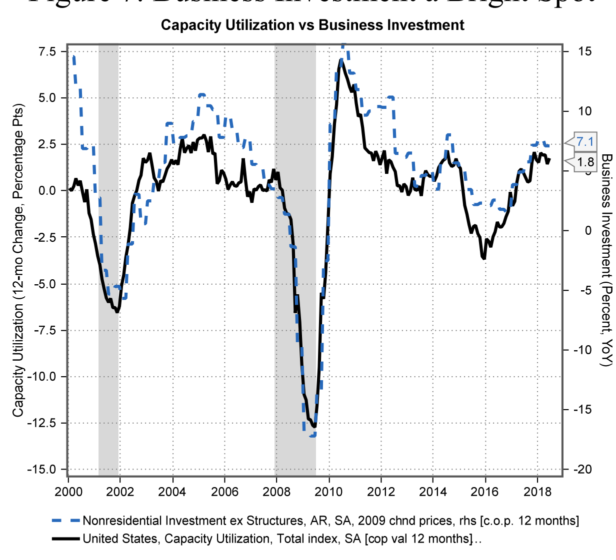


Figure 7: Business Investment a Bright Spot



After easing a bit in the first quarter, **industrial production** rose 6.0% in Q2 and 3.8% YoY (Figure 6). Manufacturing output rose only modestly, up 1.9% for the quarter. However, utility output jumped 17.3%, and mining surged 19.4% on higher oil prices. The Institute for Supply Management's manufacturing survey slipped to 58.1 in July, but it remains high historically and continues to point toward moderate gains in output. Orders for core capital goods (nondefense, excluding aircraft) rebounded strongly, up 10.2% in the second quarter. We remain concerned about downside risks from expanding trade tariffs, but so far solid consumer spending and rising business investment (see below) have boosted the industrial sector.

Real **business investment** was up 7.3% in the second quarter after even-stronger 11.5% growth in Q1. "Core" business investment (business equipment and intellectual property) rose 5.9% in Q2 and 7.1% YoY, about in-line with gains in capacity utilization (Figure 7). Although investment spending is likely to slow from its rapid first-half pace, lower corporate tax rates and rising labor costs should spur continued investment spending, and we expect it to remain a bright spot this year.

In our fourth-quarter 2017 *Update*, we highlighted a need for rising **labor productivity** to sustain faster growth as the economy moves into full employment. To recap that discussion, output is a function of labor input, capital input and multi-factor productivity. As the economy reaches full employment, employment growth should slow. That leaves business and government investment and multi-factor productivity (together, labor productivity) to pick up the slack to avoid slower domestic economic growth. Multi-factor productivity has been stubbornly low since the financial crisis, averaging zero from 2007-2016 (latest data available) and a still-low 0.25% since the first full year of recovery beginning in 2010. That compares to average annual growth in multi-factor productivity of 0.8% from 1990-2006; it was even higher before then.[2] The reasons for this decline are unclear, especially in light of rapid technological advances, which should boost multi-factor productivity. Data suggest we should not place too much hope on a surge in multi-factor productivity to sustain economic growth when employment gains inevitably slow.

Figure 8: Productivity Likely to Pick Up

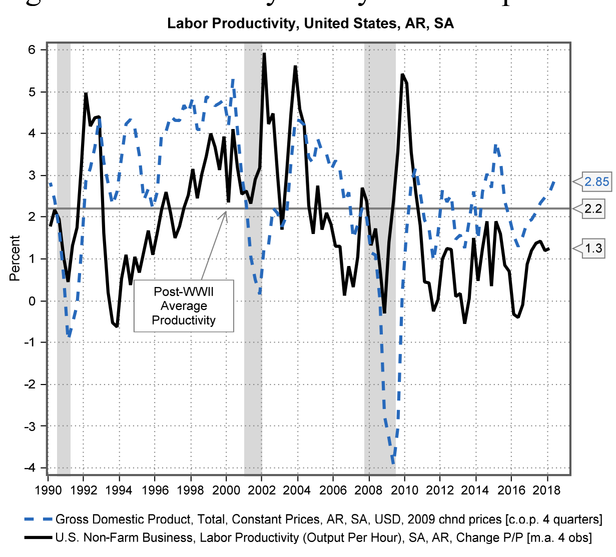
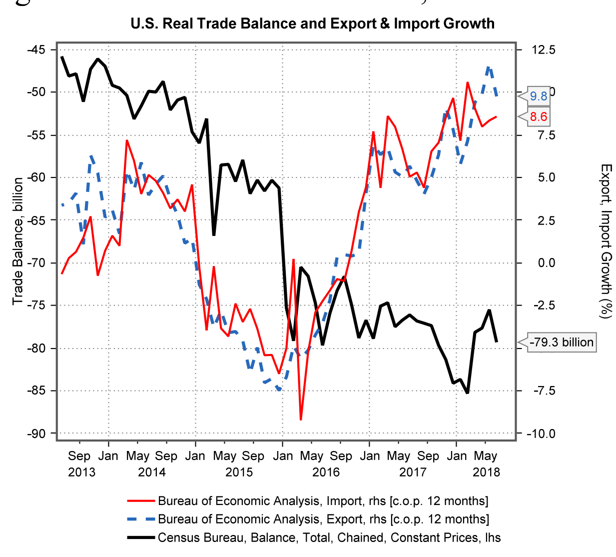


Figure 9: Trade Deficit Narrowed, Future Unclear



That leaves capital investment as the key to sustaining growth over the next few years. As noted above, we already have seen significantly higher business investment spending. However, it is too soon to know its impact on labor productivity. Nonfarm productivity rose 0.4% QoQ and 1.3% YoY in the first quarter (latest data available), about flat with recent results (Figure 8). That probably reflects subdued GDP growth in Q1, as productivity tends to move with economic

[2] With thanks to our economic data provider, Macrobond, for making us aware of this dataset.

activity. If business investment and economic growth stay strong, as expected, we could see a return to 2% overall productivity growth over coming quarters. We will keep readers posted!

The **trade deficit** narrowed sharply in the second quarter, despite widening in June (Figure 9). Net exports added 1.1% to real GDP growth in Q2. Imports and exports expanded rapidly, up 8.6% and 9.8% YoY, respectively, as both importers and exporters rushed to deliver goods before tariffs kicked in. However, we expect both import and export growth to slow in the second half in response to recently-implemented tariffs. With the list of potential tariffs both in the U.S. and abroad rapidly expanding, it could get even worse next year. Fundamentally, stronger U.S. economic growth and a stronger U.S. dollar should boost demand for imported goods while making U.S. exports more expensive. That suggests net exports should exert some drag on real GDP growth. However, the trade situation is very fluid, and we cannot predict how it will affect GDP over coming quarters.

Inventory growth fell in response to strong consumer and business spending in the second quarter, subtracting 1.0% from second-quarter real GDP. Although inventory growth is often volatile quarter-to-quarter, it generally has minimal impact on long-term GDP, averaging just +0.04% growth contribution since 1990. We expect some inventory rebuilding after Q2's drawdown, but it is not a major factor in our medium-term outlook.

Government consumption accelerated in the second quarter. Real federal spending rose 3.5%, paced by a 5.6% jump in defense spending. Real state and local spending rose 1.4%, faster than Q1's 0.9% pace but still relatively slow. We think state and local governments will face taxpayer resistance to more rapid spending in light of tax reform's $10,000 annual limitation on deductions for state and local taxes on individual federal tax returns. State and local spending growth should remain subdued. However, federal government defense spending is still ramping up, and nondefense spending is slated to pick up soon. The Congressional Budget Office (CBO) projects[3] that discretionary outlays will increase 6.6% in fiscal year 2018 and 6.4% in FY2019; they are projected to decline by 1.6% in FY2020 – at which point the annual federal budget deficit is expected to exceed $1 trillion. That pullback in spending and a rapidly expanding deficit represent headwinds to growth after 2019, something the Federal Reserve will consider when setting monetary policy next year and beyond.

Summarizing the second-quarter economic situation, real GDP growth of 4.1% adds up as follows: Personal Consumption Expenditures (+2.69%), Residential Investment (-0.04%), Business Investment (+0.98%), Inventory Change (-1.00%), Net Exports (+1.04%), and Government Consumption (+0.37%). The first three components equal **Private Domestic Final Sales**, which grew by 4.3% during the quarter and 3.2% over the past year (Figure 9). Private sector growth was led by PCE and business investment. Looking ahead for the next several quarters, we expect continued gains in business investment and PCE, albeit at a somewhat slower pace than in Q2 (but faster than in H1), moderate growth in government consumption, slow growth in residential investment, and a positive contribution to growth from inventories. Net exports is a wildcard.

[3] *The Budget and Economic Outlook: 2018 to 2028*, Congressional Budget Office, April 2018.

Figure 10: Private Sector Driving Growth

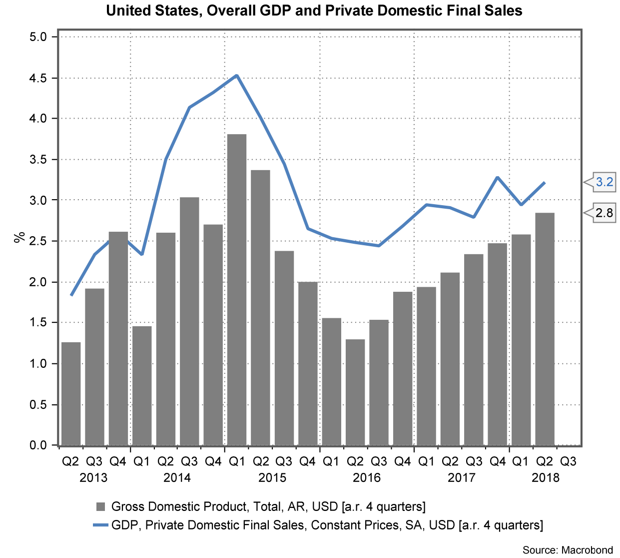
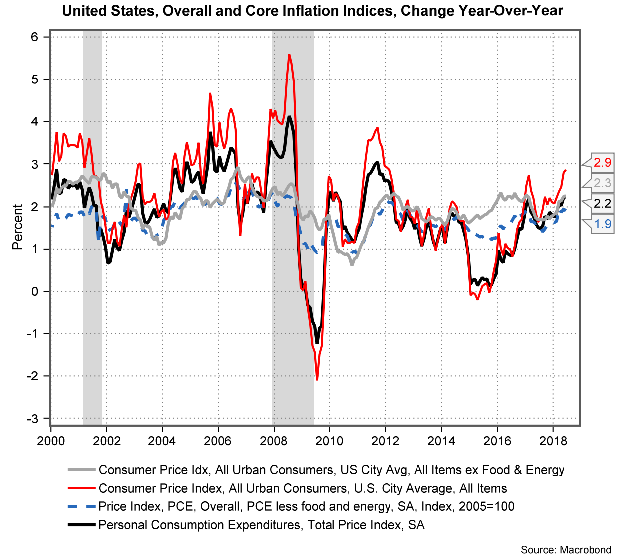


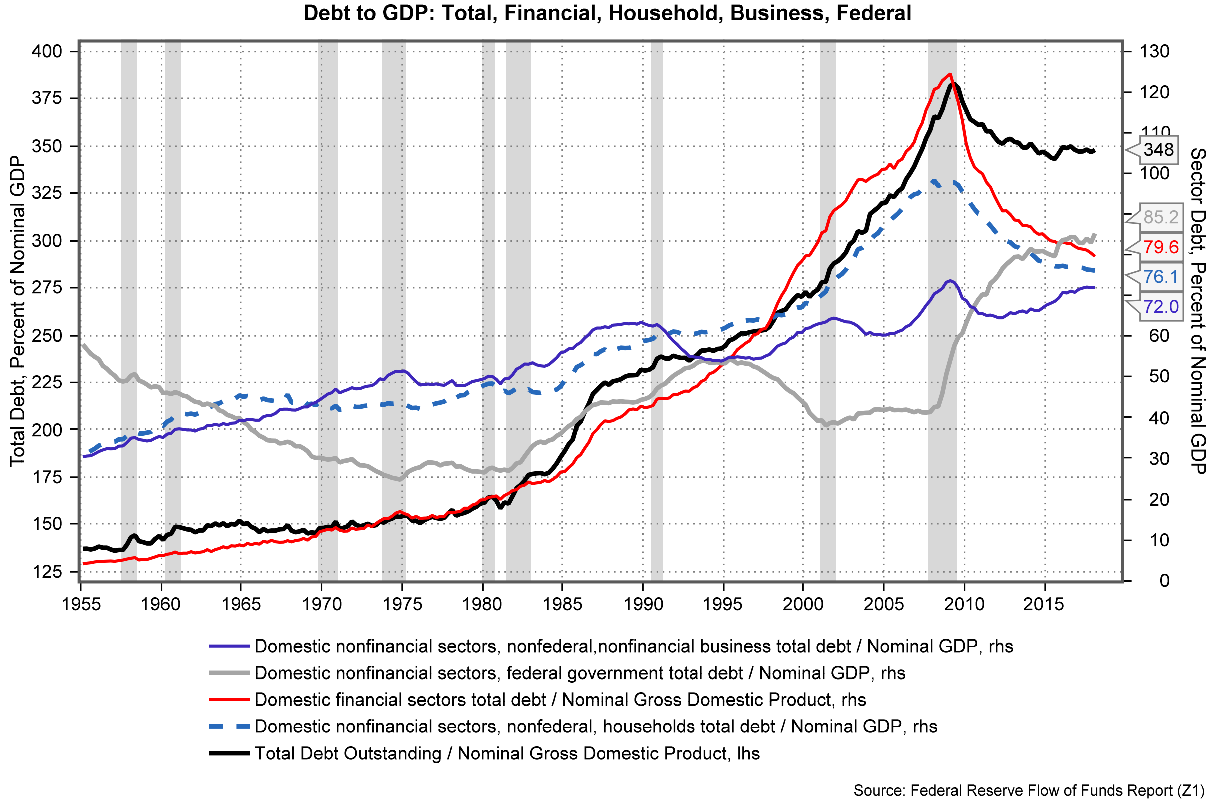
Figure 11: Inflation Near Fed's 2% Target



Inflation rose again in the second quarter, leaving it near the Federal Reserve's 2% inflation target (Figure 11). For 12 months ending in June, the consumer price index (CPI) was up 2.9% overall and 2.3% excluding food and energy. The Federal Reserve's preferred inflation gauge, the PCE deflator, was up 2.2% overall and 1.9% excluding food and energy over 12 months ending in June, up from 1.7% and 1.5%, respectively, in December 2017 but little changed during the second quarter. Higher energy prices were responsible for most of the pickup in overall CPI over the past year, but core inflation has moved up as well. On one hand, rising wages, higher energy prices and tariffs on some imported goods argue for higher inflation. On the other hand, a stronger dollar, lower corporate tax rates and lower prices on domestic goods targeted by foreign tariffs argue for price restraint. Inflation should edge upward, but we expect it will be a gradual process.

As shown in Figure 12 below, broad **balance sheet trends** in the U.S. were about steady in the first quarter of 2018 (latest data available). Overall debt-to-GDP was 348%, up slightly from 347% last quarter. Leverage at households dipped slightly to 76.1% from 76.3%. Financial business leverage continued to decline relatively quickly, dropping to 79.6% from 80.5% debt-to-GDP last quarter. However, federal government debt jumped to 85.2% from 83.0% as the federal budget deficit widened – with more to come. Nonfinancial businesses leverage was unchanged at 72.0% of GDP, as strong earnings growth offset higher business investment. We remain watchful of nonfinancial corporate leverage, but it has stabilized in recent quarters, and government debt is the sector that bears most scrutiny over the next several years as deficits continue to rise.

Figure 12: Leverage Stable Overall, but Government Borrowing Starting to Rise



Market Outlook

Long-term **Treasury rates** were mixed in the second quarter as the Fed hiked short-term rates and the yield curve flattened. The benchmark 10-year Treasury note yield rose by 11 bp to 2.85%, and the 30-year Treasury bond yield was nearly unchanged, up 1 basis point (bp) to 2.98% on June 29 (Figure 13). Ten- and 30-year yields are up about 10 bp since quarter-end, closing at 2.94% and 3.09%, respectively, on August 6.

The Federal Open Market Committee (FOMC) hiked short-term rates by 25 bp in June and is likely to do the same in both September and December. If so, that would bring the fed funds target rate (currently 1.75-2.00%) to 2.25-2.50% at year-end, pushing inflation-adjusted short rates above zero for the first time since before the financial crisis. The FOMC also continued to reduce the Fed's holdings of Treasuries and mortgage-backed securities.[4] Currently, the Fed is reducing reinvestment of maturing securities at a rate of about $40 billion per month (60% in Treasuries and 40% in mortgage-backed and agency securities). That will step up to $50 billion per month in October 2018, where it is expected to remain until the Fed's portfolio reaches a "normal" size. So far, the Fed's System Open Market Account (SOMA) has dropped from a peak of about $4.25 trillion to about $4.0 trillion. The FOMC has not specified what "normal" will be

[4] See "FOMC Communications related to Policy Normalization" on the Federal Reserve's website for details. Available at: https://www.federalreserve.gov/monetarypolicy/policy-normalization.htm

other than to say SOMA will be larger than the norm prior to the financial crisis.[5] The committee has time to decide, as it will take until the end of 2020 for it to reach roughly $2.5 trillion.

As a reminder, when SOMA reinvestments shrink, two related things happen. First, private investors will have to purchase a larger quantity of Treasury and mortgage securities – during a time when Treasury auction sizes are rising to finance a wider budget deficit. Second, the stock of Treasury and mortgage securities held by the public will rise, requiring investors to increase allocations to those assets relative to other assets. While many factors affect interest rates, those two push in the direction of higher rates. Of course, higher Treasury rates are part of the FOMC's plan for tightening financial conditions. However, the Fed is navigating uncharted waters in unwinding quantitative easing, and it is likely to proceed cautiously.

Figure 13: Rates Mixed; Forwards Flatter[6]

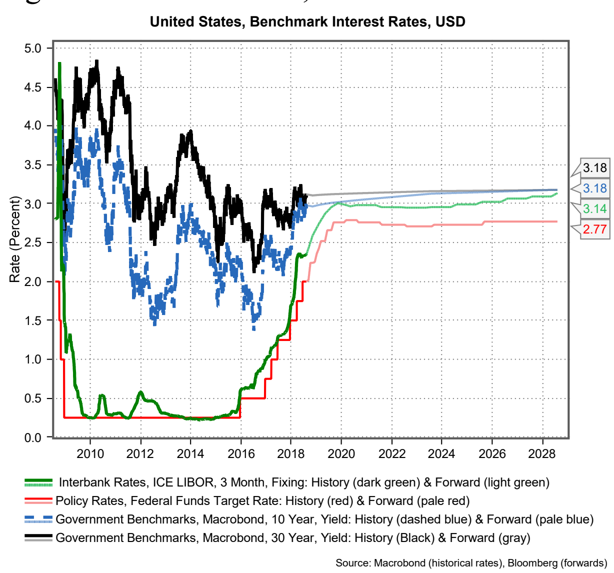
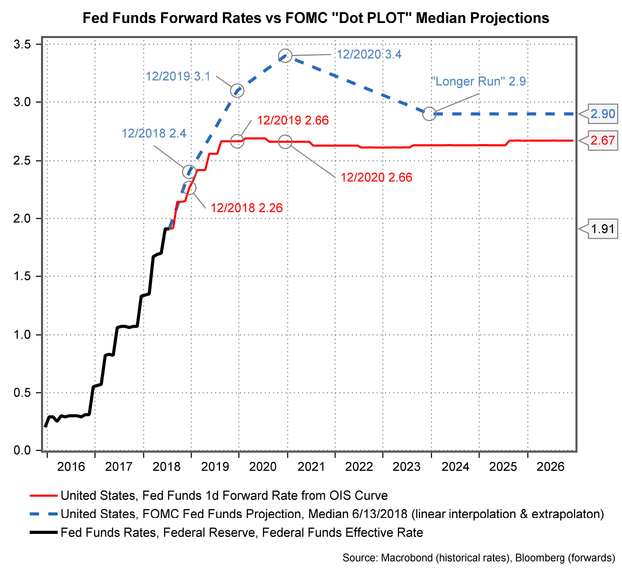


Figure 14: FOMC's Projections above Markets'



Markets currently price in a high likelihood of two additional 25 bp rate hikes in 2018, a bit more than one additional 25 bp rate hike in 2019 and little or no move in 2020 (Figure 14). The FOMC's median fed funds projections from June 13 suggest agreement with markets through about mid-2019 but are more hawkish thereafter. Markets expect fed funds to reach 2.66% by year-end 2019 and then hold about steady. In contrast, the FOMC projects 3.1% and 3.4% at year-end 2019 and 2020, respectively before declining to a "longer run" rate of 2.9%.

Our rate expectations fall between market forwards and FOMC projections. We expect the fed funds target range to be 2.25-2.50% at year-end 2018 and 2.75-3.00% at year-end 2019 and 2020. We anticipate somewhat slower economic growth in 2020 as federal government spending slows and early stimulus from tax reform wanes. In addition, rising Treasury supply and reduced portfolio reinvestment by the Fed should combine to tighten financial conditions without multiple rate hikes by the FOMC in 2020. There is risk that strong economic growth and higher inflation prompt the FOMC to tighten more aggressively than we expect (a 2019 year-end fed funds rate

[5] A simple extrapolation of SOMA's growth path before the financial crisis would project holdings of about $2.0 trillion at year-end 2020.

[6] The fed funds effective rate recently has traded about 10 bp below the top end of the FOMC target range. In Figure 13, we add 10 bp to forward rates implied by overnight index swaps (OIS) to align them with historic target rates.

target of 3.00-3.25% would not be a shock), but we also see downside risks from trade policy and prospects for slower economic growth from 2020. Forward curves already reflect most of our anticipated rate hikes. As a result, we think intermediate Treasury rates will rise only moderately from current levels, perhaps by 25-50 bp over the next several years. That would be roughly 15-40 bp above current Treasury market forward rates to year-end 2020, which should pose a headwind but not a major obstacle to preferred securities.

Corporate **credit spreads** widened modestly in the second quarter, as worries over trade policy reduced investors' risk appetites and newly issued securities had to offer higher yields to attract buyers. Investment-grade corporate bond spreads[7] widened by 13 bp to 129 bp in the second quarter. As those fears receded and new issue volume diminished in July and early August, spreads narrowed to 114 bp, about where they ended the first quarter. High yield bond spreads[8] were more stable. Spreads were unchanged in the second quarter at 382 bp; they narrowed to 352 bp as of August 6 (Figure 15).

Figure 15: Spreads Mixed in Second Quarter

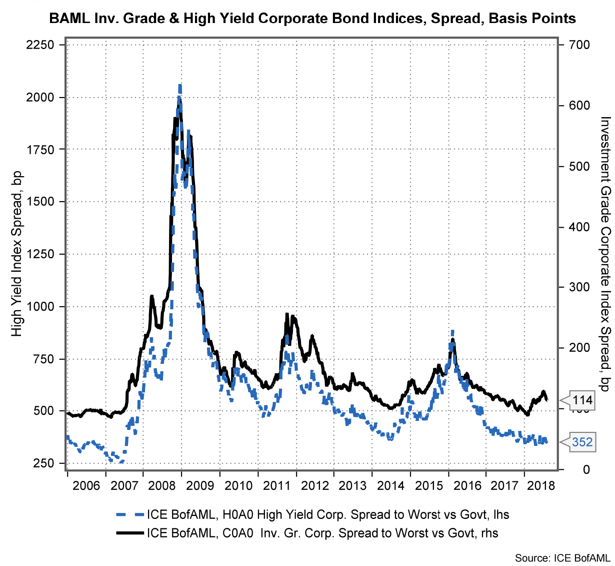
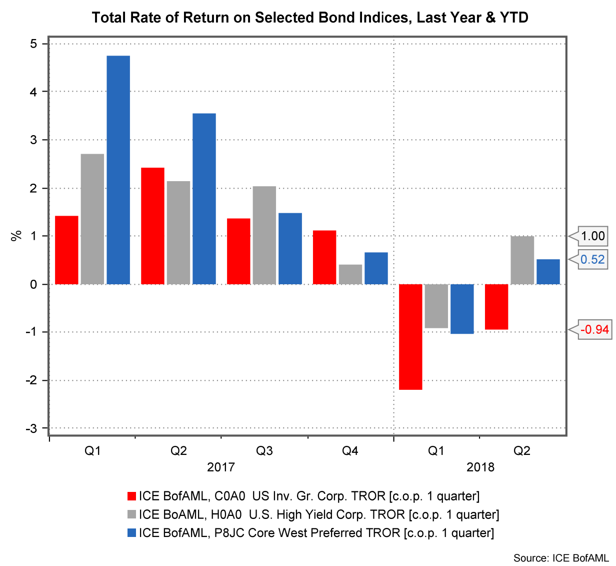


Figure 16: Sideways Credit Returns This Year



Spreads on preferred securities are more difficult to illustrate. Nearly all preferred securities are callable, and yield-to-worst often understates economic yield when prices are above par – as most are today – because not all of those securities will be called by their issuers on first call date.

Instead, we will focus on total rate of return, which incorporates the impact of changes in both benchmark interest rates and credit spreads, among other factors. Figure 16 shows total returns on selected ICE BofAML indices in recent quarters. In the second quarter of 2018, total return on

[7] Investment-grade corporate bond spread is represented by the ICE BofAML U.S. Corporate Index[SM] (C0A0) "Yield to Worst versus Government" yield spread series. "Spread to Worst" is the lower of yield to call and yield to maturity minus yield on a comparable Treasury security.
[8] Below-investment-grade corporate bond spread is represented by the ICE BofAML U.S. High Yield Index[SM] (H0A0) "Yield to Worst versus Government" yield spread series.

the preferred index[9] (+0.52%) underperformed the high yield index (+1.00%) but outperformed the investment-grade corporate bond index (-0.94%).[10] Year-to-date through July, preferreds (-0.02%) also lagged high yield (+1.19%) and outperformed investment grade corporates (-2.40%).

Fundamental **credit conditions** were stable in the first quarter of 2018 (latest data available), and banks' second-quarter earnings releases generally showed improving loan performance and stronger earnings. Corporate earnings after taxes surged 15.1% in the first quarter compared to a year earlier on a combination of stronger pre-tax earnings (+5.9% YoY) and lower corporate tax rates. Economists expect them to be up 7.1% YoY in Q2, although that's probably too low based on earnings that have been reported for the quarter so far. Profits as a proportion of GDP jumped as profit growth far outpaced economic growth, something that is likely to continue over the rest of 2018 (Figure 17). Over time, however, we expect that competition for workers will boost wages and erode margins lifted by tax reform, which should push the profit share of GDP back toward its long-term average.

Figure 17: Corporate Profits Up Strongly

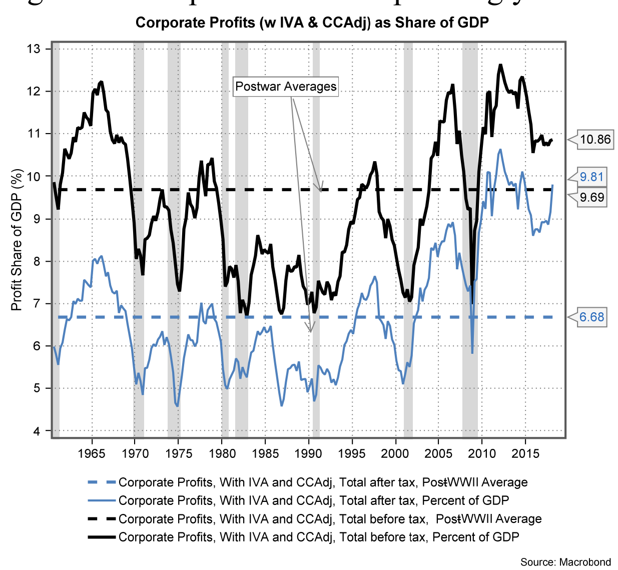
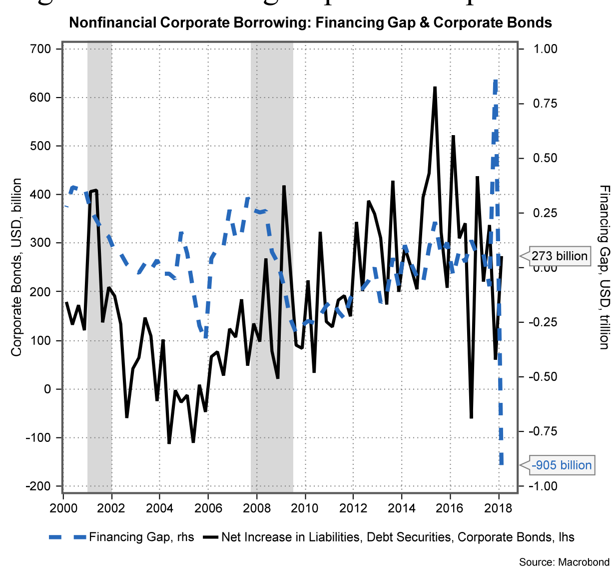


Figure 18: Financing Gap Much Improved



Internally generated cash relative to spending on capital investments (the "financing gap") at nonfinancial businesses improved dramatically in the first quarter after widening sharply in 4Q2018 (Figure 18). Averaging those two quarters gives a financing gap of -$11 billion, meaning companies generated more cash than they invested. Corporate bond issuance picked up after a slow fourth quarter, but again averaging these swings leaves net borrowing looking moderate. Looking ahead, we expect corporate borrowing to increase in 2018 as companies boost investment spending. Higher after-tax corporate profitability should mean less net borrowing than last year, however, and keep credit metrics favorable.

[9] Preferred index is the ICE BofAML 8% Constrained Core West Preferred & Junior Subordinated Securities Index[SM] (P8JC).
[10] Total return is not annualized and includes both price change and income. Past performance does not guarantee future performance.

Figure 19: Balance Sheets Solid, but EBIT Up

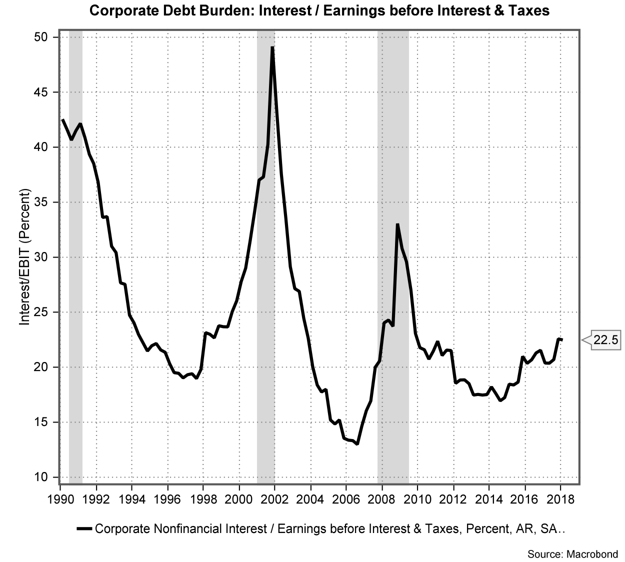
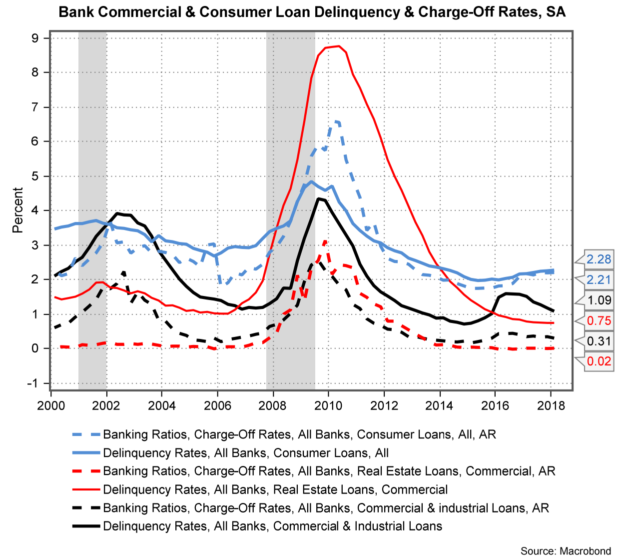


Figure 20: Loan Quality Remains Good



Debt relative to total liabilities held about steady at nonfinancial companies in the first quarter. During a long period of low rates, companies increased the proportion of long-term liabilities (bonds, mortgages and direct investments) on their balance sheets, which reduced interest-rate sensitivity to higher short-term rates. However, with the fed funds rate approaching 2% compared to near zero as recently as December 2015, interest expense as a percentage of earnings before interest and taxes ticked up to 22.5% in Q1 from just over 20% in the middle of last year (Figure 19). Interest expense remains relatively low, and higher corporate profits should provide a cushion against rising rates going forward, but it's clear that Fed tightening is beginning to have an impact.

Bank loan delinquencies and charge-offs were generally steady in the first quarter, and second-quarter earnings indicate slightly better credit metrics at most banks. Overall loan delinquencies at banks dipped to 1.71% in Q1 from 1.78% in Q4 and 1.94% a year earlier. Overall loan charge-off rates edged 1 bp lower to 0.47% in the first quarter, about where they have been since late 2016. Delinquency rates on commercial and industrial loans continued to drift lower, while consumer loan delinquencies and charge-offs were about flat (Figure 20).

Bank earnings rose strongly, and capital ratios held steady or edged lower. All banks that participated in the Federal Reserve's recent Dodd-Frank Act Stress Tests (DFAST) and Comprehensive Capital Analysis and Review (CCAR) passed the quantitative portions of those regulatory reviews, and the Fed objected to just one bank's capital plan on a qualitative basis.[11] Other industries have also benefitted from stronger economic growth. Higher investment yields are boosting returns at insurance companies. Increased demand for oil and gas is benefitting pipeline companies that bring those resources to market. And sturdy hiring and rising incomes support a range of businesses from REITs to homebuilders to manufacturers. Credit conditions remain strong.

[11] The Fed objected to DB USA Corporation's capital plan due to qualitative concerns over its capital planning and DFAST processes.

Summarizing our main views, we now expect real GDP to expand by 3.0-3.3% in 2018. Sharp upward revisions to personal savings suggest that consumer spending should grow about in-line with personal income growth. Although job growth is bound to slow eventually, wage growth should make up for most of that, which should keep income growth comfortably above 4% through 2019. Business investment is likely to continue leading economic growth, albeit at a somewhat slower pace than in 2018's first half, and residential investment should turn up modestly. Government spending is set to pick up over the remainder of 2018 and into 2019, although that growth tailwind will turn to headwind in 2020. We remain hopeful that higher business investment and regulatory reform will boost productivity and enable faster economic growth without substantially higher inflation. However, uncertainty over trade and immigration policies and prospects for sharply higher federal budget deficits cloud longer-term outlooks for the economy and interest rates.

For preferred investors, we see this outlook as good news following slightly negative returns since the start of 2018. The FOMC should become increasingly sensitive to downside risks as financial conditions tighten more meaningfully. Accordingly, while the Fed is likely to hike the fed funds rate target to 2.25-2.50% by year-end 2018, we expect a slower pace of tightening from mid-2019 onwards. In turn, that should push intermediate- and long-term interest rates only modestly above current levels. Finally, credit fundamentals remain strong, especially for financial institutions, and sturdy economic growth and rising profits should support credit spreads. We think preferred securities continue to offer long-term investors an attractive combination of good credit quality, high income and moderate interest rate risk.

Flaherty & Crumrine Incorporated
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