U.S. Macro Outlook, Q1 2018

Economic assumptions for our baseline and alternative scenario forecasts

- U.S. GDP's Q1 2018 growth was the best of any January-March period since 2015, despite the rattling of markets by volatile stock markets and the announcement of potential tariffs on certain imports.
- Although unemployment dropped to a new low of 3.9% in April, labor market strength has yet to affect wages or inflation substantially. Lower-than-anticipated wage inflation since January has brought a degree of calm to equity markets.
- Strong consumer spending, higher private investment and the recent tax cuts will drive growth in 2018.
- The FOMC will increase the Fed Funds Rate two more times in 2018. An increasingly tight labor market and the fiscal stimulus' impact may make the FOMC more hawkish. The 10-Year Treasury will likely hover around 3% for the rest of the year, with the possibility of rising.
- The federal tax reform will stimulate the economy over the medium term, while also straining the government's already weak fiscal position.
- EA's baseline forecasts are largely unchanged from last quarter. The government's fiscal stimulus will provide a modest boost to growth. We expect a mild cyclical downturn starting in mid-2019, followed by a quick return to growth. Our upside and downside forecast scenarios, while reflecting a wider range of outcomes, are unchanged from last quarter.

ECONOMIC GROWTH: Q1 WAS A MIXED BAG; GROWTH TO REMAIN ON SOLID FOOTING FOR 2018

U.S. Gross Domestic Product (GDP) grew at an annualized rate of 2.3% in Q1 2018—slower than the 2.9% registered in Q4, but above the 2.1% consensus estimate. The better-than-expected performance came despite markets being rattled by volatile stock markets and the announcement of potential tariffs on certain imports. Growth was slower than in the prior three quarters, due to weaker contributions from personal consumption expenditure, fixed investment, exports and government spending. On a year-over-year basis, the economy grew 2.9%, marking a seventh straight quarter of rising GDP growth and a high since Q2 2015.

Personal consumption grew at an annualized rate of just 1.1%—down from Q4's 4.0%—as auto sales and purchases of clothing, footwear, food and beverages slowed. On the one hand, slower growth in consumer spending does not come as surprise following a Q4 holiday shopping surge. But with the new tax cuts having yielded the biggest jump in disposable income growth since 2015 (3.4%, annualized, for Q1), slower spending may indicate that consumers are proceeding with caution, due to rising gas prices and possibly a desire to pay down existing debt.

Fixed investments slowed to 4.6% from Q4's 8.2% as investment in business equipment slowed to 4.7% from Q4's three-year high of 11.6%. The slowing is not a major concern since the Q4 high likely occurred as some businesses sped up their purchase timetables to take advantage of bigger tax deductions before the new tax policy took effect. Moreover, many of the new tax plan's incentives for business spending are expected to bear fruit only in the medium term.

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EMPLOYMENT: LABOR MARKET TIGHTER, UNEMPLOYMENT LOWER, WAGE GROWTH STILL SUBDUED

The labor market continues to offer a mixed picture of the economy. On the one hand, the past couple of months' weaker-than-expected headline employment numbers and subdued wage growth would seem to suggest that economic growth is slowing. On the other, below-consensus or slower jobs gains, along with April's unemployment decline (to 3.9%), may indicate that the labor market is reaching its limit, thus making an acceleration in wages imminent. Wage growth itself continues to puzzle, however, having slowed in April despite a shrinking labor pool. A key metric to watch for in the coming months is the underemployment rate, which declined in April to 7.8% from 8.0%. The still-high underemployment rate is often viewed as a sign that the labor market hasn't yet reached capacity, and may be the reason wages haven't increased significantly.

MONETARY POLICY & INFLATION: EXPECT TWO ADDITIONAL RATE HIKES IN 2018; INFLATION IS KEY

Although the Federal Reserve has already raised rates once this year, the past three months' slow wage growth and mixed data on inflation should keep the Fed on track for at least two additional rate hikes this year. The Fed's outlook will likely evolve over time as any increase in concern over the government's fiscal stimulus—i.e., the Tax Cuts and Jobs Act—and its effect on inflation should be reflected in the Fed's projections going forward.

With the economy operating marginally above its potential GDP for a third consecutive quarter, the Fed will be keenly watching how the tax cuts percolate through to business investment and consumer spending. As we've said before, when an economy is thought to be operating at full capacity, fiscal stimulus may prove to be inflationary. Inflation remains one of the key metrics to watch. At 1.9% in March, core personal consumption expenditures (PCE) remained below the Fed's 2% target. The 10-year break-even inflation rate—a measure of inflation expectations—has steadily climbed since the second half of 2017 (from 1.7% to March's 2.05%); whether inflation expectations can hold at this level remains to be seen.

Although recent wage data should calm bond markets, the yield on the 10-year Treasury will likely hover around 3%—if not slightly higher—for the rest of 2018, due to the rising issuance of debt to fund higher budget deficits, rising national debt, faster inflation from the fiscal stimulus and the Fed's balance sheet reduction—which will gather steam late this year and next.

FISCAL POLICY: TAX PLAN TO BE STIMULATIVE IN THE MEDIUM TERM; DEBT ISSUANCE AT RECORD HIGH IN Q1

The government's new tax plan will drive private investment, jobs and consumer spending this year and possibly through the middle of 2019. It is also expected to push the budget deficit to $804 billion in the current fiscal year—up from $665 billion in fiscal 2017—and beyond the $1 trillion mark by 2020. The budget deficit is expected to rise by $1.5 trillion over the next ten years—a major cause for concern, given the rising trajectory of U.S. public debt.

The budget deficit for the first seven months of the fiscal year widened to $385 billion, from the corresponding year-earlier period's $344 billion. Debt issuance across all maturities reached a record $459 billion, with nearly three-quarters of total issuance ($333 billion) being shorter-dated securities (or bills). In the quarter ahead, the Treasury is aiming to further ramp up the size of debt issuances, while also dealing in debt with maturities of five-years or more.

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Markets are wary of all this additional borrowing just as the Fed is starting to pare its balance sheet. In fact, investors' discomfort has been all too visible since mid-February, as concern about higher borrowing has kept the 10-year between 2.8% and 3.0%. And declining foreign demand for U.S. debt, at a time when the economy needs significantly more funding, is worrisome as well. "Indirect bidders" of U.S. debt (mutual funds, foreign investors and central banks) now hold roughly 40% of U.S. debt—the smallest share since November 2016 and one considerably lower than the peak of nearly 55% in 2008. Moreover, with rising trade tensions between the U.S. and China, there continues to be speculation that China, one of the largest holders of U.S. debt, could dump Treasurys, which would add to the already rising supply of U.S. debt, thus pushing yields higher.

CRE IMPLICATIONS: TAX PLAN TO BENEFIT MULTIFAMILY; STEEL TARIFFS AND INTEREST RATES A NEGATIVE

EA economists Tim Savage and Jing Ren argue that multifamily will get a boost from the tax plan. The tax benefits of renting a home vs. buying will increase in 29 of the 35 largest U.S. markets—up from 15 markets before tax reform. Limitations on state and local tax deductions and the loss of the mortgage interest deduction on home purchases above $750,000 will marginally impact housing costs in high-cost markets, but will have negligible impact on population flows.

President Trump's executive order imposing tariffs of 25% on steel imports could exacerbate current cost pressures on commercial real estate developers, landlords and tenants, due to higher tenant-improvement buildout costs. In combination with the ongoing shortage of skilled labor, this could cause development activity to slow—unless rent growth is sufficient to offset higher costs. Of course, the impact of higher steel costs will vary by product type and location. Slowdowns in construction activity could be more pronounced for product types with large steel requirements (steel-framed, high-rise office towers vs. wood-framed apartment buildings, for example). Canada and Mexico, which accounted for one-quarter of U.S. steel imports in 2017, are exempt from the tariffs (initially, at least), which could mitigate upward pressure on pricing.

Lastly, with normalization of monetary policy underway and the Treasury set to increase the supply of bonds to finance rising budget deficits, longer-term rates will continue to rise over the medium term. Given that longer-term Treasurys are the primary driver of commercial and residential mortgages and other longer-term securities, the increase in rates will likely slow purchases and refinances on the commercial and residential side.

TRADE DEFICIT TO WIDEN; STRONG ECONOMIC FUNDAMENTALS TO SUPPORT THE DOLLAR

Although the U.S. trade deficit slid from 58 billion in February to a 6-month low of $49 billion in March—due to record-high exports and slower imports growth—at $163 billion, the Q1 trade gap was still up 18.5%, year over year. Likewise, Q1 trade deficits with China, Europe and Mexico were up 15.5%, 19.9% and 9.0%, respectively over Q1 2017. The larger deficits were driven primarily by consumers buying more imported goods. Given that the U.S. cannot control the international price of oil, nor discourage its consumers from buying imported cars or electronics, a strengthening economy—with additional impetus from the fiscal stimulus in 2018—will likely widen the trade deficit further. The Trump administration continued take a hardline stance with China, demanding that Beijing work toward cutting the U.S.' chronic merchandise trade deficit with China—$375 billion in 2017—by $200 billion by the end of 2020. While Chinese officials haven't agreed to any such demands, they are set for a second round of trade talks with Washington just as the U.S. finalizes its list of Chinese products to be hit with punitive tariffs. The

administration is also seeking to renegotiate the North American Free Trade Agreement with Mexico and Canada.

The trade-weighted dollar depreciated slightly more than 10% between January 2017 and February 2018, but has since gained 4.3%. The depreciation pressures before February were likely fueled by speculation that a pickup in global growth would result in major central banks tightening monetary policy, thus eroding the United States' yield advantage. The European Central Bank and the Bank of Japan have pushed back against this narrative, however, and the U.S. yield advantage has likely widened as longer-term U.S. rates have risen. Looking ahead, tighter monetary policy and stronger economic activity driven by the fiscal stimulus are expected to drive the dollar higher.

EA BASELINE FORECAST

Our baseline forecasts remain largely unchanged from last quarter. We expect the government's fiscal stimulus to boost growth, though gains are modest given that the economy is operating at near-capacity. Inflation in 2018 is stronger than 2017's 2.1%. The 10-year Treasury hovers around 3% for the rest of the year, with the possibility of rising higher, due in part to the Fed's balance sheet reduction and the increasing government debt issuance. We expect a relatively mild slowdown to begin in late 2019—5 quarters with GDP growth between slightly negative and 0.8%. The slowing causes the Fed to lower interest rates, and the 10-year drops from 3.0% in 2018 to 2.2% in 2019. Inflation also declines with the slowing economy. We see a quick rebound only toward the beginning of 2021 as the economy recovers.

Figure 1: Economic Growth revised up for 2018

CBRE EA BASELINE FORECAST	2018	2019	2020	2021	2022
GDP, %	2.5	0.8	0.8	2.9	2.3
CPI, %	2.5	1.8	1.2	1.7	2.0
10-yr Treasury, %	3.0	2.2	1.9	2.2	2.5

Note: Figures are Q4/Q4 change—except the 10-year, which is Q4 % yield.

Source: BEA, BLS, Federal Reserve, CBRE Econometric Advisors, Q1 2018.

EA UPSIDE SCENARIO

The upside scenario is also the same as last quarter. This scenario assumes that President Trump's tax plan leads to a strong multiplier effect on growth, an infrastructure program that boosts productivity, capital repatriation that prompts business investment, and a growing economy that adds to the labor force participation rate. These factors support a long expansionary cycle in which the economy steers clear of overheating; the Fed, therefore, is not forced to raise interest rates to curtail inflation.

Figure 2: Upside Scenario: Economic Growth Revised Up for 2018

CBRE EA UPSIDE FORECAST	2018	2019	2020	2021	2022
GDP, %	3.6	2.5	1.7	2.8	3.2
CPI, %	3.5	2.8	2.5	2.4	2.6
10-yr Treasury, %	4.0	3.3	3.1	2.9	3.0

Note: Figures are Q4/Q4 change—except the 10-year, which is Q4 % yield.

Source: BEA, BLS, Federal Reserve, CBRE Econometric Advisors, Q1 2018.

EA DOWNSIDE SCENARIO

Our downside scenario is also unchanged from last quarter, anticipating GDP growth turning negative in 2018 and 2019. While our baseline assumes that the government's stimulative fiscal policies produce

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strong growth multipliers, our downside scenario assumes that they do not, due to being watered-down or misguided. Economic research suggests that fiscal multipliers—the bang for the buck of government spending and tax cuts—are much lower when the economy is running near full capacity, as it is today. This implies that the stimulus may not be that stimulative at all, meaning the economy would get higher inflation and interest rates without the benefit of stronger growth. The downside scenario is the extreme version of this, accompanied by other downside policies such as a trade war, large-scale deportations, and otherwise anti-growth legislation.

Figure 3: Downside Scenario: Outright Recession in 2018 and 2019

CBRE EA DOWNSIDE FORECAST	2018	2019	2020	2021	2022
GDP, %	-0.3	-1.3	2.1	2.9	2.5
CPI, %	0.5	-0.4	0.0	0.5	1.0
10-yr Treasury, %	1.4	1.3	1.7	2.1	2.3

*Figures are Q4/Q4 change—except the 10-year, which is Q4 % yield.

Source: BEA, BLS, Federal Reserve, CBRE Econometric Advisors, Q1 2018.

In terms of overall damage to the economy, realistic downside scenario more closely resembles the dot-com bust than the Great Recession. We expect 2.4 million net job losses at its worst, before a cyclical recovery takes hold. The Fed's aggressive response—along with foreign capital flows into the U.S.—would likely keep the 10-year yield well below 2% until late 2020.

EA SEVERE DOWNSIDE SCENARIO

Our severe downside scenario, unchanged from last quarter, is meant as a proxy for the Federal Reserve's "Severely Adverse" supervisory scenario under its Comprehensive Capital Analysis and Review (CCAR) program. CCAR is meant to evaluate the capital planning processes and capital adequacy of U.S. banks under stressful macroeconomic scenarios. This scenario is certainly stressful; the Fed assumes the unemployment rate to hit 10%—equal to its 2009 peak. The peak-to-trough GDP decline in this scenario is also on par with that recorded during the Great Recession.

Figure 4: Severe Downside Scenario: Stress Test

CBRE EA SEVERE DOWNSIDE FORECAST	2018	2019	2020	2021	2022
GDP	-5.4	1.7	1.9	2.8	2.4
CPI	0.2	0.4	1.2	1.8	1.5
10-yr Treasury	1.1	1.3	1.7	2.1	2.2

Note: Figures are Q4/Q4 change—except the 10-year, which is Q4 % yield.

Source: BEA, BLS, Federal Reserve, CBRE Econometric Advisors, Q1 2018.

Since the Fed does not provide guidance on payroll employment growth, EA uses the change in GDP and the unemployment rate to approximate the impact. The scenario's supposed recession occurs immediately and wipes out more than 7 million jobs by the end of 2018. Although the Fed is quiet on what might cause such a severe recession, we can safely assume that financial markets would suffer some sort of systemic failure, likely leading to government intervention. The Federal Reserve does not discuss a hypothetical reaction in terms of monetary policy either, but history tells us it would use everything in its toolbox to stop the bleeding. This could mean the re-introduction of quantitative easing, or even the introduction of negative interest rates. The severe downside scenario has an extremely low probability, but it offers a useful guide to capital planning under the direct macroeconomic situations.

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