U.S. Macro Outlook, Q3 2017

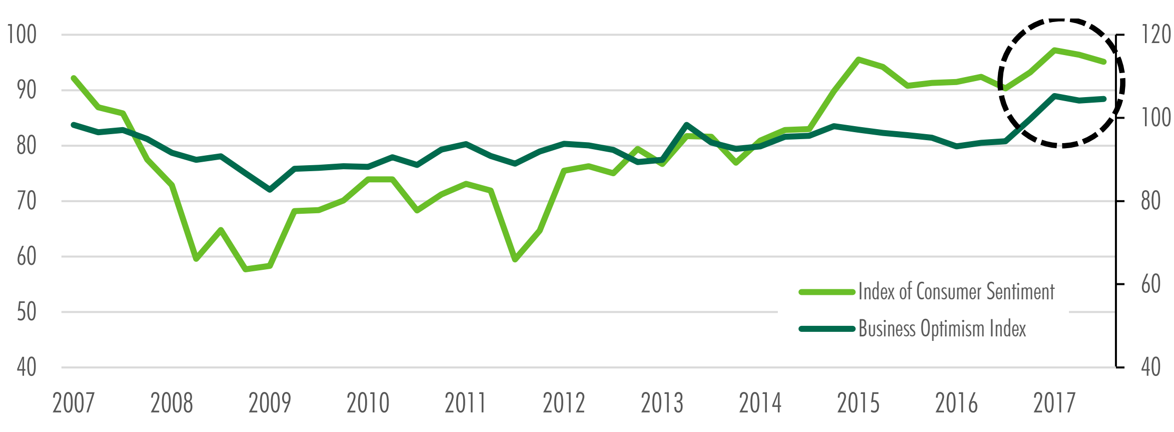
Economic assumptions for our baseline and alternative scenario forecasts

- The economy remains on the path discussed last quarter; little has changed in our macro outlook since Q1.
- The expansion of economic and commercial real estate growth continues at a steady, but not blistering pace.
- Real economic activity has been tracking at the same pace as last year, despite stronger business and consumer sentiment since Donald Trump's inauguration.
- President Trump's policy agenda remains unclear and his ability to foster the passage of his proposals is diminishing as Congress focuses on other matters. Tax reform of some kind is likely, though it will probably be minor; its details will determine whether it is net positive or negative for commercial real estate.
- EA's baseline outlook for employment growth is unrevised; it will gradually slow before contracting in 2019. GDP projections have been upgraded to hedge on the side of modest fiscal stimulus in 2018.
- Our upside and downside forecast scenarios have been updated to reflect a wider range of outcomes.
- The Fed is likely to raise its target rate once more this year, and to begin unwinding its balance sheet in the fall. This is expected to push longer-term interest rates up modestly.
- The U.S. real estate investment environment remains attractive, with strong fundamentals and limited risk.

2017 U.S. OUTLOOK: KEEP CALM AND GROW 2%

U.S. GDP growth surprised to the upside in Q3 2017, posting an annualized rate of 3.0% despite disruption and damage from a string of hurricanes. The economic expansion, in its eighth year now, will likely reach nine without a problem. Although the economy has now tracked at 3% or higher for a couple quarters, and has seen several six-month growth spurts during these past eight years, such momentum has generally not been sustained. In fact, a closer look at the GDP data shows that nearly a third of the Q3 growth was driven by business restocking (and not higher sales), which, if stripped out, brings Q3 growth down to 2.3%—closer to the long-run average. Ultimately, we still expect 2017 to deliver a familiar dose of 2% GDP growth and an average monthly job gain of just over 160,000. This may seem dull, but it is just what the economy needs in its current phase—calm and steady growth, absent of high inflation, overleverage, and asset bubbles. However, we do believe that wage pressures (owing to a tight labor market), tighter credit conditions (as the Fed further normalizes monetary policy), and a general lack of political and fiscal clarity will send the economy into a mild and short recession beginning in early 2019.

Figure 1: Consumers Talk the Talk, Even As Spending Falters



Source: CBRE Econometric Advisors, Q3 2017.

"TRUMPENOMICS"?

Having spent the better part of 2017 trying to repeal the Affordable Care Act and falling short several times, Republicans have now trained their sights on reforming the tax code—without any need for Democratic support. While President Trump is aggressively pushing for the bill to be signed before the end of the year, top lawmakers do not believe such a timeline is realistic, given that there are only five full legislative weeks left in the year. Of greater concern, though, is what's in the proposed tax code. The proposed doubling of individual income tax deductions and a promise to cut the corporate tax rate from 35% to 20% have left tax writers searching for more avenues to pay for the proposed cuts. Several proposals to raise revenue—including modifying the tax treatment of 401(k) retirement savings plan—have been met with forceful opposition. Furthermore, the recent passage of a crucial budget resolution envisions tax cuts that would increase the budget deficit by $1.5 trillion over the next ten years—a major cause for concern, given the rising trajectory of U.S. public debt. With the economy already operating at or near full employment, and given current demographic trends, it is unclear whether the proposed tax cuts and a boost in infrastructure spending would produce the kind of growth spurt intended by the administration. Without a significant increase in productivity, it would be a challenge for the economy to grow more quickly for any sustained period.

Several potential policy changes could have an outsized effect on commercial real estate. For instance, repealing the 1031 "like-kind" exchange that allows owners to defer tax on capital gains when they reinvest it in other properties would dramatically impact pricing. Similarly, as the EB-5 program plays a large role in financing real estate development with foreign capital, any reduction to that program could raise the cost of capital and stunt future development. Carried interest, mortgage interest deductibility, and expensed depreciation are additional hot topics that would directly impact real estate—not to mention the indirect effects that changes to immigration, border taxes, and broader tax reform would carry. Needless to say, there is quite a bit of policy uncertainty.

Abstracting from the range of possible policy changes, the economy is poised to slow. There are a number of factors which we are confident will contribute to softer growth this year and next:

- **Labor shortage.** The U.S. economy is at or near "full employment" and has been so for some time, with the unemployment rate having fallen to 4.1% in October. Finding skilled workers that aren't already employed will continue to be a challenge. Job openings are currently at a record high, so there is certainly demand; the labor supply is scarce, however. Although September's job loss (-33,000; the first monthly job loss in seven years) was to some degree a result of hurricane damage, the report was still weak on the hiring front, given its downward revisions to the previous months. September's increase in wages—up 2.9% from a year earlier—was significant and offsets the slowing pace of hiring. Given that the economy is operating at full employment, we believe that further acceleration in wage growth is just a matter of time.
- **The strong U.S. dollar.** The trade-weighted dollar depreciated nearly 9% between January 1 and mid-September, and has since rebounded by about 2%. The past six weeks' appreciation pressure has been driven largely by the Fed's well-choreographed moves to unwind its balance sheet, and its intent to gradually raise rates. Moreover, with the Fed acknowledging that the economy's footing is currently solid, a December rate hike looks even more likely—making it likely that the dollar's rally will continue in the coming months as short- and long-term rates rise. President Trump's tax reform plans and positive economic data have also added to the dollar's strength.

- **Higher interest rates.** The Federal Reserve has raised rates twice this year and is likely to do so again in December. The Fed also began to unwind its balance sheet in October, by letting some of the Treasurys on its balance sheet mature. While the stock, bond and currency markets' initial reaction to the balance sheet reduction has been rather calm, we do expect to see greater upward pressure on interest rates in the coming quarters, as the pace of redemptions gathers pace. The 10-year Treasury has already risen from a September 7 low of 2.05% to around 2.4%, due to the Fed's moves and stronger economic growth. That said, it remains below March's rate of 2.60%.

- **Fewer car sales.** U.S. auto sales were almost 18 million in 2016. That total is expected to fall by 5% in 2017 and an additional 5% in 2018. Despite the slowdown in sales, several foreign manufacturers have opened plants in the southeastern portion of the U.S. The glut of new cars—it is cars and not trucks or SUVs—has led to a huge supply on dealer lots. At the same time, cars are coming off lease in record numbers, weakening prices in the used car market. Combine that with rising loan rates for autos (tied to Fed activity) and you have significant softness in the auto industry. We have already seen some response from auto manufacturers, with layoffs and longer downtime for workers during the summer plant changeover season.

- **Sluggish housing market.** The overbuilt market that contributed to the Great Recession has been replaced by an underbuilt one, especially at the entry level. New and used home sales are up, relative to 2015 and 2016, but the gains are more modest than one would expect, given our position in the economic cycle. Housing construction, particularly of new single-family homes, has a tremendous spillover impact on the economy. While the supply side has its problems, demand for housing is likely to be restrained as mortgage rates rise with interest rates. This will limit economic growth relative to trend, though it will still add to economic growth.

EA BASELINE FORECAST

Our baseline forecasts have changed somewhat from Q2 2017. The GDP growth forecast for 2017 has been trimmed slightly, due to the possible negative effects from the two recent hurricanes. Our expectations for employment have risen slightly as well, to 2.0 million new hires, which equates to just over 160,000 jobs per month. The inflation forecast remains unchanged from last quarter, but the 10-year Treasury forecast has been lowered slightly, given the recent inflation numbers, with the three rate hikes since last December and the Fed's balance sheet unwind not having put the kind of upward pressure on yields that we'd initially expected. Bond and equity markets have remained rather calm.

Figure 2: We Expect Economic Growth to Moderate

CBRE EA BASELINE FORECAST

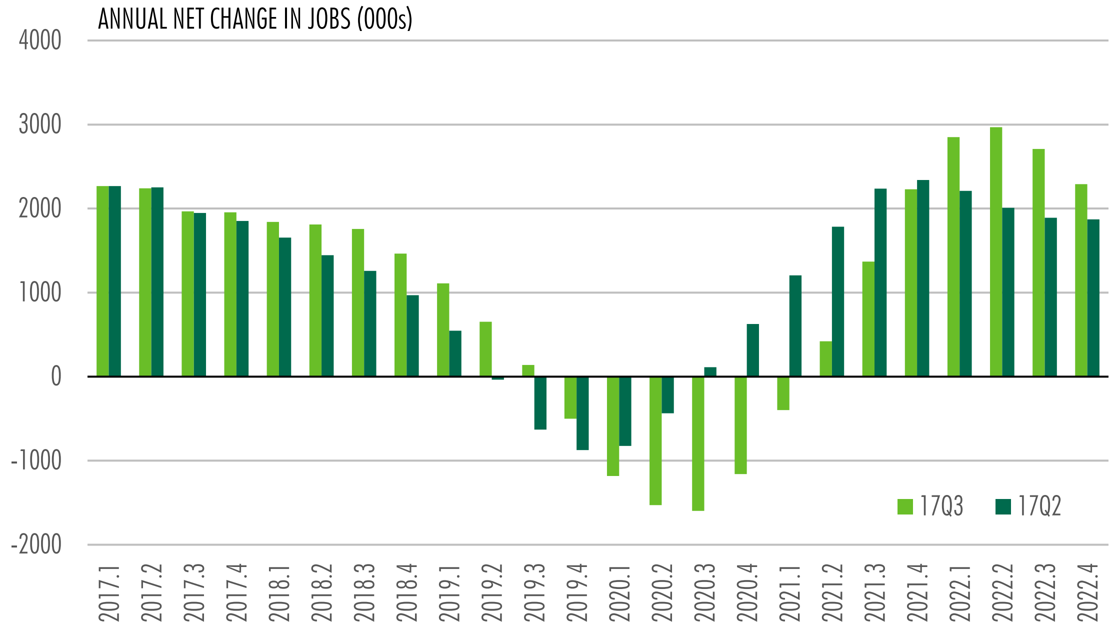
	2017	2018	2019	2020	2021
GDP, %	2.3	2.4	0.8	0.8	2.9
Employment, mil.	2.0	1.5	(0.5)	(1.2)	2.2
CPI, %	1.5	2.2	1.1	1.2	1.7
10-yr Treasury, %	2.5	3.0	1.8	1.9	2.2

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

Source: BEA, BLS, Federal Reserve, CBRE Econometric Advisors, Q3 2017.

We've raised our 2018 employment forecast to 1.5 million jobs, from 1.0 million forecast last quarter. That doesn't change the forecast for GDP growth, however, which remains at 2.4%. We expect a slowdown to hit in late 2019 and last for a full year; it will be relatively mild, with GDP growth between slightly negative and 0.8% for five quarters. Under this scenario, the slowdown leads to 500,000 job losses for 2019 and around 1.2 million job losses for 2020.

Figure 3: Baseline Employment Forecast: A Slight Timing Shift



Source: CBRE Econometric Advisors, Q3 2017.

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The Fed lowers interest rates in response, and the 10-year drops from 3.0% in 2018 to 1.8% in 2019. Inflation declines with the slowing economy. We see a rebound only toward the beginning of 2021, but as in the past three recessions, job gains come at a slower pace than GDP.

EA UPSIDE SCENARIO

The upside scenario has is almost the same as it was last quarter. GDP growth is the same and employment growth is slightly weaker. The inflation and 10-year Treasury forecasts are also slightly lower. This scenario assumes that Congress and the President implement tax reform that enhances growth, an infrastructure program that increases productivity, and capital repatriation that leads to business investment, a growing economy and a rising labor force participation rate.

Figure 4: Upside Scenario: Economic Growth to Increase Slightly

CBRE EA UPSIDE FORECAST					
	2017	2018	2019	2020	2021
GDP, %	2.4	3.2	2.5	1.7	2.8
Employment, mil.	2.3	4.0	3.5	0.5	2.5
CPI, %	2.2	3.5	2.8	2.5	2.4
10-yr Treasury, %	2.7	4.0	3.3	3.1	2.9

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

Source: BEA, BLS, Federal Reserve, CBRE Econometric Advisors, Q3 2017.

These factors lead to an economic expansion that is record in length, yet never gets so hot that the Fed is forced to raise interest rates to curtail inflation. This is a 'Goldilocks' scenario in which growth is neither too hot nor too cold.

EA DOWNSIDE SCENARIO

Figure 5: Downside Scenario: Recession in 2017

CBRE EA DOWNSIDE FORECAST	2017	2018	2019	2020	2021
GDP, %	1.8	(0.3)	(1.3)	2.1	2.9
Employment, mil.	1.7	(0.3)	(2.4)	(1.3)	2.2
CPI, %	1.4	0.5	0.4	1.1	1.7
10-yr Treasury, %	2.0	1.4	1.3	1.7	2.1

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

Source: BEA, BLS, Federal Reserve, CBRE Econometric Advisors, Q3 2017.

Our downside scenario represents a turn for the worse, with GDP growth much weaker in 2017 and then negative in 2018 and 2019. Employment is slightly less negative in 2018, but slightly worse in 2019. There are plenty of risks for investors to be concerned about; this scenario assumes that some combination of shocks sinks the economy into a recession by year's end. Some amount of financial market turbulence is our downside scenario's single prerequisite—the source of such volatility might be uncertainty about monetary and fiscal policy, geopolitical events, or the popping of an unexpected asset bubble. Recessions are always accompanied by a stock market correction, even if the reverse is not always true.

A domestic policy misstep is a greater risk than it was a few months ago. The merit of President Trump's agenda items aside, it is clear that he is less willing to adhere to political norms, which raises the surprise factor. Bouts of uncertainty can cause financial markets to whipsaw in an instant. Once business and consumer confidence are undermined, it can be difficult for the economy to right itself before slipping into recession.

Confidence is an important factor, but the actual policies matter as well. While our baseline scenario assumes that stimulative fiscal policies are put in place, our downside scenario assumes that none are, or that policy changes are watered-down or misguided. Many Republican leaders are not eager to increase government spending and lower taxes without offsetting reductions elsewhere. President Trump has vowed to protect Social Security and Medicare, which leaves less room to make any stimulus deficit-neutral. Additionally, economic research shows 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 any 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.

A realistic downside scenario more closely resembles the dot-com bust than the Great Recession, in terms of overall damage to the economy. Our model predicts a net loss of more than 3 million jobs 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 is intended to be 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. Under this scenario, the peak-to-trough GDP decline is on par with the drop recorded during the Great Recession.

Figure 6: Severe Downside Scenario: Stress Test

CBRE EA SEVERE DOWNSIDE FORECAST					
	2017	2018	2019	2020	2021
GDP	0.3	(5.4)	1.7	1.9	2.8
Employment	(0.3)	(5.5)	3.4	(0.7)	1.8
CPI	0.0	0.2	0.4	1.2	1.8
10-yr Treasury	0.8	1.1	1.3	1.7	2.1

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

Source: BEA, BLS, Federal Reserve, CBRE Econometric Advisors, Q3 2017.

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 over 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 negative interest rates, quantitative easing, and even helicopter money. The severe downside scenario has an extremely low probability, but it offers a useful guide to capital planning under the direst macroeconomic situations.

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