U.S. Macro Forecast



August 2016

Expansion: Seven Years & Going Strong

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- The U.S. economic expansion weathered the global shocks and remains on solid footing
- Low oil prices, rising wages, and improved job security—consumers are well positioned to power growth
- Brexit is proving to be a regional shock, so far, and may create additional tailwinds for the U.S.
- Leasing fundamentals continue to tighten across most product types and geographies, rent growth is accelerating
- Sales volume slowing to a more sustainable pace; pricing is holding up well
- Returns moving lower, but still attractive compared to other asset classes

U.S. Economy

The U.S. economy faced some very difficult headwinds in the first half of 2016, mostly coming from overseas. In particular, the financial markets were rocked at various points this year by several factors including China's decelerating economy, weakness in the emerging markets caused by a long-term slump in commodities, and more recently, Brexit. Throughout all of these challenges, the U.S. economy has remained impressively resilient. The key demand drivers that support the property markets—consumer confidence, job growth, low interest rates and consumer spendingall remain firmly intact. The outlier, once again, is GDP. Real GDP grew by a meager 1.0% in the first half of the year, well below its potential growth rate which is commonly believed to be closer to 3%.

Over the past three years, U.S. GDP and labor markets have told two very different stories—the former pointing to perpetual sluggishness, the latter to boomlike strength. As of 2015, annual GDP growth has not exceeded 3% for 10 consecutive years, a first since

the government began tracking GDP data in 1947. But 2014 and 2015 were the strongest years for job growth since 1998/1999. Through July 2016, 1.3 million jobs were created. We anticipate total job creation to surpass 2.2 million new nonfarm payrolls by the end of the year. The year-over-year growth rate in the Wages and Salary Index of the Employment Cost Index (ECI) was 2.5% in the second quarter of this year—the second highest rate since 2008. It is expected to average above 2.8% through year-end 2017. The clear strength of the labor markets, combined with low energy and gas prices, has fueled a resilient and robustly spending consumer. In fact, in the second quarter of 2016, consumer spending contributed 2.8% to GDP growth—the second strongest quarterly contribution this cycle. But this strength has been countered by the need to work down the third-largest inventory build-up ever recorded. In addition, consumers are spending differently than in the past (more on services and imports). Consequently, working through that inventory is taking more time than normal for traditional retailers. The health of the consumer is, however, observable in other data, including vehicle sales (which are hovering near record territory) and home sales (which hit a cyclical high in June).

Brexit is proving to be more of a regional shock thus far, not a global one. Other than a few tough days in the stock market, the U.K. vote to exit the European Union has not significantly altered the economic trajectory in the U.S. The equity markets have already shrugged off the June 23 referendum: The Monday before the Brexit vote, the S&P 500 stood at 2,083; as of this writing (August 15, 2016), it closed at 2,190, more than 100 points higher and at a new record level. Moreover, the direct economic ties between the U.S. and the U.K. are not overly concerning. The U.K. accounts for only 2.5% of total U.S. exports, and represents less than 0.3% of U.S. GDP. Even prior to

U.S. Macro Forecast



August 2016

the vote, the real trade-weighted U.S. dollar Broad Index was appreciating—albeit at a slower rate in the second quarter of 2016 than a year earlier—4% versus a surging 10%. In spite of these challenges, growth

in exports of goods remained positive—but low—throughout the first half of this year. A economic shock to the global economy is never desirable, but Brexit could ultimately create renewed tailwinds in the U.S. For instance, the European-driven uncertainty is likely to result in lower gas prices staying lower for longer, which has a positive multiplier effect on real estate via consumer spending.

be a regional shock, not a global one.

Brexit is proving to

Interest rates are likely to remain lower for longer, which creates room for new cap rate compression. And foreign capital previously destined to land in London may now find a home in quality assets based in the U.S. Unless a darker scenario unfolds in Europe one of prolonged negotiations or a larger EU breakup the impact on the U.S. should be contained and will largely manifest as episodes of heightened volatility.

In the midst of all of these events, the Federal Reserve has continued to behave consistent with the Hippocratic Oath: "first, do no harm." As uncertainty around global prospects, Brexit, and the U.S. presidential election persist, the Federal Open Market Committee (FOMC)

has refrained from raising the target federal funds rate, and the path to normalization has been delayed yet again. In our baseline scenario, we assume the FOMC will raise rates again by one quarter of a

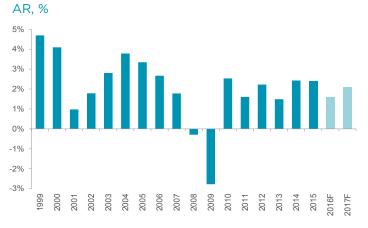
> percentage point at its next meeting on September 21. That of course assumes employment and inflation data will remain on their current courses and no major stumbles related to preelection jitters in the U.S. will occur. International drivers that were suppressing inflation are slowing, and monthly noise aside, labor markets continue to tighten. Further, we do not expect any major shock relating to the Presidential election, especially as

policy changes must be approved by Congress. With both bond and stock prices at record highs—something most analysts will acknowledge as unusual—the sensitivity of investors to Fed policy will become an important metric to watch. Indeed, we believe diverging global monetary policies and the immense size of global sovereign bond markets will present challenges for the Fed in this new era of monetary easing.

Macroeconomic Outlook

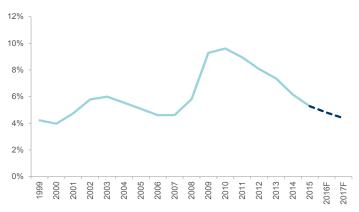
GDP: Our forecast continues to anticipate a moderate growth path for the U.S. economy-1.6% in 2016 and

Real GDP Growth



Source: U.S. Bureau of Economic Analysis, Cushman & Wakefield Forecast

U.S. Unemployment Rate



Source: U.S. Bureau of Labor Statistics, Cushman & Wakefield Forecast

U.S. Macro Forecast



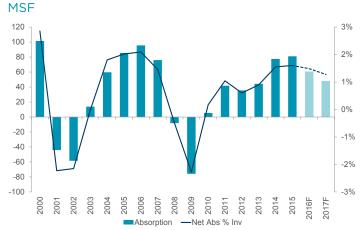
August 2016

2.1% in 2017. This represents a sizeable downward revision from our last forecast and largely reflects the downdraft created by the slowing Chinese economy, the aftermath of Brexit, and the related fallout in business investment. With these exogenous shocks mostly settling down, we anticipate business investment will improve and contribute positively to stronger economic growth in the second half of 2016 and more so in 2017. Consumer spending will continue to power the broader economy. Personal consumption expenditures will grow by 2.5% in 2016 and 2.7% in 2017. Net exports will put pressure on overall growth as exports fall year-over-year in 2016 before rebounding by 1.1% in 2017 as global growth improves.

Employment: In line with revisions to the GDP forecast, total employment growth is forecast to increase, but by a lower amount than estimated in our May forecast. After peaking above 3 million payrolls this cycle in 2014, job creation tempered in 2015 to 2.8 million. As the economic cycle matures, the core pace of monthly job creation is expected to slow. Our forecast calls for 2.2 million new nonfarm payroll jobs to be added in 2016, with monthly job growth averaging 180,000 to 200,000 payrolls through the remainder of the year. In 2017, we forecast 1.8 million jobs will be created at an average monthly pace of 147,000.

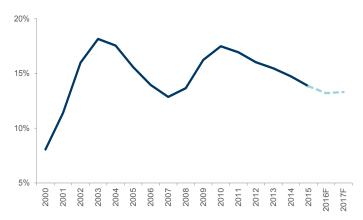
The tightening labor market—evident in the decline in the unemployment rate to 4.8% in 2016 and 4.4% in 2017 from 5.3% in 2015—will also underpin inflation pressures as wages and compensation notch higher. Importantly, measures of wage, benefits, and compensation inflation (captured by the U.S. Bureau of Labor Statistics in various indices) will outpace consumer inflation. The Personal Consumption Expenditures (PCE) index (the Fed's preferred measure of inflation) is forecast to grow at 1.1% in 2016 and 2% in 2017, while the core PCE (excluding the volatile energy and food components) is forecast to grow at 1.5% and 1.6%, respectively.

U.S. Office Net Absorption



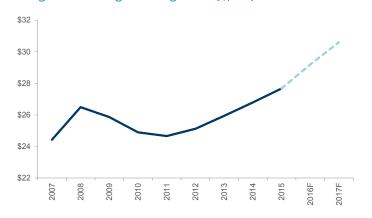
Source: Cushman & Wakefield

U.S. Office Vacancy Rate



Source: Cushman & Wakefield

U.S. Office Rents Weighted Average Asking Rent (\$/SF)



Source: Cushman & Wakefield

U.S. Macro Forecast



August 2016

Implications for Commercial Real Estate

Office: As total nonfarm payroll job creation decelerates—a function of tightening conditions in the labor market and not of a slowdown in economic growth—office-using job growth will also slow. In 2016, office-using employment is expected to grow by nearly 600,000 jobs and in 2017, by almost 500,000 jobs, with professional and technical services and administrative positions accounting for more than two-thirds of those increases. Consistent with this view is the gradual deceleration in demand for office space. Net absorption will total just over 60 million square feet (MSF) in 2016 (down from 81.1 MSF in 2015), with the vacancy rate averaging 13.2% for the year, 60 basis points (bps) below its 2015 value. In 2017, further tightening from an additional 47.6 MSF of demand will not be enough to edge the vacancy rate down. The level of new construction is expected to increase over the next two years to 52.3 MSF in 2016 and 59.1 MSF in 2017. As the development pipeline finally catches up to demand in 2017, we expect to see the first increase in the average annual vacancy rate: 10 bps to 13.3%. Rent growth will achieve its highest rate in the cycle in 2016, growing at 5.5%. With more supply coming online and absorption slowing, rent growth will decelerate in 2017 to a rate of 4.8%. Growth in

U.S. Office Rent Growth vs. Inflation (\$/PSF)



Source: Cushman & Wakefield

rents will average 2.7% between 2018 and 2021, softening as supply and demand re-equilibrate.

Global gateway cities continue to dominate the demand metrics. Although some feared that certain pockets may be experiencing a slowdown, the six major gateway cities have contributed the same share of demand in 2016 as in 2015. Representing 20% of all demand, these cities are a nexus of industries responsible for the absorption of 63.6 MSF of office space since 2010; they accounted for roughly 20% of all U.S. absorption midway through 2016. Leasing activity has slowed in the most concentrated tech markets; notably, San Jose and Boston both registered negative net absorption midway through 2016 totaling -1.2 MSF and -602,000 SF, respectively. Other techfueled markets such as San Francisco, New York, Seattle, and Austin have continued to register positive absorption, along with a host of secondary markets that now look to tech as a sizable and growing engine. Geographically, the expansion is traveling South and West at a faster speed, reviving a pre-crisis trend in which secondary markets in these regions (i.e., Atlanta, Orlando, Charlotte, Denver, Dallas, Phoenix, San Diego, Seattle) the absorption and rent growth rankings.

Industrial: The industrial segment of the economy encompasses disparate industries driven by very different engines. Warehouse and distribution space will continue to benefit from empowered consumers and from the continued growth of eCommerce; at the same time, flex/R&D space will benefit from solid gains in high-tech employment sectors. Manufacturing, which has faced headwinds from international pressures since mid-2014, will finally get some reprieve as industrial production, factory orders, and investment begin to turn the corner starting in the second half of 2016. Warehouse/distribution space accounts for over 60% of industrial inventory, making consumer health more vital than ever to this supply chain-centric product. We anticipate spending on non-durable goods will increase by 2.5% this year before rising to 2.8% next year. Similarly, spending on durable goods will increase by 2.6% in 2016 before hitting 3.4% next

U.S. Macro Forecast



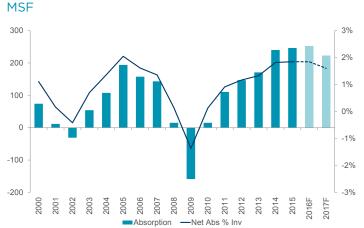
August 2016

year. Total vehicle sales—a component of durable goods spending—are not expected to peak until 2017, at 17.9 million units, up from the 17.6 million expected in 2016. All of these factors will fuel another year of record-setting demand. We forecast U.S. industrial net absorption in 2016 to surpass 250 MSF, besting last year's record-pace of 246 MSF. Net absorption will ease somewhat in 2017 but still remain above 200 MSF—a level the industry never observed prior to the current eCommerce-led boom.

The amount of new space in the construction pipeline continues to climb, with more than 200 MSF of deliveries slated for each of the next three years. Occupiers will not feel relief for another year, as vacancy will only see its first uptick in the latter half of 2017. The vacancy rate is expected to fall 80 bps this year to 5.8% in 2016 from 6.6% in 2015, before rising to 6.0% in 2017. Strong leasing activity, appetite for modern and transport-centric locations, and supply constraints will feed rent growth which will hit 4.9% in 2016 and 4.8% in 2017.

Retail: The retail landscape cannot be judged as a monolith, but instead on the basis of individual category (if not individual retailer) performance. But the runways for growth for nearly every category that has driven positive absorption in the shopping center marketplace in the post-recession era are growing

U.S. Industrial Net Absorption



Source: Cushman & Wakefield

shorter. Demand will largely remain focused on Class A product and/or new space. Department store and apparel users—particularly those publicly traded—will remain in sharp contraction mode. Off-price apparel, dollar stores, and discounters will remain in growth mode, but these retailers will increasingly face the challenge of market saturation after seven consecutive years of aggressive growth. Food users (restaurants and grocery stores) will remain in growth mode, but saturation will increasingly lead to closures, with older casual dining concepts the biggest losers. While plenty of restaurant concepts remain firmly in aggressive growth mode, look for an industry shakeout in 2017 led by weaker franchise players. Luxury demand will continue to post positive metrics, but this category is slowing as well. This is the case regardless of the performance of the overall economy.

This means that the bifurcation in retail property performance based upon class will only accelerate. While this trend has lasted for the past five years, the gulf between Class A and Class C properties will widen more significantly heading into 2017. Class A projects will continue to garner the highest levels of demand, lowest levels of vacancy, and positive rental rate growth, even though these metrics will be increasingly slow. Meanwhile, Class B properties unable to improve their position will increasingly fall into the extremely challenged Class C category. Class B properties able to withstand this trend include those in urban settings, well-situated locations, and the beneficiaries of significant capital investments that lure top level tenants.

Over the next two years, a combined 65.3 MSF of net absorption will put downward pressure on vacancy which is forecast to decline to 7.6% in 2016 and 7.3% in 2017 from 8.0% in 2015. Although rent growth will remain bifurcated and a stronger-than-anticipated closure season continues to dampen its outlook, rents are still expected to increase by 4.6% in 2016. Deceleration in some retail asset classes will push headline rent growth down to 1.5% in 2017.

U.S. Macro Forecast



August 2016

Transaction Volume: 2016 has thus far seen no shortage of buyers, but a lack of motivated sellers. In addition, the combination of economic shocks in the first half of the year related to the downturn in the Chinese economy and the Brexit fallout, along with a

general sense that the expansion is getting long in the tooth, has resulted in a drop in sales activity. Total sales volume for all property types—including land sales—will end the year 15-20% lower than in 2015. Still, sales volume will total \$449.6 billion, on par with the level of activity in both 2006 and 2014. There is evidence that banks and balance sheet lenders are already becoming more selective: the latest

year for that segment of buyers), the trend in REITs is more notable. Sales of apartment assets remained the most robust this year and are actually up year-

over-year despite the early-year financial market volatility; sales of land development sites, warehouse assets, and hotels were hit the hardest.

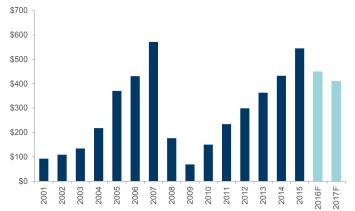
Total Returns: Total (unlevered) NCREIF returns for commercial real estate will remain strong in 2016. The

> forecast average of 10.5% in 2016 will continue a five-year streak of doubledigit NCREIF returns.1 We continue to believe that capital appreciation will decelerate, shaving up to 5% off returns over the next few years, largely reflecting the effects from rising interest rates and the maturity of the cycle. Income returns, which will continue to be supported by moderate rent growth in most asset classes, will also be buttressed by increasing

occupancy and lower energy costs. Total returns are forecast to slow to 8.2% in 2017. Sovereign bond yields are currently at and expected to remain at record lows. Equity market returns are expected to average between 4.5% and 6.0% in 2017 (the S&P 500 at 6.0% and the DIJA at 4.8%) and investment-grade corporate bond yields are forecast to average 4.0% in 2017. Given the above, CRE assets will remain a relatively attractive asset class for investors seeking yield.

from the Federal Reserve's Senior Loan Officer Survey shows that an increasing number of banks are tightening CRE lending standards. Foreign investment in the first half of the year was nearly 50% lower than in 2015, and REIT activity declined by more than 60%. While this brings foreign capital activity back to where it was in 2014 (as 2015 was a stand-out

U.S. Transaction Volume All Property Types (including land), Billions



Source: RCA Cushman & Wakefield Forecast

U.S. NCREIF Returns

CRE assets will

remain a relatively

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class for investors

seeking yield.

Annualized Average Quarterly Total Return, %



Source: NCREIF, Moody's, Cushman & Wakefield

¹This refers to the annualized average quarterly rate of return.

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August 2016

Prices

Underlying the forecast for declines in capital returns is a softening in pricing pressures. After rising by 13.8% in 2015 in many asset classes, growth in CRE prices is expected to moderate after reaching record price levels. Price appreciation is forecast to hit 7.4% in 2016 before declining to 5.7% in 2017. Most of the decline in pricing growth will occur towards the end of the decade, although some softening is already evident: luxury apartment rents have seen some steadying as leasing velocity has weakened.

Conclusion

The slowdown in momentum in the first half of the vear was notable but unable to upset the current economic expansion. Powered by continued improvements in the labor markets, consumers are and will continue to spend robustly. The headwinds

created by slowing global demand (led by a deceleration in China's economy) and by the uncertainty in financial markets around Brexit did diminish trade and investment. But as the second half of the year unfolds, we expect those categories to pick up steam, supporting stronger corporate profits, inflation, and real GDP growth. Though monetary policy normalization is expected to unfold at a slower pace than before, economic conditions will likely warrant more rate hikes next year with the next increase expected as soon as September. Commercial real estate markets have fared well: vacancy rates are falling, rent growth is positive and, for some asset classes, reaching a cyclical peak, and leasing velocity remains healthy. Capital markets activity will see unique pressures from impending regulations, but the slowdown in sales volume and pricing is in line with a broader return to a more sustainable investment environment.

U.S. Macro Forecast



August 2016

U.S. Macro Forecast Table

	2015 2016			2017			Annual			
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	2015	2016	2017
US Economy										
Real GDP, % (AR)	1.4	1.1	1.7	2.4	2.4	2.1	1.8	2.4	1.6	2.1
Chg. in Nonfarm Employment, ths.	721	659	449	595	546	502	470	2,775	2,249	1,758
Chg. in Office-using Employment, ths.	217	137	159	149	152	149	120	812	597	496
Unemployment Rate, %	5.0	4.9	4.9	4.6	4.6	4.5	4.4	5.3	4.8	4.4
Retail Sales & Food Services, % (SAAR)	2.0	2.7	2.9	2.9	4.1	5.6	4.8	2.3	3.1	4.7
CPI Inflation, % (AR)	0.4	1.1	1.1	1.2	1.6	2.2	2.1	0.1	1.2	2.1
Consumer Confidence Index	96	96	95	101	99	100	104	98	98	103
Federal Funds Rate, %	0.2	0.4	0.4	0.4	0.6	0.7	0.9	0.1	0.4	1.0
10-year U.S. Treasury note, %	2.2	1.9	1.8	1.6	1.8	2.1	2.2	2.1	1.8	2.3
ISM Manufacturing Index	48.6	49.8	51.8	53.1	52.4	51.2	51.5	51.3	50.8	51.8
West Texas Intermediate, \$/bbl	42	34	46	44	45	44	43	49	42	43
Office Sector*										
Net Absorption, msf	20.5	11.8	15.8	18.4	14.5	10.3	11.5	81.1	60.5	47.6
Vacancy Rate	13.5%	13.4%	13.3%	13.1%	13.0%	13.0%	13.1%	13.8%	13.2%	13.3%
Asking Rent	\$28.10	\$28.57	\$29.01	\$29.41	\$29.78	\$30.14	\$30.47	\$27.67	\$29.19	\$30.60
Industrial Sector*										
Net Absorption, msf	67.3	62.0	72.2	64.3	53.6	52.2	49.0	246.1	252.1	222.8
Vacancy Rate	6.2%	6.1%	5.8%	5.7%	5.7%	5.8%	6.0%	6.6%	5.9%	6.0%
Asking Rent	\$5.40	\$5.45	\$5.52	\$5.62	\$5.71	\$5.77	\$5.83	\$5.31	\$5.57	\$5.84
Retail Sector**										
Net Absorption, msf	10.6	5.8	12.1	8.6	9.8	5.2	11.4	41.8	36.3	29.0
Vacancy Rate	7.8%	7.7%	7.6%	7.5%	7.4%	7.4%	7.2%	8.0%	7.6%	7.3%
Asking Rent	\$21.57	\$21.59	\$21.76	\$21.78	\$21.83	\$21.88	\$21.97	\$20.79	\$21.74	\$22.07
Capital Markets***										
Total Investment Sales, \$ Bil.	\$168.1	\$114.0	\$105.2	\$101.5	\$128.9	\$101.8	\$102.3	\$545.0	\$449.6	\$411.8
NCREIF Unlevered Total Returns, Qtrly % Chg.	12.2%	9.1%	10.7%	11.6%	10.4%	8.3%	6.1%	13.3%	10.5%	8.2%
Moody's/RCA CPPI (All Property Types), Yr/Yr % Chg.	10.9%	6.3%	6.9%	7.4%	9.2%	5.9%	7.6%	13.8%	7.4%	5.7%

^{*}Annual rents and vacancy rates are averages, not year-end

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Cushman & Wakefield is a leading global real estate services firm that helps clients transform the way people work, shop, and live. Our 43,000 employees in more than 60 countries help investors and occupiers optimize the value of their real estate by combining our global perspective and deep local knowledge with an impressive platform of real estate solutions. To learn more, visit www.cushmanwakefield.com or follow @CushWake on Twitter

^{**}Historical series based on CoStar

^{***}RCA, NCREIF, Moody's Analytics

^{***}Total Investment Sales includes office, industrial, retail, multifamily, hotel, and land sales