

MARK-UP

## Research Report

# U.S. Real Estate Strategic Outlook

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THE DECEMBER 2017 REVIEW IS A REFLECTION BY DEUTSCHE ASSET MANAGEMENT'S ALTERNATIVES RESEARCH & STRATEGY TEAM HIGHLIGHTING WHAT IT BELIEVES ARE SIGNIFICANT CHANGES IN THE MARKET OVER THE PAST YEAR COMPARED WITH THE FEBRUARY 2017 U.S. REAL ESTATE STRATEGIC OUTLOOK.

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# Table of Contents

1	Overview	3
	1.1 Sector Allocations	3
	1.2 Market Allocations	4
2	Commercial Real Estate Fundamentals	4
	2.1 Economic and Structural Demand Drivers	5
	2.2 Real Estate Supply	6
3	Commercial Real Estate Capital Markets	7
	3.1 Public and Private Debt	8
	3.2 Public and Private Equity	9
4	Commercial Real Estate Total Returns	10
5	Industrial Outlook and Strategy	11
	5.1 Current Conditions	11
	5.2 Outlook and Strategy	12
6	Retail Outlook and Strategy	14
	6.1 Current Conditions	14
	6.2 Outlook and Strategy	15
7	Office Outlook and Strategy	17
	7.1 Current Conditions	17
	7.2 Outlook and Strategy	19
8	Apartment Outlook and Strategy	21
	8.1 Current Conditions	21
	8.2 Outlook and Strategy	22
	Appendix 1: U.S. House Portfolio	25
	Appendix 2: Real Estate Target Markets	26
	Important Information	27
	Research & Strategy – Alternatives	29

# 1 Overview

2016 was a strong year for U.S. commercial real estate (CRE). For the most part, demand continued to outstrip supply, pushing vacancy rates lower and rents higher. Prices generally ended the year above where they started, delivering total returns to core real estate in line with historical norms. In more subtle ways, however, the landscape began to shift. While fundamentals were strong, financial-market volatility curbed the decline of cap rates that had powered capital gains since 2010. Total returns slipped into the single digits for the first time since the financial crisis.

We expect that commercial real estate will deliver a similar return profile over the next five years. Given that supply is generally moderate and shows tentative signs of peaking, we believe that real estate is positioned to generate healthy NOI (Net Operating Income) growth. At the same time, rising interest rates and temperate capital flows are expected to put modest upward pressure on cap rates, slowing the pace of appreciation. Total returns are expected to be primarily income driven, averaging 5%-6% annually through 2021 (6%-7% over the next two years).\*

While a more muted return profile may be disappointing to some investors, in our view it represents a soft landing that should be welcomed. The U.S. economy does not suffer from overt excesses, such as inflation or asset bubbles, that have precipitated past recessions. Supply is generally under control. Real estate is not over-leveraged and valuations are not stretched on a relative basis. In this context, a moderation of returns should help extend the duration of the cycle, or in a worst case scenario, cushion the severity of any downturn, which we continue to believe is several years off.

While in our view the outlook remains positive, the economic, structural, and supply-side factors that drive real-estate performance are clearly shifting. Our sector and market allocation strategies account for these dynamics.

## 1.1 Sector Allocations

We believe that fundamental drivers and risks favor the industrial and to a lesser extent the retail sectors, while we are cautious toward the apartment and office sectors.

— **Industrial (Overweight):** Warehouse construction has steadily increased, but it has failed to satiate the burgeoning demand generated by e-commerce fulfillment. More recently, housing activity has added meaningful support to demand, particularly for smaller properties. Vacancy in well-located facilities close to urban population centers is becoming especially scarce.

— **Retail (Market-weight):** The challenge to retail real estate from e-commerce has been well documented. However, a growing taste for services that cannot be delivered online (e.g., dining, health care, fitness, etc.) is fostering demand for well-configured retail space in the right locations. As the economy continues to expand, we believe that wage growth will accelerate, buttressing consumer spending. Meanwhile, retail construction is virtually absent. Accordingly, we believe that the retail sector is positioned to deliver solid returns over the medium term, although location, asset, and tenant selection are critical.

— **Office (Underweight):** The office sector has historically performed well in mature phases of the real-estate cycle, and with leases rolling up to rent levels that are on average 25% above those prevailing five years ago, income growth prospects are upbeat for many office assets.\* However, office leasing disappointed in 2016 despite healthy job creation, suggesting that corporate space densification continues to weigh on absorption.

\* CBRE-EA as of December 2016

NOI Growth in the NCREIF Property Index (NPI) slipped from 5.8% in 2015 to 4.6% (year-over-year) in the third quarter of 2017. (Source: NCREIF, September 2017)

A modest increase in Treasury yields has been offset by a compression in credit spreads. Cap rates have been broadly stable. (Sources: Federal Reserve (interest rates), NCREIF (cap rates), September 2017.)

NPI total returns were 6.9% (trailing four quarters) in the third quarter of 2017. (Source: NCREIF, September 2017.)

Industrial's total returns of 12.8% (trailing four quarters) in the third quarter of 2017 were more than double other those of other sectors. (Source: NCREIF, September 2017.)

While fundamentals and returns have softened at regional malls, they remain steady at neighbourhood and community centers. (Source: NCREIF, September 2017.)

Despite strong job creation, net office absorption undershot historical averages and returns were the lowest among major property types in the year to the third quarter of 2017 (Source: NCREIF, September 2017.)

Apartment absorption remained solid despite an uptick in the homeownership rate. Multifamily starts have ebbed but remain elevated. (Sources: CBRE-EA, Census Bureau, as of September 2017.)

Los Angeles and Boston Apartment and Office markets outperformed in the year to the third quarter of 2017. (Source: NCREIF, as of September 2017.)

New York, Washington D.C., and San Francisco apartments weighed heavily on the NPI in the year to the third quarter. (Source: NCREIF, September 2017.)

All of these markets outperformed in the third quarter of 2017. (Source: NCREIF, as of September 2017.)

These markets generally outperformed in the third quarter of 2017. (Source: NCREIF, as of September 2017.)

Second quarter 2017 rent growth averaged 2% (year-over-year) in Apartment and Office, 3% in Retail, and 6% in Industrial. (Source: CBRE-EA, September 2017.)

Moreover, with the labor market already near full employment, the scope for further job creation may be constrained, and pockets of supply are surfacing in a handful of markets (e.g., New York and Houston).

- **Apartments (Underweight):** Apartments performed well coming out of the financial crisis, as households (particularly Millennials) eschewed homeownership due to stringent mortgage lending, an overhang of student debt, and shifting lifestyle preferences. However, absorption has slipped over the past two years and vacancies have recently increased. The demographic support for apartments will not reverse overnight, but demand might moderate further as the leading edge of the Millennial generation enters the mid-30s. The greatest challenge, however, is the large influx of new supply that is coming on line in virtually every market of the country.

## 1.2 Market Allocations

From a strategic perspective, we continue to favor large, coastal, “gateway” markets (e.g., Boston), which have produced stronger rent and price appreciation over time, while providing superior liquidity. Conversely, we are wary of smaller markets with poor demographic trends (e.g., some cities in the industrial Midwest), which have generally underperformed over the long term. Nevertheless, current market conditions warrant some modulation around this general posture. Specifically:

**Gateway Markets:** Prices have risen substantially in several coastal markets. We remain optimistic toward Los Angeles and Boston, where fundamentals are on a strong footing. However, we are more cautious toward markets with weaker or riskier fundamentals, including San Francisco, New York, and Washington D.C. (albeit with important property-type exceptions).

**Regional Markets:** Our most favored markets are generally smaller coastal cities that share some of the natural supply barriers of gateway markets but with yields that are somewhat higher, including Portland, Oakland, Orange County, San Diego, Fort Lauderdale, and to a lesser extent, Seattle and Miami. Meanwhile, our view of inland markets is mixed: in traditional fashion a few are at risk of oversupply (e.g., Charlotte and Houston), while others are more balanced (e.g., Austin, Denver, Atlanta and Phoenix).

## 2 Commercial Real Estate Fundamentals

Commercial real estate (CRE) fundamentals strengthened further in 2016, pushing vacancy rates to 15-year lows (see Exhibit 1). While economic growth was tepid, key real-estate demand drivers, including hiring and retail sales, were stalwart. Supply edged higher but remained measured by historical standards. Low and falling vacancy rates allowed landlords to hike rents by 4% nationally across property types, matching gains in 2015.<sup>1</sup>

We expect that the commercial real estate market will remain solid in 2017 and 2018. While there is no doubt that the cycle is mature, the market generally does not — with notable exceptions by sector and market — display the kinds of imbalances that have historically capsized fundamentals. On the demand side, the economy (to which real estate absorption has a 0.9 correlation) does not suffer from inflation or asset bubbles, which have precipitated past recessions. On the supply side, the pipeline of projects underway indicates that deliveries should remain broadly stable. Tight vacancies should support rent growth of 3%-4% annually in the aggregate across sectors and markets over the next two years.<sup>1</sup>

<sup>1</sup> CBRE-EA and Deutsche Asset Management calculations. Data as of December 2016.

Beyond 2018 the outlook is more opaque. Although we are not anticipating a recession, real-estate absorption will likely ease as the economy bumps up against capacity limits, causing vacancy rates to escalate beginning in 2019. To be sure, the risk of a recession at some point over the next five years is not insignificant: if one were avoided, by mid-2019 this expansion would rank as the longest (albeit not the strongest) since the Civil War.<sup>2</sup> Yet supply could also undershoot expectations due to rising construction costs and a dearth of financing (as well as faltering demand in the event of a recession). This cycle will eventually end, but with vacancy rates already low and supply limited, any landing could be a soft one.



Source: CBRE-EA (history); Deutsche Asset Management (forecast). Data as of December 2016. No assurance can be given that any forecast or target will be achieved. Past performance may not be indicative of future results.

## 2.1 Economic and Structural Demand Drivers

U.S. economic growth dipped below 2% in 2016 for only the second time since 2009, as a sluggish global economy, a strong dollar, and dislocation in the energy sector undermined corporate profits and business investment. The pullback would have been worse if not for the enduring strength of consumer spending, which largely shrugged off both the global torpor and an acrimonious election campaign. Consumers' resilience likely owes something to the buoyant labor market: although job creation slowed, at two million it was sufficient to keep the unemployment rate below 5% even as discouraged workers re-entered the workforce.<sup>3</sup>

Economic growth picked up in the second half of 2016, evidenced in stronger GDP growth, ISM indices of manufacturing and services activity, and retail sales. We believe that this momentum will carry into 2017 with GDP advancing 2.0%-2.5%. To be sure, a strong dollar will continue to pose challenges for exporters and U.S. multinationals. However, housing and consumer spending, which together constitute about 70% of GDP, are expected to march higher against a backdrop of robust household finances (balance sheets, debt service levels, and savings rates are at their healthiest in decades).<sup>\*</sup> The yield curve, which has inverted prior to each of the last seven recessions, is safely upward sloping, suggesting that the risk of a downturn in the next 12-18 months is minimal.

However, we believe that the mix of growth will shift in ways that are meaningful for real estate. With the unemployment rate already low and demographics constraining labor-force growth, job creation will likely ease toward 1.5 million in 2017 and one million in 2018. At the

GDP recorded consecutive quarters of 3%+ growth in the second and third quarters for the first time since 2014. (Source: Bureau of Economic Analysis, as of September 2017.)

Against expectations, exports have jumped as global growth has improved and the dollar has retreated. (Source: Bureau of Economic Analysis, September 2017.)

The yield curve has flattened as the Federal Reserve has lifted short-term rates three times since December 2016, but it remains upward sloping. (Source: Federal Reserve, November 2017.)

Job growth has been stronger than expected, totalling 1.7 million in the first 10 months of 2017 (Source: Bureau of Labor Statistics, as of October 2017.)

<sup>2</sup> Other countries have recorded longer expansions, such as Australia, which has gone more than 25 years without a recession.

<sup>3</sup> Bureau of Labor Statistics. Data as of December 2016.

\*\* Bureau of Economic Analysis as of December 2016.

The homeownership rate stopped falling but apartment absorption was healthy in the first three quarters of 2017, perhaps due to strong job creation. (Source: Census Bureau, CBRE-EA, as of September 2017.)

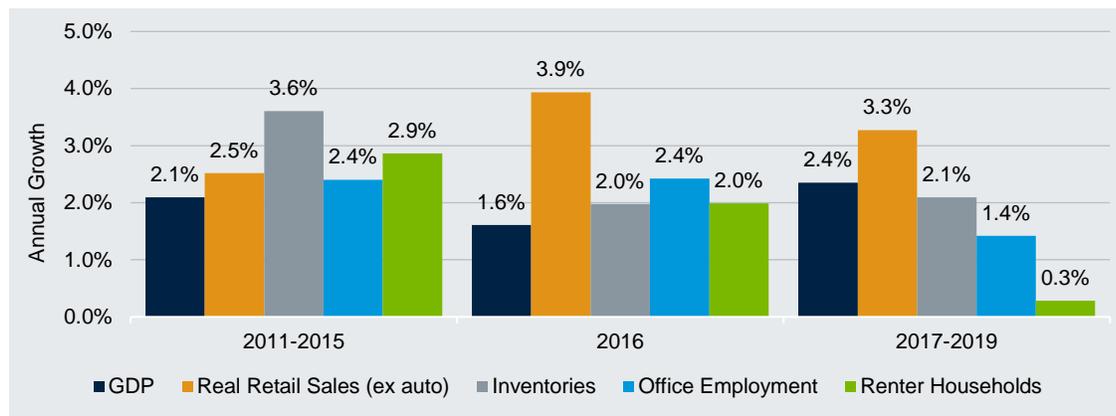
Office absorption trailed its historical average, despite strong job growth. (Source: Bureau of Labor Statistics, CBRE-EA, as of September 2017.)

Retailer distress continues: Toys R Us declared bankruptcy in September and more department stores closed. Yet absorption at neighbourhood and community centers has been resilient. (Source: CBRE-EA, as of September 2017.)

same time, a tighter labor market will likely put upward pressure on wages, which together with possible tax cuts should propel consumer spending.

Shifting growth patterns will combine with structural factors to shape the demand outlook across property types (see Exhibit 2). Rising wages should encourage young people to strike out on their own, but as Millennials in their mid-30s begin to contemplate buying their first home, apartment absorption could moderate. A slower pace of hiring, coupled with ongoing corporate efforts to rationalize space usage, might also dampen office demand. Yet rising disposable incomes and a resurgent housing market should lead to more store openings, particularly in the grocery, dining, fitness, health-care, and home-improvement segments that are somewhat immune to e-commerce competition. Increasing retail sales and housing activity should also support warehouse absorption, already booming thanks to e-commerce fulfilment.

Exhibit 2: Growth of GDP, Office-Using Employment, and Inventories



Source: Moody's Analytics, Consensus Forecast. Data as of December 2016. No assurance can be given that any forecast or target will be achieved. Past performance may not be indicative of future results.

The primary risk to demand is a recession, particularly in the event of a global shock, such as debt crisis in China or other emerging markets. A major swing in energy prices, the exchange rate, or interest rates could also undermine business investment, exports, and credit-sensitive sectors such as housing and autos. Federal policy is also a risk, both to the upside and the downside: Major aspects of President Trump's economic agenda, such as tax cuts, infrastructure investment, and regulatory reform, could prove more stimulative, but others, such as trade and immigration restrictions, could be more detrimental. Much will depend on the timing, design, and execution of any policy adjustments.

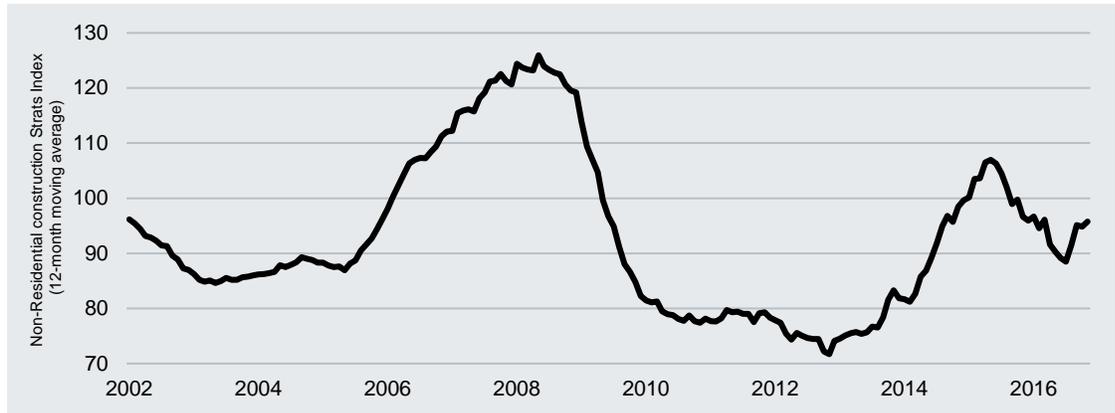
As of yet, few concrete policy measures have been implemented, outside of regulatory relief.

## 2.2 Real Estate Supply

Commercial real estate construction has been steadily increasing since the recession, but it has generally remained below both historical levels and growth in demand. There are exceptions: As a share of inventory, apartment deliveries reached their highest level since 2000 in 2016 and are poised to rise further this year. A handful of office (e.g., New York, San Francisco, and Houston) and large warehouse (e.g., Atlanta, Dallas, Chicago, and the Inland Empire) markets are also experiencing a wave of new supply. In general, however, construction has been disciplined.

Indeed, there are indications that supply may be approaching a cyclical peak. Notwithstanding a recent uptick, non-residential construction starts has been falling for nearly two years, while apartment starts plateaued in the spring of 2016 (see Exhibit 3). Given construction lags, this suggests that deliveries could abate after the batch of projects currently underway is completed.

Exhibit 3: Non-Residential Construction Starts Index (CPI-adjusted, SAAR)



Sources: Dodge Data and Analytics (starts); Bureau of Labor Statistics (CPI); Deutsche Asset Management calculations. Data as of November 2016. Past performance may not be indicative of future results.

Several factors have contributed to the limited, and perhaps waning, impetus to build. In the earlier stages of the recovery, it was generally cheaper to buy buildings than to develop them. More recently, banks have become increasingly reticent to finance development, likely in response to stringent regulatory oversight: according to the Federal Reserve's Senior Loan Officer Survey, construction financing standards began to tighten in the third quarter of 2015; in the fourth quarter of 2016, a net 28% of banks were tightening.<sup>4</sup> Labor shortages are another challenge. Having soared to 22% in early 2010, the unemployment rate for experienced construction workers registered 6% in November 2016, near the lowest level on record.<sup>5</sup> This has likely contributed to project delays and put upward pressure on wages: building costs (excluding land) have been rising at twice the rate of inflation over the past two years.

In our view, restrictive financing, skilled-labor shortages, and a likely slowdown of price appreciation will keep a lid on construction in the coming years. One wild card revolves around government policy: An easing of federal regulatory requirements on banks could pave the way for more construction lending. Yet restrictions on immigration and a major infrastructure program could also exacerbate resource constraints, making construction more difficult and costly. In our view, the balance of risks leans toward lower supply levels.

In October 2017, the unemployment rate for skilled construction workers hit its lowest level on record, and hurricane rebuilding efforts could add to labor shortages. (Source: Bureau of Labor Statistics, as of October 2017.)

### 3 Commercial Real Estate Capital Markets

Commercial real estate capital markets were volatile in 2016. Stock prices swooned and credit spreads widened at the beginning of the year amid concerns around Federal Reserve interest-rate hikes, the Chinese economy, and the energy sector. Within real estate, CMBS (Commercial Mortgage-Backed Securities) and listed REIT (Real Estate Investment Trust) prices slumped, resulting in higher mortgage rates and accelerated REIT dispositions. Financial conditions generally improved in the second half of 2016, particularly in the aftermath of the election. Nevertheless, despite solid fundamentals, capital-markets volatility weighed on core real estate returns, which slipped into the single digits in 2016 for the first time since the financial crisis.

We believe that the capital markets environment will remain somewhat restrictive. Low interest rates have provided crucial support to valuations, boosting the relative attractiveness of property yields and extending inexpensive financing to levered investors. However, interest rates jumped sharply following the November 2016 election and might increase further as inflationary pressures intensify. Rising interest rates are not, in our opinion, a lethal threat to

<sup>4</sup> Federal Reserve Senior Loan Officers Survey. Data as of December 2016.

<sup>5</sup> Bureau of Labor Statistics. Data as of December 2016.

Treasury yields stabilized after an initial spike, and credit spreads have tightened considerably. Commercial mortgage rates have dropped. (Sources: Federal Reserve, RCA, as of September 2017.)

REIT discounts to NAV have largely closed, although substantial gaps persist in some sectors, such as malls. (Source: Green Street, as of November 2017.)

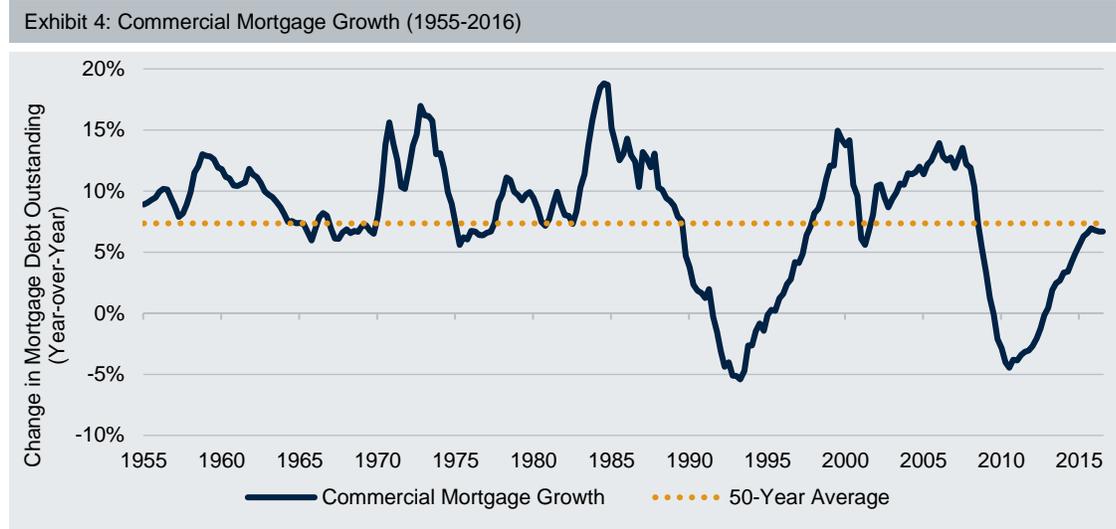
Mortgage growth has remained steady at 6.5% year-over-year in the second quarter of 2017. (Source: Federal Reserve, as of June 2017.)

the real estate market, for two reasons: First, U.S. interest rates should increase only gradually, pinned down by even lower rates overseas. Second, investors will likely factor real estate's strong fundamentals and ability to partially hedge inflation into valuations, neutralizing some, if not most, of any negative effects from higher rates (as they did, for example, during the "taper tantrum" of 2013).

Yet rising interest rates are not the only challenge. If listed REITs continue to trade at discounts to net asset values (NAVs), their propensity to invest in private assets may be impeded. New CMBS risk retention rules and heightened regulatory restrictions on banks might constrain the supply and increase the cost of mortgage debt. A strong dollar and higher currency hedging costs might deter some foreign investment. On balance, therefore, we expect that the capital markets will exert a modest drag on the pace of real-estate appreciation in 2017 and beyond.

### 3.1 Public and Private Debt

Commercial real estate debt was well supplied in 2016, but evidence pointed to a modest tightening leading into 2017. The volume of commercial (including multifamily) mortgage debt outstanding increased 6.7% year-over-year in the third quarter of 2016 — a healthy rate, but essentially unchanged from the previous three quarters, suggesting that growth momentum might have stalled (see Exhibit 4).<sup>6</sup>



Source: Federal Reserve. Data as of September 2016. Past performance may not be indicative of future results.

The pullback was concentrated in the CMBS segment: bond-market volatility early in the year, followed by the implementation of risk-retention rules in December, caused issuance to drop to \$63 billion in 2016 from \$95 billion the year before.<sup>7</sup> As a result, outstanding CMBS debt fell 9% year-over-year in the third quarter, bringing its share of the total mortgage market to 10.1%, less than half its 2007 peak (22.9%) and the lowest level since 1998.<sup>8</sup> Banks, insurers, and government-sponsored entities (GSEs) remained active, increasing outstanding balances by 9%-11%. Yet the Federal Reserve's Senior Loan Officer Survey reported that a net 19% of banks were bolstering underwriting standards in the fourth quarter. And various market-wide metrics, including loan-to-value ratios, debt service coverage ratios, and debt yields pointed unambiguously to a tightening of lending conditions.<sup>9</sup>

<sup>6</sup> Federal Reserve. Data as of September 2016.

<sup>7</sup> CRE Finance Council. Data as of December 2016.

<sup>8</sup> Federal Reserve. Data as of December 2016.

<sup>9</sup> Federal Reserve. Data as of December 2016.

CMBS issuance has defied expectations and might total more than \$70 billion in 2017. (Source: CRE Finance Council, as of September 2017.)

Recent Federal Reserve surveys indicate that fewer banks are tightening lending standards. (Source: Federal Reserve, as of September 2017.)

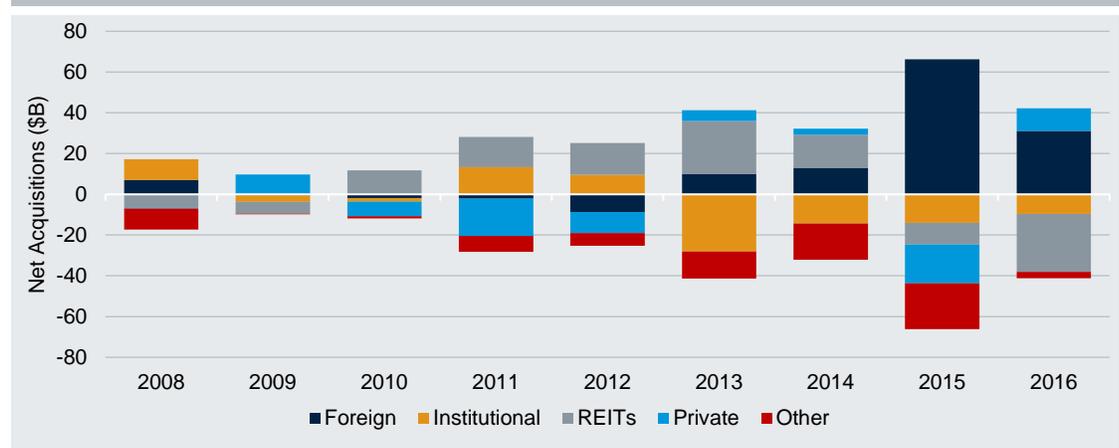
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Attractive margins on mortgage loans create a powerful incentive for lenders to grow their portfolios.<sup>10</sup> Yet mortgage conditions might tighten incrementally: While CMBS issuers should adjust to the new regulatory regime, they might struggle to offset the \$116 billion of maturities scheduled for this year (as 10-year loans originated in 2007 come due).<sup>11</sup> And while the recent election has spawned hopes of financial deregulation, the timing and nature of any changes, and their potential impact on bank lending, remain highly uncertain. In this environment, debt should remain available but selective, and borrowing costs will be sensitive to rising interest rates.

## 3.2 Public and Private Equity

Publicly-traded REIT prices have been volatile over the past two years, responding to broader capital-market forces. REITs stumbled in the second half of 2015 through the middle of 2016 amid concerns around interest rates. Prices rebounded in mid-2016 as the UK's Brexit vote pushed interest rates lower, but then slumped again after the November U.S. election. REITs' fluctuating and generally increasing cost of equity led them to dispose of a net \$28 billion of real estate in 2016 through asset sales and corporate privatizations (see Exhibit 5). Foreign capital filled the void. Facing low or even negative fixed-income yields at home, cross-border investors ploughed a net \$31 billion into U.S. commercial property in 2016.<sup>12</sup>

Exhibit 5: Net Commercial Real Estate Acquisitions by Investor Type (2008-2016)



Source: Real Capital Analytics. Data as of December 2016. The past may not be indicative of future results.

REITs were modest net buyers in the first three quarters of 2017. (Source: RCA, as of September 2017.)

The dollar depreciated in 2017 and foreigners acquired a net \$20 billion of U.S. real estate, down only slightly from \$25 billion a year earlier. (Source: RCA, as of September 2017.)

A substantial tightening in credit spreads has widened the gap between cap rates and corporate bond yields. (Sources: NCREIF and Federal Reserve, as of September 2017.)

While we expect that transactions markets will remain liquid, equity demand for U.S. commercial real estate might attenuate further. As of January 2017, listed REITs were trading at a 5% discount to NAV; were this discount to persist or deepen, REITs would likely remain net sellers of real estate in the aggregate.<sup>13</sup> Rising interest might deter levered investors, as well as unlevered ones that might pivot to fixed-income alternatives. Meanwhile, a widening spread between interest rates in the U.S. and overseas could impose a hurdle for foreign investors, simultaneously lifting the dollar's exchange rate and the cost of currency hedging.

To be sure, the forces driving equity capital are not all one-sided. The stock-market rally that took hold after the election could, if sustained, induce investors to rebalance portfolios into real estate. America's strong real-estate fundamentals and reputation as a safe haven should continue to attract foreign capital; commodity-based sovereign wealth funds in particular might deploy more capital as energy prices recover. More generally, real estate cap rates continue to offer healthy spreads relative to interest rates. On balance, however, we expect that equity capital flows will moderate in 2017.

<sup>10</sup> Real Capital Analytics. Data as of December 2016.

<sup>11</sup> CRE Finance Council. Data as of December 2016.

<sup>12</sup> Real Capital Analytics. Data as of December 2016.

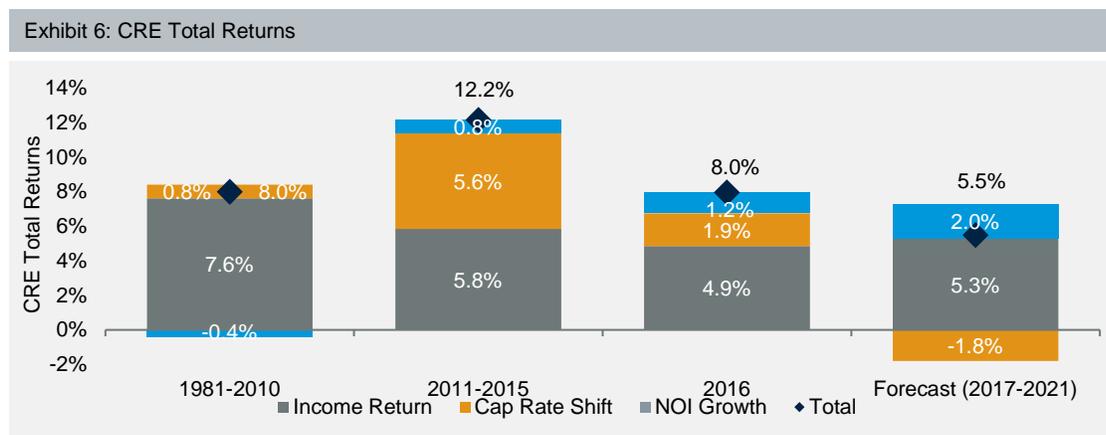
<sup>13</sup> Green Street Advisors. Data as of December 2016.

## 4 Commercial Real Estate Total Returns

Commercial real estate returns moderated in 2016 from the double-digit levels of recent years (see Exhibit 6). Market fundamentals were robust, with low and falling vacancies supporting strong NOI growth. However, volatility in capital markets in general, and REITS and CMBS markets in particular, put a floor under cap rates. Overall, total returns were lower and were driven more by fundamentals than earnings multiples.

We expect that commercial real estate will deliver a similar return profile over the next five years. Given that supply is generally moderate and shows tentative signs of peaking, we believe that real estate is positioned to generate healthy NOI growth averaging 2% annually (net of capital expenditures). At the same time, rising interest rates and temperate capital flows are expected to put modest upward pressure on cap rates, slowing the pace of appreciation. Total returns are expected to be primarily income driven, averaging 5%-6% annually through 2021 (6%-7% over the next two years).

Total returns were 6.9% (trailing four quarters) in the third quarter of 2017 and is on track to end the year at the high end of the range. (Source: NCREIF, as of September 2017.)



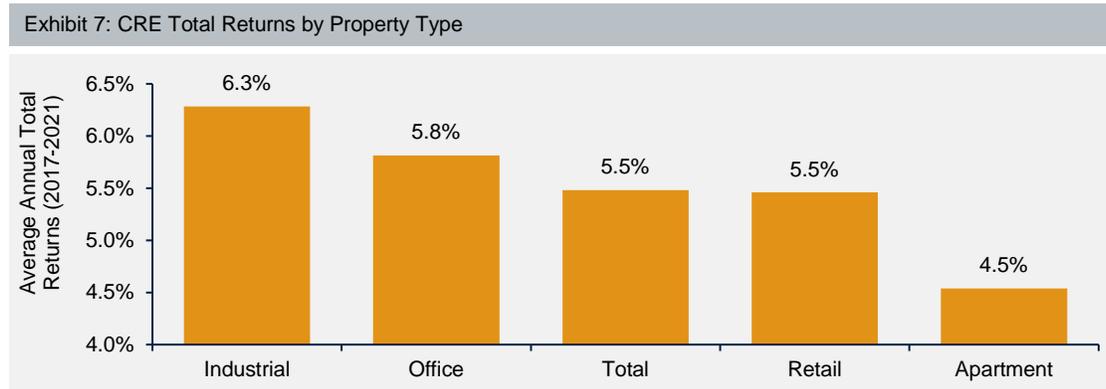
Source: NCREIF (history); Deutsche Asset Management (forecast). Data as of December 2016. Past performance is not indicative of future returns. No assurance can be given that any forecast or target will be achieved.

Industrial has exceeded our bullish expectations, generating total returns more than double those of other sectors through the third quarter of 2017. (Source: NCREIF, as of September 2017.)

Office returns were disappointingly weak through the third quarter. (Source: NCREIF, as of September 2017.)

Retail returns dipped below the NCREIF total for the first time since 2012 in the second and third quarters, but the sector outperformed Apartment and Office. (Source: NCREIF, as of September 2017.) NOI growth slid from 11.5% in 2015 to 3.5% (year-over-year in the third quarter of 2017. (Source: NCREIF, as of September 2017.)

From a property-type perspective we expect the Industrial sector to outperform, as buoyant fundamentals continue to propel rent growth (see Exhibit 7). Office is also expected to modestly outperform, as building owners roll leases over at rents that are on average 25% above those prevailing five years ago. However, we are mindful of the sector's historical volatility, which tempers its appeal on a risk-adjusted basis. Retail is expected to perform in line with the overall index, although the sector has historically displayed lower volatility, courtesy of the durability of consumption (relative to employment) and extended duration of average leases. Apartments are expected to underperform due to the sector's lower cap rates (income returns) and expected softening of occupancies and rent growth.



Source: Deutsche Asset Management as of December 2016. Past performance may not be indicative of future results.

Unlevered core commercial real estate returns of 5%-6% are below the realized returns of the past three decades. However, we believe that they are competitive with the returns available from other major asset classes, which also face potential headwinds from rising interest rates and elevated valuations. The case for real estate gains added force in a portfolio context, in view of its diversification potential, lower historical volatility (relative to equities), comparatively attractive income return, and ability to partially hedge inflation and interest rate risks that have arguably increased in recent months.

The risks around the forecast are roughly balanced. On the downside, a recession would likely push demand, occupancies, rents, and prices lower. Interest rates could also jump more sharply than expected, hurting valuations. Yet there is also potential upside through stronger economic growth (aided by supportive federal policy), weaker supply (due to rising construction costs and scarce financing), lower interest rates (constrained by global factors), and improving financial conditions (supporting capital flows via REITs, CMBS, sovereign wealth funds, and portfolio rebalancing). This balance implies that any near-term surprise — to the upside or the downside — could be subsequently reversed, holding long-term returns near projected levels.

## 5 Industrial Outlook and Strategy

### 5.1 Current Conditions

The U.S. industrial market continued its extraordinary run in 2016, building on several years of improving fundamentals. Low and declining availability rates and robust rent growth have benefitted both core investors in and developers of warehouses, producing robust absorption of new space and high relative returns.

Rising occupancies and rents have led to a larger development pipeline, although new construction totals have yet to match demand levels. Net absorption for 2016 totalled 257 million square feet, compared to just 179 million square feet of new construction.<sup>14</sup> National availability declined 70 basis points in 2016, ending the fourth quarter at 8.2%. This was the lowest rate since the dot.com era in 2000. Effective markets rents grew about 6% in 2016 and are about 26% higher than recessionary levels. The strongest markets have been California, New York/New Jersey, South Florida, and the Pacific Northwest.<sup>14, 15</sup>

National drivers and local economic growth are fueling strong conditions across the vast majority of markets, but the nation's gateway and largest inland hub markets remained prominent exhibits of national trends. Chicago, Dallas and Atlanta, the national hubs, commanded a 26% share of national net absorption in 2016. The supply pipelines in these markets also grew, combining for a 32% share of U.S. industrial completions, but total net demand still outpaced new construction deliveries, so availability rates continued to firm at lower than average levels in all three markets.<sup>14,15</sup>

U.S. gateway markets in southern California and in the Northeast region, as well as the more vibrant local markets on the West Coast and in South Florida are very healthy, all exhibiting availability rates well below their long-term averages. Only Houston and Phoenix exhibit relatively high availability rates within our universe of 32 major markets. The demand and supply balance nationally has been tilted positively to the former, with a ratio of 1.5 square feet absorbed to 1.0 square foot built in the two years ending 2016.<sup>15</sup>

New supply and demand levels were nearly equal through 2017Q3, with 51.6 million square feet of completions versus 52.9 million square feet of net absorption, representing 35% and 33% of the national totals (CBRE-EA 2017Q3 data)

The gap between demand and supply is narrowing. As of 2017Q3, net absorption totalled 158.8 million square feet and construction deliveries totalled 146.3 million square feet (CBRE-EA, 2017Q3 data).

<sup>14</sup> CBRE-EA. Data as of January 2017.

<sup>15</sup> CBRE-EA. Data as of January 2017.

## 5.2 Outlook and Strategy

These have held up in 2017 with continued job growth, year-over-year e-commerce sales growth of 15.5% through 2017Q3 and balanced supply and demand conditions (Moody's, US Census and CBRE-EA 2017Q3 data).

The U.S. industrial market appears poised to extend its strong performance in 2017 and potentially years beyond. This outlook is dependent upon the resilience of three key demand drivers that have benefitted the sector in this cycle: an expanding economy (jobs, income, and consumption), the continued rapid expansion of internet retail sales, and a disciplined construction cycle (responsive to and not anticipatory of demand). We expect that recent and future market rent gains will fuel outsized income growth and strong returns for industrial investors.

The U.S. economic outlook calls for moderating growth, but rising consumption, healthy population, job and income growth, and rapid 8% to 10% annual Internet retail sales growth<sup>16</sup>, should support healthy industrial space demand. This secular trend in retail is expected to put persistent pressure on retailers and logistics providers to accommodate rapid direct-to-consumer fulfillment in a growing number of U.S. consumer markets and the result should be additional warehouse space demand.

The national availability rate has declined more sharply in 2017, sinking to 7.7% in the third quarter (CBRE-EA).

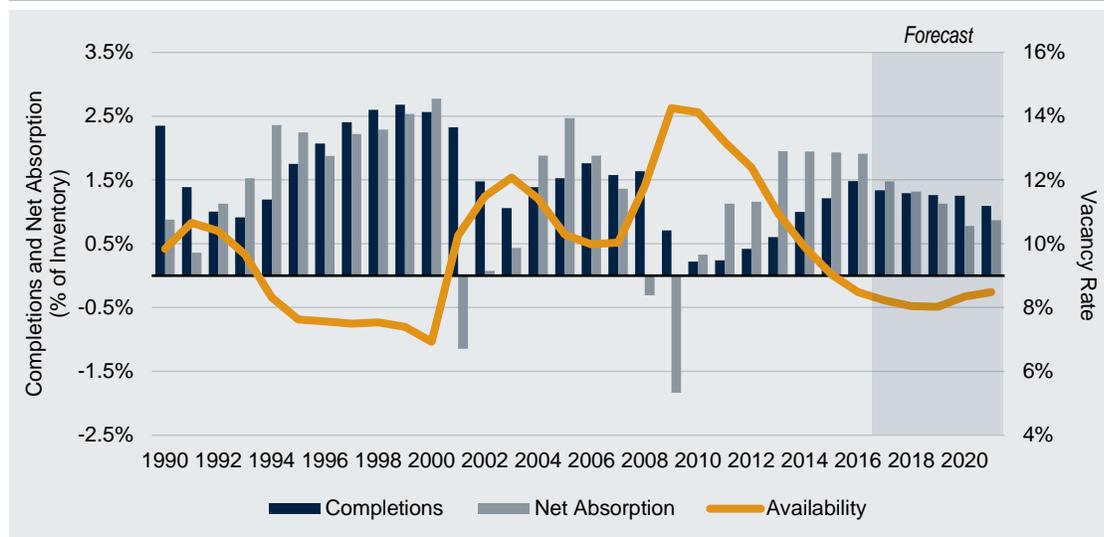
We anticipate favorable conditions in the industrial sector during our five-year forecast (see Exhibit 8). However, as development rises, matching and surpassing one-year demand levels, it is expected to cause availability to reverse course and relieve upward pressure on rents.

The national availability rate is expected to decline through 2018 to about 8% and then, absent a recession, rise moderately, but remain below long-term averages. The change in the course of availability is not expected to impact all markets equally, as those with greater supply constraints and stronger demand drivers should be able to achieve better occupancy and income performance.

The pace of development in high-barrier east and west coast markets through 2017Q3 has been about 0.3% of stock, compared to about 1.4% of stock for the nation (CBRE-EA 2017Q3 data).

Functional infill warehouse facilities stand to benefit not only from future economic growth but also from supply chain reconfiguration (the rise of e-Commerce and rapid fulfillment). Revived urban development has given new life to demand for close-in distribution facilities, despite higher occupancy costs. Markets where demand support has been strongest, those that serve the large east and west coast population centers, should continue to do well as land constraints serve to limit new competition.

Exhibit 8: Industrial Absorption and Completions % of Inventory and Vacancy Rate (1990-2021)



Source: CBRE-EA (history); Deutsche Asset Management (forecast). Data as of December 2016. No assurance can be given that any forecast or target will be achieved. Past may not be indicative of future results.

<sup>16</sup> Forrester Research, Data as of May 2016

Trends still broadly positive, with strong demand and single digit availability rates across most markets and annual rent growth tracking in the 5% to 6% nationally, through 2017

Trends are favorable for the industrial sector across many markets. However, development is ramping up in selected markets and this may cause future trends between markets to diverge compared to the last few years when nearly all markets performed well. In particular we are beginning to see the national distribution hubs reach equilibriums between new supply and expected demand and this could temper future market rent growth and contribute to lower investor returns. Conversely, land supply constraints in most gateway and many local markets will limit supply competition.

Still true, although supply has surpassed demand through the third quarter of 2017, but record low availability rates and strong rent growth over the past few years supports strong NPI performance (CBRE-EA and Deutsche Asset Management, 2017Q3 data).

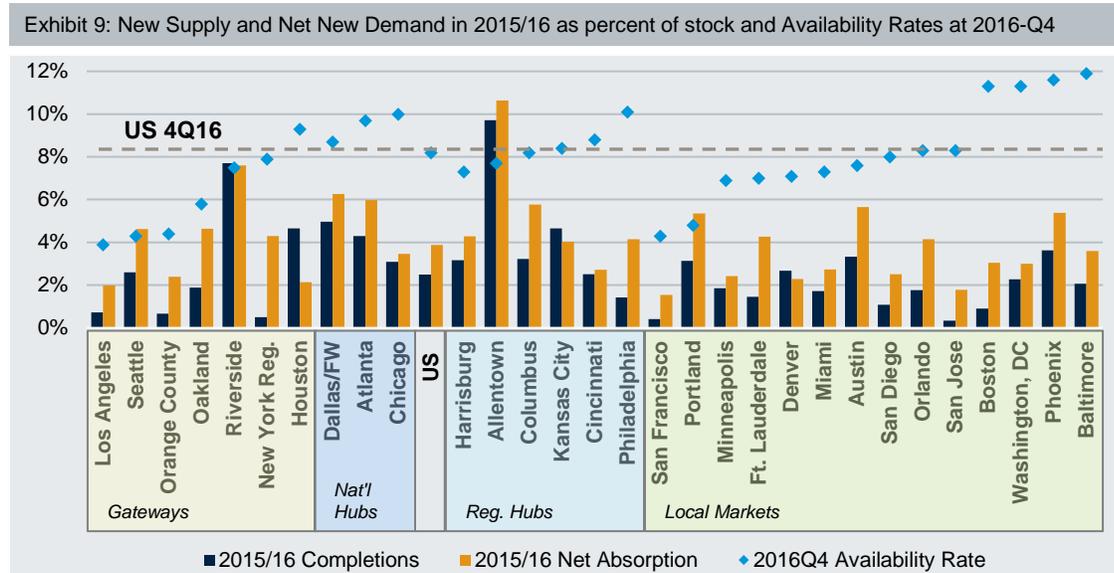
Exhibit 9 highlights relative fundamentals between markets, segmenting by type and then comparing the past two years of supply/demand balance as a percent of stock and availability rates as of fourth quarter 2016. It should be noted that although some markets have availability rates higher than the U.S. average, all (except Houston) currently have availability rates below their long-term average.

— **Gateways:** These markets (excepting Houston) have been the stars of the cycle and should continue to perform well. There are significant supply barriers and new demand continues to outpace construction deliveries. New York has a relatively high availability rate of 7.9%, but that is well below its long-term average and considered very healthy given the age of its industrial stock.\*\*\* Although Riverside has elevated construction, demand is also strong and greater constraints in the West submarket bode well for future fundamentals there.

The pace of rent growth has moderated in the major distribution hubs in 2017, but demand remained strong

— **National Distribution Hubs:** The major national distribution hubs are performing well, but their prospects have slipped somewhat. New supply has risen to match annual demand levels and this should make market conditions more competitive. We would recommend more disciplined investing here, limited to new class A assets in top tier submarkets. Larger warehouses outside of core locations are expected to underperform.

— **Regional Hubs<sup>17</sup>:** These lower-barrier locations have not historically been strong performers, but Harrisburg and Allentown, despite robust supply pipelines, have been performing well. These markets are benefiting from a dearth of modern logistics facilities in the Northeast and mid-Atlantic regions. The Midwestern regional hubs have seen less consistent demand and availability performance.



Source: Deutsche Asset Management; CBRE0-EA. Data as of December, 2016. Past performance may not be indicative of future results.

<sup>17</sup> Regional hubs are not currently included in our list of investable markets.  
 \*\*\* CBRE-EA as of December 2016.

Performance has been mixed in the past year with fundamentals improving, but NPI returns being mixed, (Austin, Miami/Ft. Lauderdale underperforming in the NPI).

- **Local Markets:** There is a broad array of fundamental health and investment performance across our group of local markets. Many have strong local economies with important high tech drivers and healthy housing markets. In this group we prefer San Jose/San Francisco, San Diego, Portland, Denver, Austin and Miami/Fort Lauderdale as targets. Elevated availability and weak or incomplete recoveries in Washington, Phoenix and Orlando, as well as industrial stock issues in Boston and Minneapolis, puts them at a relative disadvantage. Future prospects are heavily weighted to the more dynamic markets in the west and south Florida.

Competition for bulk warehouses continues, with investors bidding down returns and new supply potentially moderating rent gains (Deutsche Asset Management & CoStar Property, November 2017).

- **Class A Bulk Warehouse:** Prices for large stabilized Class A bulk warehouse properties have increased markedly in recent years, in some cases surpassing replacement cost. These assets, leased long-term to credit tenants, can provide stable cash flow, but are generally underwritten to lower total returns. Target Class A assets in core submarkets where in-place rents are below current market levels.
- **Leasing-up / Development:** In the context of healthy fundamentals, build-to-core should provide solid returns and a way to access scarce modern assets. Supply risks have risen in Denver, Dallas and Atlanta, but conditions are more favorable in New York/New Jersey, South Florida, Southern California, San Francisco Bay Area, Austin, Seattle and Portland.
- **Underperforming Markets:** An increasing development pipeline will make the national and regional hubs more competitive. Additionally, we would generally avoid markets where local demand drivers are impaired and vacancy rates are high, specifically in Baltimore and Washington D.C. Additionally, Houston continues to experience availability rate increases and fundamentals are expected to weaken further in the near term.

Flex and R&D continued to underperform warehouse in 2017, by about 280 basis points in the 1-year look back return as of 2017Q3. However, Flex in the West region outperformed the industrial average (NPI, 2017Q3 data).

- **Non-Warehouse:** We maintain an underweight to high-finish industrial property, including light industrial/flex, office/service and manufacturing as well as small multi-tenant business parks. Although conditions stand to improve in this growth cycle, over the longer term, they are tied to weaker segments of the economy and tend to be more expensive to lease and maintain than warehouses. We are highly selective in targeting research & development (R&D)/Office in only a few high-barrier markets that have good growth dynamics and/or tech drivers, such as San Jose, Oakland, Seattle, Orange County and Miami.

## 6 Retail Outlook and Strategy

### 6.1 Current Conditions

In comparison, over the last 12 months the ratio of absorption to new supply ratio has come into balance, and reflects store closures that were announced in 2016 and early 2017.

Retail property fundamentals for neighborhood and community centers continue to recover despite on-going structural and cyclical shifts in the sector. The lack of new supply remains the most significant macro trend driving healing property markets. Net absorption during the current year continues to outpace new deliveries at a ratio of 2.1:1.0, (2.1 sq ft of positive net absorption for every 1 sq ft of new supply). In the third quarter of 2016, retail availability across the U.S. stood at 10.4%, a decrease of 50 bps year-over-year (see Exhibit 10).<sup>18</sup> The current availability rate sits 70 bps above its 20-year average of 9.7%, and 280 bps points below its cyclical peak reached during the recession in 2011.<sup>19</sup> This gradual decline in availability, coupled with a modest supply pipeline, is setting the stage for future rent growth. Year-to-date third quarter of 2016, rents have grown 1.9%; outpacing 2015's annual rent increase of 1.3%, according to CBRE-EA's Retail Rent Index.<sup>20</sup>

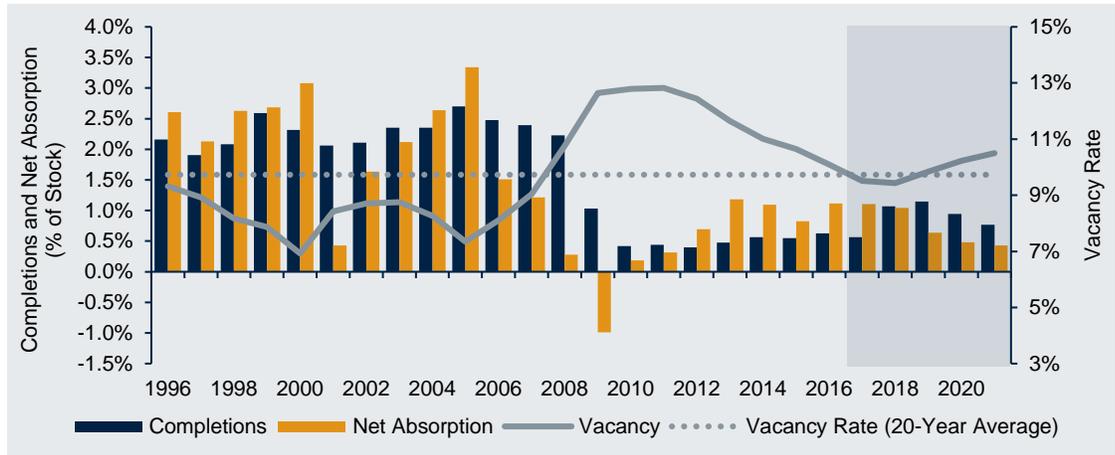
Availability rates currently remain in the 10% range. We expect continued tight supply-side fundamentals, however, net absorption began to slow in the third quarter of 2017.

<sup>18</sup> Source: CBRE-EA. Data as of 9/30/2016.

<sup>19</sup> Source: CBRE-EA. Data as of 9/30/2016.

<sup>20</sup> Source: CBRE-EA. Data as of 9/30/2016.

Exhibit 10: Retail Absorption, Completions, and Vacancy Rate



Source: Deutsche Asset Management. Data as of December 2016. No assurance can be given that any forecast or target will be achieved. Past may not be indicative of future results.

Demand drivers for retail real estate remain solid. Job growth, rising incomes, consumer confidence, and a favorable macro environment continues to support retail sales growth.

With the U.S. unemployment rate at 4.7%<sup>21</sup>, a tight employment market is putting upward pressure on wages. The Atlanta Fed's Wage Growth Tracker indicated that the median pay for U.S. workers grew by 3.9% percent year-over-year in October and November of 2016<sup>22</sup>, marking the fastest growth rate since November 2008. Meanwhile, consumer sentiment jumped in early December. The University of Michigan's Index of Consumer Sentiment surged 4.7% month-over-month to 98.2, and recorded the highest reading since 2004.<sup>23</sup> Total retail sales were up 4.1% from a year ago and 0.6% from November 2016, due to increases in auto, furniture, building materials and online retail sales. Excluding automobiles, gasoline, building materials and food services, core retail sales also nudged up 0.2% last month after being flat in November. The shift from shopping at department stores to the Internet is reflected in the year-over-year 8.4% decline in department store sales versus the 13.2% growth in online sales over the same period from 2015.<sup>24</sup> Additionally, healthy household balance sheets have helped to shore up discretionary spending. Economic indicators currently reflect the positive state of the U.S. consumer which should continue to support demand trends at least through the mid-term of the forecast, however, performance across the retail landscape will likely remain mixed.

The bifurcation of retail property continues; however, the spread in performance is weighted to property class versus property type. Class A centers are growing in scale and quality of retailers, which is translating into sales growth. On the other end of the spectrum, lower-quality class B/C centers are seeing less occupancy and rent growth.

## 6.2 Outlook and Strategy

Our forecast calls for continued recovery over the next two to three years, and a period of more balanced fundamentals as we enter into a maturing retail cycle. The lack of new supply has allowed more metros and properties beyond the top tier to participate in the recovery. We expect new supply to remain below historical norms through the duration of the forecast; however, we do see a pipeline of redevelopment and shopping center expansion projects supplementing new construction. Our rent forecast for our investible universe is expected to average 3% annually over the next five years with the most growth occurring within the early years of the forecast.

As of the third quarter of 2017 year-over-year rent growth totalled 3.2%, and remains on pace to meet the forecast.

In terms of geography, our list of top target markets includes the growth and lifestyle metros that are enjoying gains in employment, incomes, and population such as Austin, Portland and Dallas. We continue to stress selectivity and targeting high-quality assets in premier trade areas that are characterized by the confluence of density, strong demographics and growth potential due to underlying economic drivers and property fundamentals.

<sup>21</sup> Source: Bureau of Labor Statistics. Data as of 12/2016.

<sup>22</sup> Source: The Atlanta Federal Reserve. Data as of 11/30/2016.

<sup>23</sup> Source: University of Michigan. Data as of 11/2016.

<sup>24</sup> Source: United States Census Bureau. Data as of 12/2016.

Returns in Orlando and Phoenix slowed during 2017, and underperformed the retail NPI as of the third quarter of 2017. At the same time, Miami outperformed the index by 50 bps.

Dallas and Houston are showing continued strength and remain top-quartile performers out of our investable universe.

Boston and DC have continued to underperform. Meanwhile, performance in LA has accelerated.

We affirm our thesis on regional markets, driven by job, population, and income growth prospects.

Total returns for retail properties dipped below those of the NCREIF Property Index (NPI) in the second quarter of 2017 for the first time since 2012 on a year-over-year basis, and underperformed by 80 basis points (6.1%) in the third quarter.

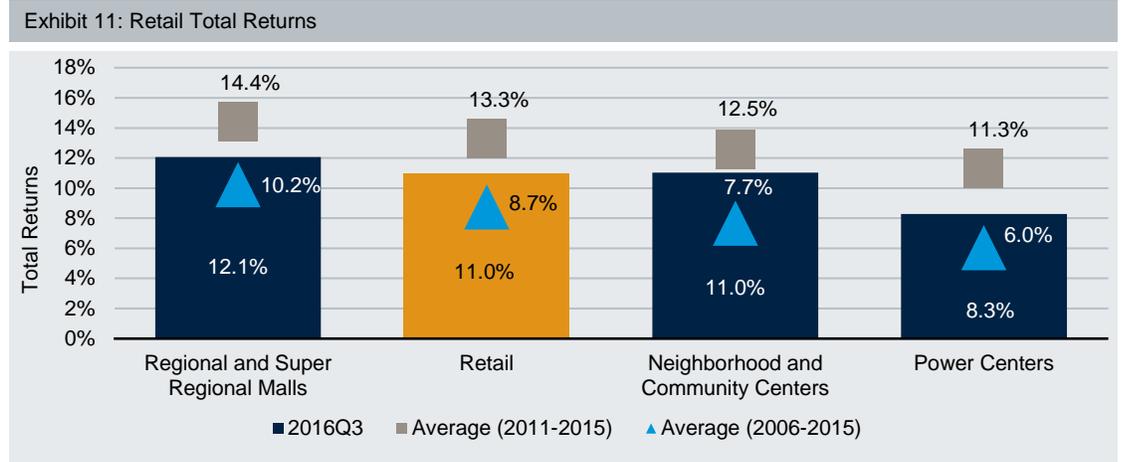
Our view is Amazon's purchase of Whole Foods substantiates our thesis on brick-and-mortar retail real estate and highlights the benefits of a physical presence.

Returns for neighborhood and community centers, totalled 6.5% year-over-year as of the third quarter 2017, and outperformed both the office and apartment sectors.

This particular property type is well suited to meet current demand trends from dining, fitness, service, and value-oriented retailers.

Despite softness in the apparel sector, super regional malls continue to hand in strong performance with returns as of the third quarter of 2017 matching that of neighbourhood and community centers. However, at 5% returns for regional malls underperformed the retail sector.

NCREIF performance in the top tourist destinations, Orlando, Phoenix, and Miami, continued to deliver strong returns in the third quarter of 2016. Metros such as Dallas, Houston, and Atlanta, benefitting from population growth, outperformed the index, and are benefitting from falling vacancies. Meanwhile, retail property underperformed in gateway metros such as Los Angeles, Boston, and New York. Investors continue to pay a premium for assets in top coastal markets; over the near term our forecasts suggest that dynamic regional markets will deliver superior risk-adjusted returns. Super regional malls continued to dominate, but returns for regional malls have started to slip while neighborhood and community centers performed well. Power centers trailed the NPI despite elevated income returns (see Exhibit 11).



Source: NCREIF. Data as of September 2016. Past performance is not indicative of future returns.

We recognize e-commerce will continue to be the major influencing factor in the future of physical retail real estate, as online sales grow 15%-18% annually over the next five years.<sup>25</sup> As retailers build out omni-channel platforms and the distribution networks needed to support expedient delivery, we continue to emphasize the importance of the physical real estate's proximity to customers. Over time, the distribution channel and the online and brick-and-mortar store will become seamless and complement one another to improve the overall customer experience.

The key elements that inform our retail strategy include:

- **Grocery-Anchored Retail:** Neighborhood and community shopping centers are starting to gather momentum and could be offering the best risk-adjusted returns compared to other retail property types over the next five years. Trailing 12-month returns for neighborhood and community shopping centers began to pick up due to strengthening demand and declining vacancies in the second quarter of 2016. Additionally, the improving health of in-line tenants is lifting the performance of grocery anchored centers. Shopping center owners are creating centers that provide daily needs and durable traffic by adding updated uses such as entertainment, quick-service restaurants, fitness/wellness concepts, and traditional service tenants such as medical services, dentists and salons to complement anchors, providing additional drawing power and customer traffic. All of these services cannot be replicated online. These types of centers are becoming more service oriented or necessity-based, building a tenant line-up that is resistant to the risk of Internet competition.

- **Malls:** Dominant malls emerged from the recession as top performers due to their scale, leasing power, vintage year of long-term leases signed during peak retail years and supplementary percentage-rent lease structures. However, even the best malls and anchors have not been immune to e-commerce risks. Traditional department store anchors are undergoing a prolonged period of space rationalization due to declining traffic

<sup>25</sup> Source: Forrester Research as of May 2016

and sales, and competition from both the Internet and specialty brands. 2016 marked a peak year for department store closure announcements since the recession<sup>26</sup>, and due to high-level company management issues we anticipate this trend will continue into 2017. In the near term, mall returns will likely abate as anchor vacancies are worked out and reconfigured. However, to the upside, repositioning these vacant anchor spaces with more productive tenants at higher rents could drive NOI growth. While not a core strategy, this may present unique opportunities to participate in the repositioning of dominant malls, centers or mall expansions through different positions in the capital stack.

- **Urban and High Street Retail:** Our urban and High Street retail strategy targets iconic retail asset within dominant retail corridors that leverage the dynamics that retailers covet and will seek as flagship locations over the long term. We view these High Street and urban shopping districts as potential long-term outperformers due to their ability to produce higher sales than traditional retail settings and visibility for brands. A strengthening U.S. dollar and weak global growth are impacting the luxury retail category and international travel and spending volume in major tourist destinations. However, the draw, tenant mix and prominence of these locations underscore the long-term viability of these global districts. The ability to utilize storefronts as billboards to create meaningful consumer experiences is vital for retailers. Our view is that this type of location will become even more valuable over time, particularly in the face of online shopping. These types of high-profile properties may prove to be the more efficient marketing and distribution channels for retailers than online or email marketing to acquire and service customers.
- **Power Centers:** We continue to underweight power centers. Power centers are typically occupied by big-box retailers and are merchandised with commoditized goods. These tenants are focused on “right-sizing” and growing an online model of their own to compete with pure-play e-commerce retailers. We believe power retail will generally be more vulnerable to store closings, bankruptcies, and downsizings in comparison to more dynamic retail strategies, and will not be able to deliver a retail experience that will hold up against e-commerce over time.

## 7 Office Outlook and Strategy

### 7.1 Current Conditions

Though overall U.S. market conditions in 2017 are healthy.

Office-using payrolls growth slipped to 1.9% YTD September 2017; still outperforming the overall U.S. growth at 1.2%.

Vacancy appears to have stabilized in the low-11% range.

Following an erratic start to the year, the U.S. office market never achieved the momentum expected to materialize in 2016. By December, office-using job growth, leasing fundamentals, pricing and returns were still not quite in alignment, leading to mixed investor sentiment. A confluence of factors that individually might not have been overly disruptive collectively held back momentum, including: financial market volatility, skepticism regarding tech valuations, pullbacks in venture capital (VC) funding, a return of speculative development and the elections.

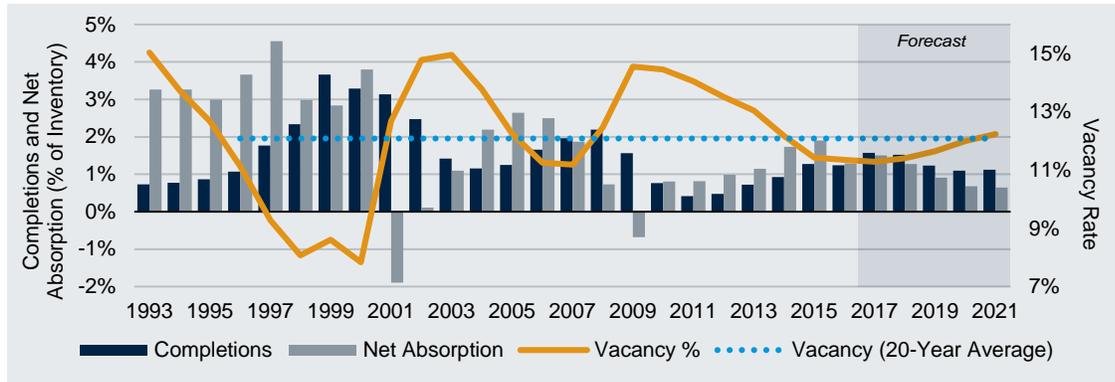
Demand indicators are generally strong, but not producing velocity and performance typical in this phase of the cycle, even with more suburban markets expanding. Office-using payrolls grew a healthy 2.3% year-over-year, outpacing overall employment growth, while also surpassing high-tech employment growth for the first time since 2007.<sup>27</sup> Vacancy at the end of 2016 was 11.3%, level with the previous year (see Exhibit 12), although only modestly higher than the previous trough of 11.2% in 2007.<sup>28</sup>

<sup>26</sup> Cushman & Wakefield as of December 2016

<sup>27</sup> Moody's Analytics/Economy.com. Data as of December 2016.

<sup>28</sup> Deutsche Asset Management & CBRE-EA. Data as of December 2016.

Exhibit 12: Office Absorption and Completions % of Inventory and Vacancy Rate (1993-2020)



Source: CBRE-EA (history); Deutsche Asset Management (forecast). Data as of November 2016. No assurance can be given that any forecast or target will be achieved. Past may not be indicative of future results.

Trend continues, asking rents up 3% in 3Q17.

Effective rents grew at a more healthy 2.5% in 3Q17 from a year ago as absorption rebounded in the summer, allowing concession to ease a bit.

NCREIF office returns fell to 5.7% in 3Q17 due to limited appreciation gains relative to the other sectors.

Weak return performance continues in 3Q17: Houston (0%). Wash. DC (2.8%) and New York (3.6%)

Growth is spreading into most prime Suburban markets.

Large premium remains: 77.6% spread over Suburban.

The burbs aren't dead, U.S. Suburban markets captured over 75% of year-to-date absorption through 3Q17.

Growth rebounding: CBD and Suburban effective rents grew 2.9% and 2.7%, respectively, in 3Q17 from a year ago.

Limited availability lent to strong asking rent growth, up 3.3% year-over-year as of 3Q. Weak absorption, however, weighed on effective rents, up just 1.4% year-over-year through 3Q (latest data available)<sup>29</sup>, as greater concession packages were employed to attract scarce demand. Since 2008, average tenant improvement allowances were up 66%, and free rent up 73%.<sup>30</sup> Rising capital expenditures in part drove NCREIF office returns to a 7.5% 12-month trailing return in 3Q from 12% at the end of 2015<sup>31</sup> – the lowest rate of return among all product types. The NCREIF office return was also biased lower due to the weak performance of a few Gateway metros the 12 months through 3Q, notably Houston (-3.2%), Washington DC (4.2%) and New York (6.3%), each of which carry outsized weight in the overall index.

Subtracting the performance of these markets from the index would have lifted performance to 8.6% during this period. While still weak compared to the other sectors, it would have been roughly in line with the apartment sector at 8.5%. This highlights the disparity in performance of office performance across markets. Likewise, transaction volume by year-end was down 50% year-over-year to \$10.5B, remaining well off previous peak volume.<sup>32</sup> Yet, price per pound increased 13% during the year and cap rates compressed to historical lows.<sup>33</sup>

The variation in performance between Central Business District (CBD) versus Suburban markets has persisted through this year, to the benefit of the CBD, but some Suburban growth has occurred. Select “urban fringe” nodes, or Suburban office markets proximate to major CBDs, with high levels of accessibility and an urbanized feel, are exhibiting growth, as are the best Suburban nodes in regional markets still highly automobile-centric. CBD office space commands a 76.5% premium to suburban space, contracting from 78.6% at the close of 2015, though still well above the 54% long-term spread (see Exhibit 12).<sup>34</sup> Since the recession, the spread widened as a result of densification allowing more companies into CBD locations as well as the growing preference of today’s workforce to be located in an urbanized, accessible area. The recent narrowing in effective rents between the CBD and suburbs is not surprising given tight availability and lack of absorption in CBD markets during 2016.

By the end of 2016, U.S. suburban markets in total accounted for nearly 100% of year-to-date net absorption through 3Q, driven by increased activity in urban fringe locations, and lack of availability in CBD nodes (see Exhibit 13).<sup>35</sup> The effective spread remains close to peak levels, but we are likely to see more narrowing. In spite of recent suburban activity, the narrowing in spread is less the result of suburban rents growing than of CBD rates falling and concessions rising. Through 3Q, CBD effective rents were flat and suburban effective rents were up a modest 1.5% (latest data available).<sup>36</sup>

<sup>29</sup> CBRE-EA. Data as of December 2016.

<sup>30</sup> Newark Grubb Knight Frank (NGKF). Data as of December 2016.

<sup>31</sup> NCREIF. Data as of December 2016.

<sup>32</sup> Real Capital Analytics. Data as of December 2016.

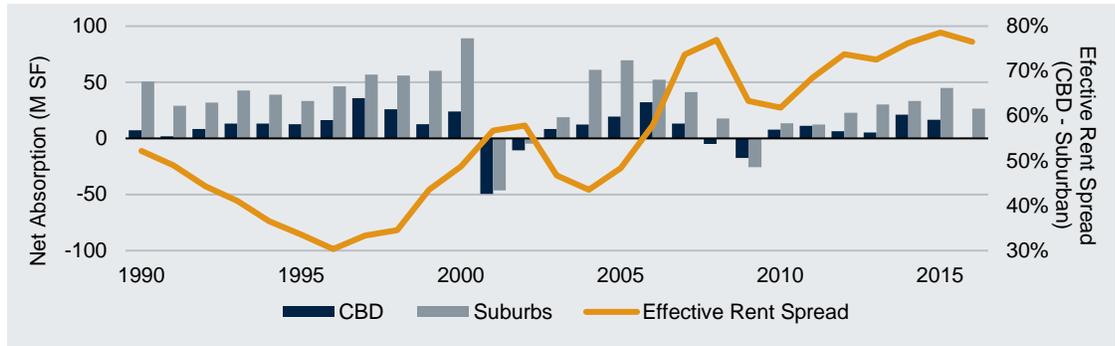
<sup>33</sup> Real Capital Analytics. Data as of December 2016.

<sup>34</sup> CBRE-EA. Data as of December 2016.

<sup>35</sup> CBRE-EA. Data as of December 2016.

<sup>36</sup> CBRE-EA. Data as of December 2016.

Exhibit 13: Office Absorption (1990-2016Q3)



Source: CBRE-EA. Data as of September 2016. Past may not be indicative of future results.

## 7.2 Outlook and Strategy

The variation in performance compared with previous cycles can be attributed to a lack of ramp up in demand and absorption related to the over-hang of shadow space and ongoing space densification. Themes underlying the velocity that has transpired and that will continue to frame our outlook include:

Still weighing on performance.

These emerging live/work/play districts remain hot.

— **Emerging Districts:** Boston Seaport, Midtown South, Seattle South Lake Union, West Loop Chicago. The rise and emergence of these newer districts has occurred at the expense of traditional nodes.

— **The Creative Office:** The newer product type – older, low rise industrial conversions and brick and beam – has rendered much of the older, traditional glass and steel and suburban office product functionally challenged.

Yes, seeing more evidence of this.

— **Densification:** Most tenants have densified, and while there are outstanding leases that will still include space efficiency measures, the degree of densification has likely plateaued, and some pushback is emerging.

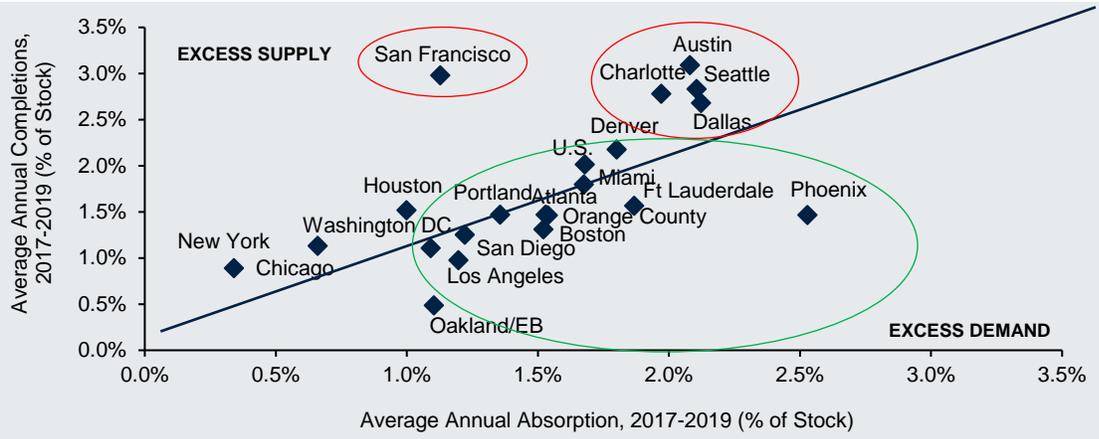
Also add renovating existing product into Creative Office space.

— **New Development:** Although for much of the cycle development was disciplined, speculative development is coming back but through necessity. Much existing office stock cannot accommodate the density, technology and lifestyle demands of today's tenants.

Yes, rent growth in regional or secondary markets continue to outpace Gateway metros.

These themes, predominantly associated with CBD markets, have allowed the CBD office markets to capture the lion's share of growth in this cycle. The markets benefitting first were the Gateway metros, but in the past couple of years, regional or secondary markets have begun to show strength. Likewise, some suburban markets are experiencing more development, contributing to the ramp up in supply expected for the overall U.S. office market.

Exhibit 14: Office Absorption and Completions % of Inventory (2017-2019)



Source: Deutsche Asset Management. As of November 2016. No assurance can be given that any forecast or target will be achieved. Past may not be indicative of future results.

New speculative office construction for 2017 on track to surpass 2016.

As of 3Q, office development accounted for 2% of existing stock, on pace with the 2.1% 20-year average.<sup>37</sup> Markets that will record a higher share of deliveries, and possibly outpace demand include tech-centric metros, where tenants demand new construction, and metros experiencing suburban recovery: San Jose, San Francisco, Seattle, Dallas, Austin, Charlotte (see Exhibit 14). With the exception of San Francisco and San Jose, vacancies are lower than the previous troughs. Construction is also riskier in metros like San Francisco, where only a third of development is pre-leased and the effective rent is 18% above the previous peak.<sup>38</sup>

San Jose's 3Q17 vacancy rate is now in the low double-digits.

Other trends we expect will have implications for our acquisition strategy, particularly at the asset level, during our five-year forecast period include:

- **Co-working Exposure:** New co-working entrants, and the participation of corporates in this area (e.g. Verizon, Microsoft, State Farm) will test metros with significant co-working exposure, and those metros should be regarded with caution. Corporates entering the field are offering co-working space with the possibility of further networking and joint venture opportunities.
- **"Customer" Experience:** The experience of an office asset to the tenants and the clients coming through the building will grow amenities further, enabled by the "Internet of Things" to guide this process. The wellness component (outdoor space, healthy food, better air and light circulation) will likely take on more importance. A recent survey by CBRE showed more than 90% of corporate real estate executives expect to incorporate wellness into their planning.<sup>+</sup> Assets with characteristics in alignment with these priorities should be considered.

Trend to urban fringe continues – watching where Amazon plants its flag for HQ2.

- **Return of the Campus:** As CBD markets become increasingly tight, and large-block options limited, urban fringe locations in the most outer rings of the CBD into the suburbs, with a "24/7", urbanized feel, will benefit. New developments in these fringe markets are able to offer state-of-the-art product, alongside many of the amenities found in CBD markets, but also at a lower price point, and could offer an opportunistic play.

Still holds.

Effective rents in 3Q17 were down 2% from a year ago in the nation's capital.

This cycle has been markedly different from past cycles, and in the context of the length and momentum achieved thus far, our five-year outlook shows a muted office environment. Likewise, our shift in focus away from Gateway metros (New York, Washington D.C., and San Francisco), where NOI growth is trailing the U.S. average to regional metros that have lagged and that we expect to benefit from more rent growth, should be maintained. We continue to

Regional markets producing annual rent growth over 4% in 3Q17: Atlanta, Austin, Charlotte, Phoenix, Portland, and West Palm Beach.

<sup>37</sup> Deutsche Asset Management, CoStar, & CBRE-EA. Data as of December 2016.

<sup>38</sup> CBRE-EA. Data as of December 2016.

+ CBRE Health and Wellness Survey 2015 Source: CBRE-EA as of December 2016.

advocate targeting best-in-class assets in “A” locations, including high-amenity, “urbanized” submarkets with a strong multifamily component. We remain bearish toward traditional suburban office vulnerable to shifting tenant preferences in favour of urban environments.

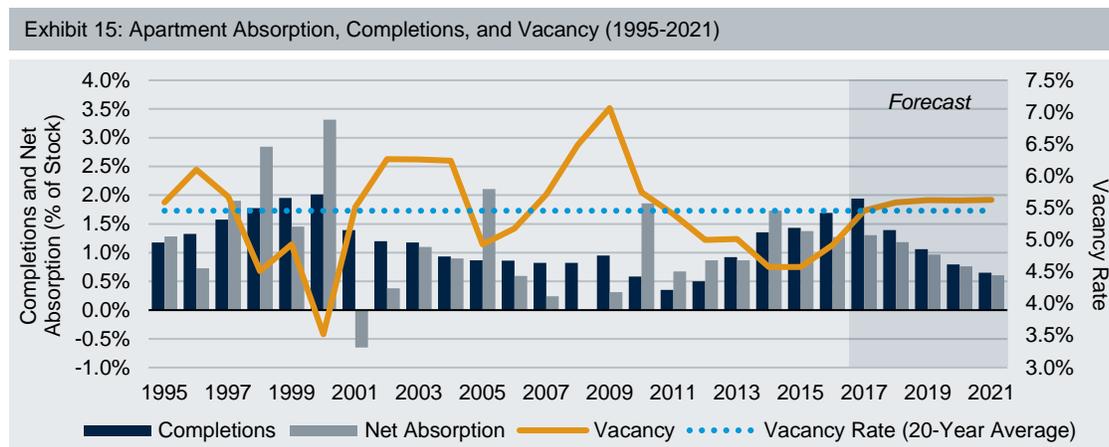
## 8 Apartment Outlook and Strategy

### 8.1 Current Conditions

Signals continued to emerge in late 2016 that despite a still tight space market, the apartment sector was moving into the mature stage of the cycle. The nation’s vacancy rate was 4.6% as of the third quarter, up 30 basis points over the past year, the third consecutive quarter of year-over-year increases (see Exhibit 15)<sup>39</sup>. Prior to the second quarter of 2016, vacancy had been flat or declining for 25 straight quarters. Still, vacancy continues to hover around historical lows because demand for apartments remained historically strong. After an average of roughly 200,000 units of net absorption in 2014 and 2015, net absorption is expected to total around 170,000 units in 2016, well above the long-term average of about 135,000 units.<sup>40</sup>

The overall vacancy rate in the 3Q17 is up 10 bps from a year ago, marking 6 consecutive quarters with year-over-year increases.

Net absorption is already over 200,000 units YTD 3Q17 reflecting the continued strong demand for apartments.



Sources: CBRE-EA (history); Deutsche Asset Management (forecast). As of December 2016. No assurance can be given that any forecast or target will be achieved. Past may not be indicative of future results.

Despite strong demand, supply pressures continue to build, pushing vacancy higher. Completions outpaced net absorption by 8,000 units in 2015 and that spread is likely to multiply<sup>41</sup>. As a result of this increased supply and high nominal rent levels, rent growth has slowed substantially. After topping 5.0% in mid-2015, year-over-year national effective rent growth fell to 2.6% at the end of 2016. This marked the lowest annual rent growth since the second quarter of 2010. After outperforming following the recession, rent growth in Class A apartments (much of it in the urban core) has lagged behind that of lower quality product due to new supply being concentrated in this space (see Exhibit 16)<sup>42</sup>. Over the past year, Class A rents grew 1.7%. Still, growth of Class B and C product has been on the decline in recent quarters as well, growing 2.5% and 2.8%, respectively, over the past year.

MF permitting and construction starts remain elevated signalling that the ongoing construction cycle has a few more years to go.

Effective rent growth for the 3Q17 was 2.3% higher from a year earlier, well below the last 5 years when the sector averaged 3.6% growth per year.

#### Exhibit 16: Class A Apartments Underperforming

<sup>39</sup> CBRE Econometrics, January 2017.

<sup>40</sup> CBRE Econometrics, September 2016, Deutsche Asset Management January 2017.

<sup>41</sup> CBRE Econometrics, September 2016.

<sup>42</sup> Axiometrics, January 2017.



Sources: CBRE-EA (history); Deutsche Asset Management (forecast). As of December 2016. Past performance is not indicative of future results.

Effective rent growth YTD September rebounded to positive for the San Francisco Bay Area, but remained in the red for Houston and New York.

Many of the markets where rent growth has slowed the quickest are also some of the largest, and have therefore had an outsized effect on national rent growth. Among the seven metros that recorded negative effective rent growth in 2016 were Houston, San Francisco, San Jose, Oakland and New York<sup>43</sup>. On the other hand, Sunbelt and Tertiary metros continue to dominate the top of the list. The top performers include Riverside, Phoenix, Atlanta and Orange County along with smaller MSAs, such as Sacramento, Las Vegas and Salt Lake City.

Investors continue to covet trophy properties in core markets – initial yields remain low.

Softening fundamentals in downtown submarkets have not deterred investors; we estimate that the average going in cap rate for urban core product is currently 4.6% in our 26 investable markets, with many prime assets trading under 4.0%<sup>44</sup>. However, this is a 10 basis point increase from six months ago, potentially reflecting some minor pricing adjustment, though whether this is a result of rising interest rates or slowing fundamentals remains to be seen.

NCREIF apartment returns slowed further to 6.2% in 3Q17.

Annual NCREIF Property Index total returns for the apartment sector slowed to 8.5% in the third quarter of 2016<sup>45</sup>. Western metros have been the primary outperformers; Portland, Riverside, Oakland, Denver, Phoenix, San Diego, Seattle, Orange County all exhibited total returns of 10% or more over the past year. In contrast, several slower growth Midwest and East Coast markets, along with Houston and San Francisco, make up most of the bottom of the list with total returns in the single digits. Among apartment property subtypes, garden apartments are the top performers, returning 11.1% over the last year as of third quarter 2016. Despite their popularity with investors, high-rise properties have lagged behind, returning 7.0%, 290 basis points below the subtype's five-year average annualized return. The high-rise will likely underperform again in 2017 as significant supply continues to come online in the urban core.

Only Orange County posted a total return over 10% in 3Q17 though strong results were also achieved in Seattle (9.2%), Denver (8.4%), Phx (8.2%), and LA (8%).

Add Chicago, New York and Wash DC to the list of core metros posting 3Q17 total returns under 5%.

## 8.2 Outlook and Strategy

Total returns for high-rise properties dropped to just 4.9% in 3Q17.

While favorable macro trends should continue to sustain healthy renter demand, it is unlikely to offset the expected flood of new supply. New deliveries are projected to average 230,000 units per year from 2016 to 2018 – 73% above their long-term annual average of 132,000 units<sup>46</sup>. Still healthy net absorption will likely not keep pace and as a result, vacancies are forecasted to increase by 60 basis points during 2017. Declining supply growth in the outer years of the forecast will put demand and supply closer in balance, resulting in a vacancy rate around 5.6%. Upward pressure on vacancy is expected to cause rent growth to continue to moderate.

MF permitting in September 2017 (rolling 12 months) was just under 400,000 units confirming that this near-term new supply forecast will likely be met.

Yes, despite strong renter demand, vacancy rates are rising in 2017.

<sup>43</sup> Axiometrics, January 2017.

<sup>44</sup> Deutsche Asset Management, December 2016.

<sup>45</sup> NCREIF, November 2016.

<sup>46</sup> Deutsche Asset Management December 2016, CBRE Econometrics September 2016.

Due weakest in Austin, Chicago, Houston, Miami, NY, SF, and Wash DC, average rent growth for the 26 investable markets was up just 2% in 3Q17 from a year earlier.

Still in line with expectations

Looks good so far, annual rent growth in the 3Q17 for Riverside (4.6%), Phoenix (4.5%), San Diego (4.4%), and Atlanta (3.1%) are all well above the US average of 2.3%.

Still holds.

In many prime urban core areas located in Gateway markets, 1 to 2 months of free rent are being offered to lease vacant units.

Despite rising concessions in luxury CBD apartments, the "affordability migration" trend continues.

Just like their parents, older Millennials are beginning to move to the suburbs  
Housing affordability remains at decade low in 3Q17.

We project overall rent growth in our 26 investable markets to drop to 2.6% in 2017, down from around 3.1% year-over-year in the third quarter of 2016. With vacancy projected to hover around 5.6% on the back end of the forecast period, slightly above its long-term average of 5.5%, rent growth will also trend near its longer term average of roughly 2.5%. As many major coastal markets are exhibiting decelerating rent growth, it will be late-recovery Sunbelt markets that should bolster national rent growth over the next several years. In 2017, we expect metros such as Riverside, Phoenix, San Diego and Atlanta to exhibit the highest effective rent growth.

Slowing rent growth and rising vacancy, combined with very low yields, will likely limit the property type's ability to produce strong total returns relative to the other main property types. Given that many prime apartment markets are fully valued, attractive investment opportunities have become more limited. With the construction cycle in full swing, investors need to be more patient and selective when acquiring apartment assets in the current low-yield and slowing NOI growth environment. Although we believe the prime markets should be viewed as strategic long-term performers, elevated pricing in these locations will likely constrain total returns in the near term. Our major strategic themes include:

— **Selectivity in the Urban Core:** Given the flood of new supply into CBDs, especially within the luxury segment, coupled with still elevated pricing and low yields, selectivity will be key for any downtown acquisition targets. Only the best located properties with unique amenities should be considered. Proximity to grocers, parks, trails, etc. may help distinguish a property from the plethora of competitors. Moreover, the flood of high-end product being delivered may have implications for rent levels across the spectrum. As this product is delivered, downtown markets are already experiencing an adjustment period as properties once considered Class A may have to contend for renters further down the income scale. In the near-term, garden properties are likely to outperform given less supply headwinds and more affordable rent levels. Still, forecasts indicate 2017 will likely be the peak year for deliveries<sup>47</sup>. With that in mind, there may be opportunities to acquire prime assets should capital markets adjust to the slowing fundamentals in the urban core.

— **Urban Nodes Outside of the CBD:** With an unprecedented amount of high-end supply being delivered into the urban core, greater opportunities may instead exist in "urban nodes" located outside of CBDs. We consider "urban nodes" to be amenitized, transit-oriented nodes with a nearby employment base that exist in inner-ring suburbs. Many of these areas provide investors some yield premium over prime urban core product and are still supported by the demand trend towards living in more urbanized locations. These neighborhoods also benefit from "affordability migration" out of core urban locations as many people are being priced out of CBDs due to several years of high rent growth and new supply being concentrated in the luxury space of the market. Suburban areas that share some characteristics with an urban node could also fit into this strategy, but should still be located in high-population growth markets. A very high walk score may not always be necessary; one should not shy away from inner suburbs where driving is still the main mode of commuting. Opportunities exist in areas that may still require driving for some errands, but where residents can still access walkable town centers and urban-like areas for entertainment and other purposes. This "urban node" strategy plays on two major demographic trends:

With the front end of the Millennial generation now at age 35, urban nodes may provide a good outlet for **Millennials who marry and want to have a child** outside of the CBD without having to give up amenities that an urban environment provides. With homeownership expected to remain unaffordable for many, urban nodes could become destinations for this growing group. This is also a strategy that could benefit from **downsizing baby boomers**. We believe urban nodes will be more attractive to an older renter who is downsizing than moving from a house in the suburbs all the way into the CBD. While baby boomers may be looking to downsize, they also have accumulated more

<sup>47</sup> Deutsche Asset Management, December 2016

furniture and households items over the years and will likely be more amenable to a somewhat spacious apartment in an urban node setting rather than the tight floor plans of most newly built properties in Downtown locations.

Strong performance continues, NCREIF returns for Suburban product were 8.6% in 3Q17.

- **Suburban/Garden Apartments:** While Garden properties in Suburban locations have outperformed most recently, we don't believe this segment is necessarily a long-term outperformer. However, a well-balanced apartment portfolio does benefit from suburban exposure. Properties in the suburbs should meet very specific criteria, foremost being that they **should be in good school systems as well as exhibit strong population growth**. The further out from the urban core you move, the more critical population growth becomes. Should any significant in-migration to the urban core occur, it could leave a low growth suburban area exposed to a lack of a renter pool.

## Appendix 1: U.S. House Portfolio

The Deutsche Asset Management House Portfolio presents the allocation by property sector for core portfolios in the United States which we believe would outperform the NPI. We develop the House Portfolio as an unlevered portfolio of properties for a U.S. investor without regard to tax consequences. The House Portfolio is formulated using both quantitative and qualitative modeling, integrated with our House View. The resulting weights, we believe, aid in providing long-term risk-adjusted outperformance to our portfolios versus the market as a whole and against relevant benchmarks and indices. The analysis focuses on the four major property sectors and excludes hotels. The following table summarizes our conclusions on weightings in comparison with the NPI. The analysis results in an active overweight to the industrial sector, a market weight to the office sector and retail sectors, and an underweight to the apartment sector.

Allocation recommendations and rationale for 2017					
Sector	NPI Weights	Research Perspective	House Portfolio	Active Bet	Recommended House Portfolio Range
Apartments	25%	<ul style="list-style-type: none"> <li>— Economic expansion fueling household formation.</li> <li>— Decline in homeownership may not continue.</li> <li>— Higher construction causing vacancy rates to rise, NOI growth to fall.</li> <li>— Cap rates lowest among sectors.</li> </ul>	18%	(7%)	13% - 23%
Industrial	14%	<ul style="list-style-type: none"> <li>— Benefits from expanding U.S. population and job gains as well as e-commerce, housing production, and trade.</li> <li>— Speculative construction is rising but demand should still outpace. Good environment for build-to-core.</li> <li>— Solid rent and NOI growth expected in near term.</li> <li>— Smaller &amp; mid-sized warehouses poised to outperform.</li> <li>— Flex/R&amp;D is recovering, but limited to the west region.</li> </ul>	23%	+9%	18% - 28%
Office	37%	<ul style="list-style-type: none"> <li>— Job growth will continue to increase office space demand, but some uncertainty near-term could work against absorption.</li> <li>— Flat vacancy resulting in anemic rent growth in CBDs, but more growth expected as vacancy remains under the long-term average through 2020.</li> <li>— Rent recovery has extended to suburban markets, supported by increased absorption and critical new supply.</li> </ul>	35%	(2%)	30% - 40%
Retail	23%	<ul style="list-style-type: none"> <li>— E-commerce restraining store openings, but convenience and service (health, fitness, dining) retail expanding.</li> <li>— Lack of new supply contributing to improving fundamentals.</li> <li>— Rent growth becoming more broad-based.</li> <li>— Long duration leases provide stable income.</li> </ul>	24%	+1%	19% - 29%
Hotel	1%	N/A	0%	(1%)	0%

Sources: NCREIF Property Index (“NPI”) and Deutsche Asset Management. As of December 2016. No assurance can be given that any forecast or target will be achieved.

## Appendix 2: Real Estate Target Markets

**Investible Metros:** We screened top U.S. metros, which represent 86% of the NCREIF Property Index (NPI), and identified the investment markets for each property sector that we believe have the best prospects for superior performance during the market cycle or a portion of it. This metro selection is based on property market size, liquidity, growth characteristics, income, historical returns and other factors indicative of future performance. The list of these metros remains generally static, although some metros may be added or subtracted over time due to structural market changes

**Target Investible Metros:** These are a subset of the universe of investible metros and include markets expected to outperform or market perform during the next three to five years.

Investible and Target Markets				
Market	↑ Overweight	↓ Underweight	↔ Market Weight	
	Apartments	Industrial	Office	Retail
Atlanta	↔	↔	↑	↔
Austin	↔	↔	↔	↑
Baltimore	↓	↓		
Boston	↔		↑	↔
Charlotte	↓		↓	↔
Chicago	↓	↓	↓	↓
Dallas	↓	↓	↔	↑
Denver	↔	↔	↓	↔
Fort Lauderdale	↑	↑	↑	↑
Houston	↓	↓	↓	↓
Los Angeles	↔	↔	↔	↔
Miami	↔	↔	↔	↔
Minneapolis	↓	↓		↓
New York	↓	↑	↓	↓
Oakland / East Bay	↔	↑	↔	↑
Orange County	↑	↑	↑	↔
Philadelphia	↓			↓
Phoenix	↑	↔	↔	
Portland	↔	↑	↑	↑
Riverside	↑	↔		
San Diego	↑	↑	↔	↔
San Francisco	↓	↔	↓	↔
San Jose	↓	↑	↔	↑
Seattle	↓	↑	↔	↔
Washington DC	↓	↓	↓	↔
West Palm Beach	↑			↔

Source: Deutsche Asset Management. Data as of December 2016. No assurance can be given that any forecast or target will be achieved.

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