

# U.S. COMMERCIAL REAL ESTATE OUTLOOK UPDATE

## TD Economics



January 4, 2017

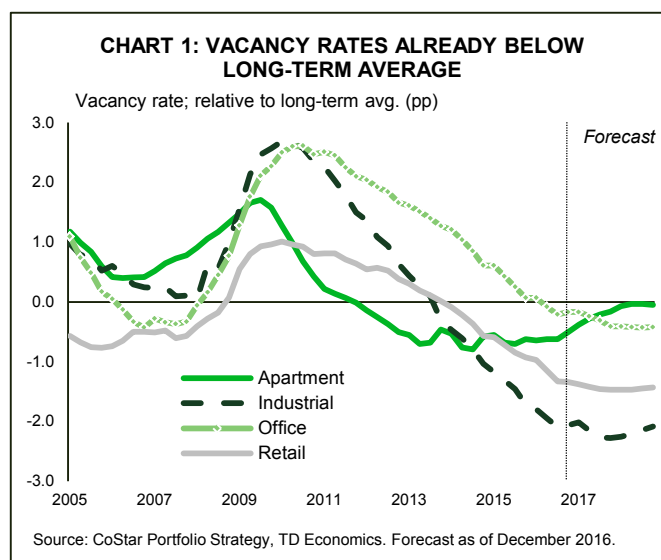
## U.S. COMMERCIAL REAL ESTATE MARKET SET TO CONVERGE WITH FUNDAMENTALS

### Highlights

- The U.S. commercial real estate market continues to be underpinned by relatively healthy fundamentals, but several of the risks highlighted in our outlook last year remain in place.
- Cap rate spreads are narrow. While slowing price growth should help stabilize capitalization rates, gradually rising interest rates will continue to pressure spreads. These are already wafer-thin in some markets, leaving them particularly vulnerable to an interest rate or demand-related shock.
- Additionally, the significant supply pipeline of apartments continues to loom over several major markets, and will likely lead to an uptick in vacancies. Demand weakness still remains a concern in markets exposed to the federal government, oil & gas, and financial sectors. The retail market, on the other hand, appears to be coping well with rising e-commerce activity.
- Interest rates should rise more gradually going forward, but one cannot discount the possibility of another lurch up in yields, particularly given the significant policy uncertainty.

In our [previous](#) Commercial Real Estate Outlook, published in early-2016, we determined that the overall fundamentals were healthy, but highlighted some risks facing the market. The key risk at the time stemmed from rapidly rising property prices, particularly apparent in large gateway cities, which sharply narrowed cap rate spreads, making these markets more vulnerable to correction. Additionally, we highlighted several segment-specific risks, including: a potential supply shock related to a large apartment pipeline, weakness in office demand related to federal government, oil & gas, and financial industry cutbacks, and softening demand for retail space from rising e-commerce activity. In this update we take stock of how these dynamics have played last year and highlight themes to watch for this year and next.

Overall, we expect the commercial real estate (CRE) market to exhibit healthy growth, but reflect a slowdown alongside broader macroeconomic cyclical factors. Vacancies have fallen below typical cycle lows across all CRE segments (see Chart 1) and are unlikely to push much lower. Demand should remain relatively well supported on the back of resilient, albeit moderating, economic growth, and will be increasingly met with rising supply as previously-started projects become completed. As such, rent growth is likely to slow and put some pressure on incomes and cap rates. Interest rates will likely hold onto much of their recent advance, further reinforcing the pressure on cap rate spreads, but another surge in yields is unlikely with future increases projected to be gradual. Given the already narrow cap rate spreads, price growth should continue to decelerate to a more sustainable pace,

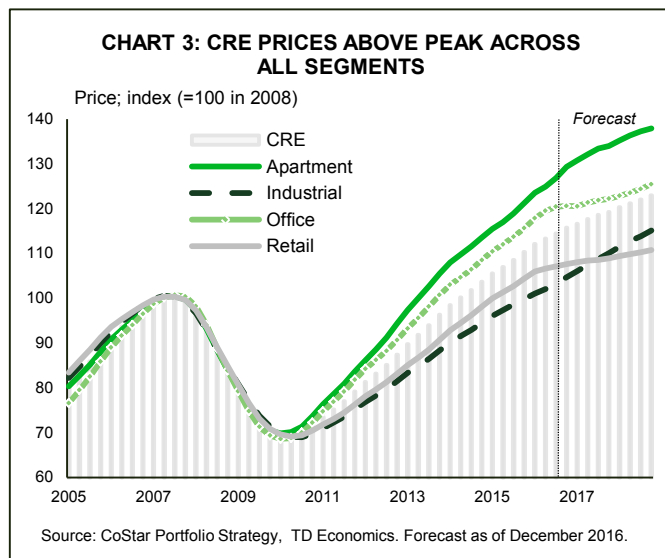


with the market expected to experience somewhat softer activity as credit conditions tighten and foreign investment slows – particularly across the main gateway markets. Lastly, while potential trade conflicts or higher interest rates related to unfunded deficits pose downside political risks, policies such as corporate tax cuts and infrastructure investment offer upside potential for the commercial real estate market.

### Demand for CRE to moderate from previous years

The U.S. economic recovery is now seven years old. The economy has added jobs for seventy-four consecutive months, with the tally approaching 15 million, with office-using industries contributing particularly strongly to this record. Robust job gains have pushed the unemployment rate down from 10% in 2009 to 4.6% in November – a level nearing its natural rate. As slack continues to diminish, cyclical factors that boosted growth will dissipate, and growth should moderate more in line with its fundamental pace.

Given the weakening demographic factors, growth is unlikely to reach much beyond the 2% mark unless labor productivity improves markedly. Job growth will also slow, from 1.8% earlier in the recovery to 1.2% over the coming years, with monthly job creation expected to fall well below the 150,000 pace. Slower hiring will weaken absorption across both the retail-type as well as office-using occupations, where job growth is expected to decelerate to 1.4% and 1.2%, respectively, with the former supported by health-care employment (see Chart 2). Hiring in industrial-type occupations will lag, but should nonetheless accelerate from 0.5% this year to 0.7% by 2018 as drag from manufacturing and mining diminishes, while distribution activity continues to improve.

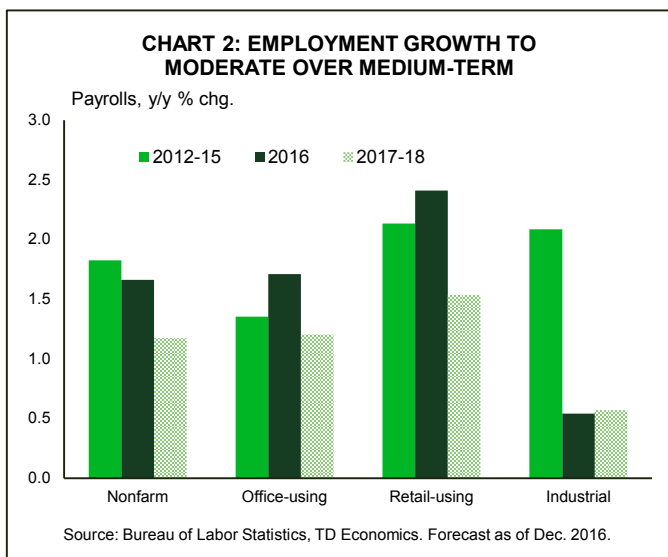


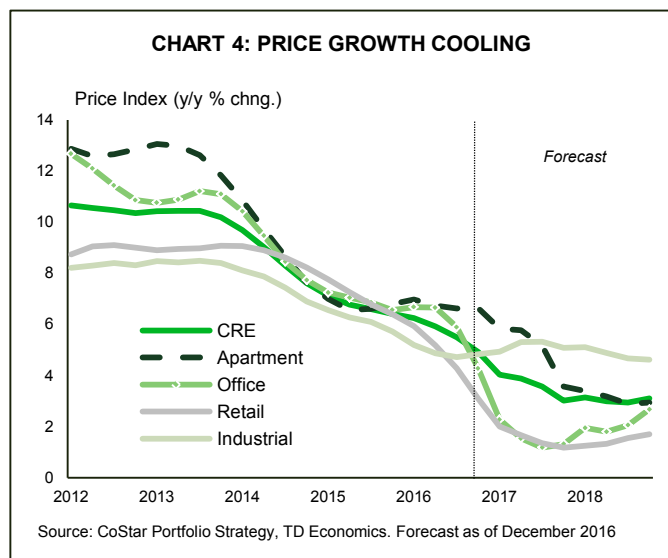
The slower payroll growth will moderate demand and result in a deceleration of rent growth. Alongside steady vacancy rates, this will weigh on operating income and put further pressure on cap rates – already at low levels across many major markets following years of blockbuster price growth.

### Slowing price growth should help mitigate risks

Prices of commercial real estate properties have been increasingly grabbing media attention and raising financial stability concerns amongst policymakers. Nationally, prices have risen more than two-thirds from the trough six years ago, with valuations now about 15% higher than their pre-recession peak (see Chart 3). Gains were particularly pronounced in many key knowledge-intensive economies across the Northeast, West Coast, and select inland IT hubs. Prices have effectively doubled in San Jose, New York, and Seattle since the trough, and are up more than three-quarters in Austin, Bridgeport, Washington D.C., Denver, and Boston. Multifamily and office properties have seen valuations rise by nearly 80% from the trough, with these segments now nearly 25% more expensive than during previous peaks. On the other hand, retail and industrial CRE prices saw less robust gains, up 50% since early-2010, but prices are nonetheless higher than their pre-recession peaks by 3% to 7%, respectively. Strong price gains have pushed cap rates to record lows, with spreads to government bond yields near their long-term average of approximately 400 basis points.

The narrowing of cap rate spreads appears to have begun weighing on price growth. Overall, prices advanced by about 5.5% from the previous year – the slowest pace





of the recovery and about half of the 2012-14 average. The price deceleration has been broad-based across segments, slowing to between 4% and 7% (see Chart 4). The price deceleration has also been geographically broad, and has been apparent in the high-priced markets including: New York, Boston, Washington, L.A., San Francisco, and, to a lesser extent, Seattle. Alongside moderate economic growth, the deceleration in price gains should help prevent further erosion of the cap rate spreads, and help avoid exacerbating the risks facing the CRE market.

#### Rates unlikely to lurch higher, but risks remain

Cap rate spreads vary substantially by market segment, so as to account for the risk profiles of various properties. On average, the premium above the risk free rate is about 300bps to 350bps for apartments and retail, around 400bps for industrial space and 450bps for office properties. Currently, the spread among industrial properties is nearly 70 basis points higher than its historical average – a healthy cushion should there be another lurch higher in bond yields. Likewise, the premium is some 15 basis points above the long-term average in the retail segment. The story sours in the remaining segments, with apartment cap rate spreads nearing the long-run average on the recent rapid run-up in bond yields, while office cap rate spreads have fallen some 80 basis points below that threshold nationally. Cap rate spreads in apartment and office segments are particularly wafer-thin in New York, Boston, Washington, and San Jose (see Table 1). Investor appetite could be tested should interest rates track significantly higher. The risk of this occurring is unlikely, but cannot be discounted altogether. The rapid

rise in yields in the fourth quarter was largely related to a rebound in inflation expectations and the term premium. These were arguably too low earlier in the year and much of the biggest leg of the adjustment is in the rear view. As such, interest rates should only move up very gradually – about 20 to 40 basis points per year – helped along by two dynamics. Firstly, the Fed tightening cycle, which begun over a year ago, is likely to be very glacial. We expect the Fed to raise rates by 25 to 50 basis points per year – less than a quarter of the pace of a typical cycle. Secondly, U.S. yields will likely be kept low by excess liquidity and low interest rates globally, with investors likely attracted to U.S. debt given its relatively higher yield.

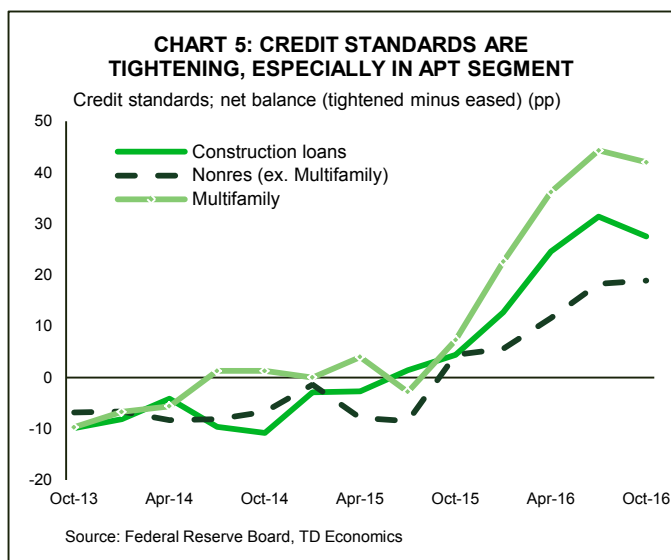
But, this doesn't completely remove interest rate risk from the landscape. Additional repricing higher of term- or inflation premiums is possible given the low historical levels, rising oil prices, and large outstanding uncertainty around future fiscal policy measures that could exacerbate inflation expectations. Should this occur, markets where cap rate spreads are already very narrow are most at risk of deteriorating investor sentiment.

#### Declines in activity could further weigh on prices

Softening fundamentals within the CRE market are already manifesting in transaction data. After setting a record in 2015, transaction activity is down nearly 10% relative to last year. Aside from cap rate spreads putting pressure on prices, this trend may be further reinforced by declines in foreign investment and tightening of bank credit conditions for CRE-backed loans.

There was already evidence of declining foreign activity in recent quarters, likely held back by the surge in U.S. dollar vis-à-vis most global peers. This trend is unlikely to reverse, with the greenback strengthening further since. Foreign activity may also come under pressure from a retreat of Asian investors. Chinese authorities have recently announced their intention to limit on outbound investment to stem capital outflows. Commercial real estate transactions will, as part of this initiative, undergo increased scrutiny with many unlikely to be approved. There is also a risk that increased scrutiny may also occur under the new U.S. administration under policy initiatives in the New Year.

Along the same vein, the EB-5 investor visa program may expire in short order. This scheme offers resident visas to foreigners who invest more than \$500,000 in the U.S. Previously set to expire in September, and then in December, the program was again extended by Congress until



mid-May 2017, but its future is far from assured given the policy uncertainty of the incoming administration. On the whole, its potential expiry poses a downside risk to foreign investment in CRE. While foreign transactions account for only about 5% of all CRE sales nationally, they make a much larger share in some top U.S. markets including New York, Los Angeles, San Francisco, and Miami.

The last weight to consider on the CRE market is the tighter financing faced by investors. For one, banks are tightening the lending conditions for CRE loans. This trend begun last year after several Fed policymakers advocated for more stringent criteria due to concern over the rapid price growth of CRE assets. It would appear that the banks are heeding the Fed's warnings. The Senior Loan Officer Survey indicated a tightening of lending of conditions for CRE-backed loans for five consecutive quarters (see Chart 5). Most of the tightening in lending conditions has come this year, and has been apparent across large and smaller banks. The tighter standards weigh on activity and prices, but should limit financial sector risk down the road stemming from overvaluation. Secondly, funding for CRE transactions could become all the more difficult through the commercial mortgage-backed securities (CMBS) issuance. Volume of CMBS mortgages maturing this year and last is about double the dollar amount of prior years, with many of these 10-year loans more risky, having been issued in 2006 and 2007 – a time when underwriting standards were weaker. Taken together with a Dodd-Frank risk-retention rule, implemented last month, that requires CMBS issuers to keep 5% of the assets on their own books, it looks like lending conditions will increasingly tighten.

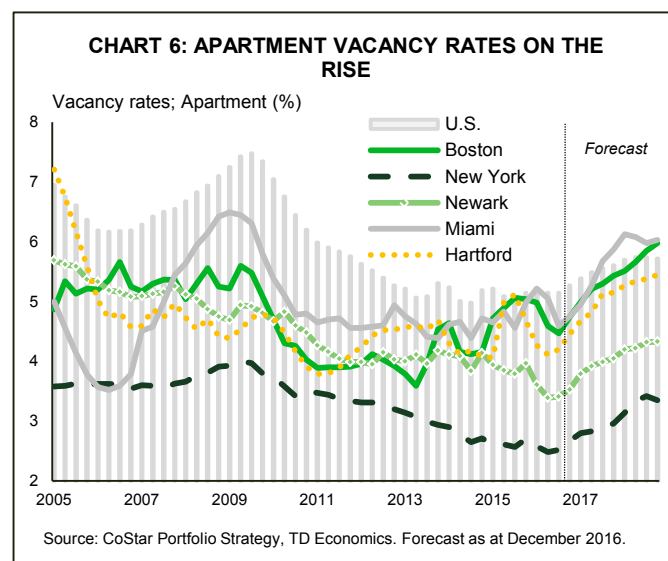
## Regional and segment-specific risks remain

In addition to the risks facing the broader CRE market, there are several others we've noted in the past that are more regional or segment-specific in nature. While materialization of any one of these is unlikely to tip the CRE market into a correction, they nonetheless have significant implications for local market conditions and economies.

## Large pipeline of apartments to pressure vacancies

The multifamily segment has been the quickest to recover from the recession, as legacies of the housing crisis pushed more households to become renters, leading to surging demand for apartments. The resulting building boom has been quite broad-based geographically, but has been concentrated in large cities. Since then, improving credit access and rapidly rising rents have made renting a less attractive option, with the homeownership rate appearing to be turning the corner. As demand softens, some of the properties completed in the coming quarters may not be absorbed right away, leading to some upward pressure on vacancy rates across these markets (see Chart 6).

Any uptick in vacancies should be modest overall, with the national metric (based on the 54 main metros) projected to rise by just 0.3 percentage points. This leaves the vacancy rate below the pre-recession average. However, some markets will experience an uptick that could be as much as 1 percentage points next year, with vacancy rates in Boston, Miami, New York, and Washington D.C. expected to rise above or near their recessionary peaks. Outside of the TD footprint, markets including San Jose, Los Angeles, and Seattle appear most at risk in light of the substantial supply

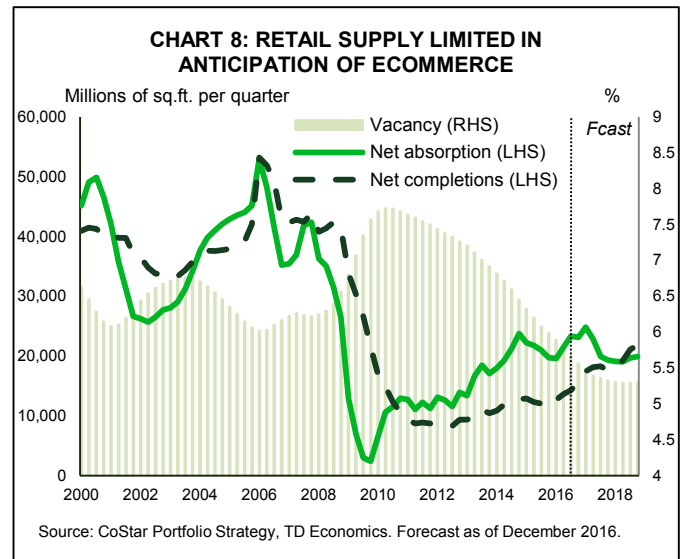
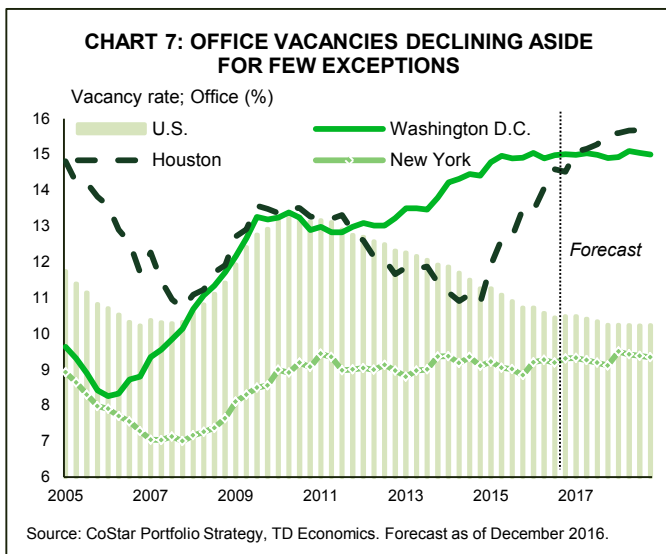


pipeline and already rising vacancy rates. Rising vacancies would keep a lid on rent and income growth, pressuring cap rates lower and posing some downside risks to prices in markets where cap rate spreads are particularly thin relative to history, such as Boston, New York, Miami and Washington D.C. (see Table 1 and 4).

### Office market resilient... but pockets of risk exist

The office market recovery has been more modest but the market continues to make headway alongside the broader economy. Office using employment is up about 2% from the prior year, outpacing payroll growth more broadly, and is currently 7% higher than it was during the peak. Despite this strong performance, demand for office space has been less apparent. It has been tempered by declining square footage per employee, with the vacancy rate only recently falling below its long-run average. As such, new construction has remained relatively modest. With demand likely to outpace net completions over the coming quarters, vacancies should be pressured lower.

However, there are several markets that are bucking this trend, with three main ones standing out: Washington D.C., Houston, and to a lesser extent New York. These markets face specific demand shocks, with cutbacks in federal government, oil & gas, and finance, respectively. Weaker demand has led to rising vacancies, with rates exceeding or near their recessionary nadir across the three markets (see Chart 7). The softer conditions are likely to persist over the medium term, weighing on rent growth and cap rates across these markets. Risks related to thin cap rate spreads are also present in office markets where demand has been strong. Boston, San Jose, and Newark experienced sharp price gains



in recent years that have eroded much of the yield premium over the risk-free rate. The low cap rate spread poses a particular risk should a downturn in demand manifest, with these economies heavily reliant on IT, pharmaceutical, and fintech industries.

### Retail resilient in the face of ecommerce

The retail CRE segment has been undergoing significant evolution. Demand has remained quite weak, as consumers increasingly frequent online stores in favor of the brick-and-mortar kind. Still, the vacancy rate continued to improve, declining to 5.7% in the third quarter – the lowest level on record. The tighter conditions are partly related to a lack of supply, as developers acted cautiously in anticipation of relatively soft absorption conditions in the face of e-commerce (see Chart 8). But, it was also related to the better than expected performance from the brick-and-mortars, with retail spaces instead utilized for service type offerings, including health facilities, gyms, movie theatres, and restaurants – all less affected by the trend towards online shopping.

As a result, the retail segment has fared quite well in recent quarters. Retail-related employment growth, at 2.3% y/y, has outpaced total payrolls by a wide margin. Rents have remained relatively affordable, with the healthy conditions and falling vacancies likely to push rent growth higher. At the same time, the still low prices for retail properties offer a good return relative to the risk-free rate – with the spread likely to hold near its long-term average in the coming quarters. In fact, the retail market remains healthier than ever. Aside for New York, California, and some oil-exposed Texas markets, cap rate spreads in other major markets are 1 to 2 percentage points above their long run average.

## New political landscape poses up and down risks

In addition to the existing risks, there are also some new ones on the horizon. Top of mind are the potential policy changes of the new incoming administration, which may have significant economic implications that would also extend to the CRE market. On the one hand, many proposed policies are pro-growth initiatives, that could be beneficial for the CRE market, with infrastructure improvements and corporate tax reductions potentially lifting demand and activity in the market. Specific sectors could also benefit from targeted policies, with higher defense spending likely to support demand amongst defense contractors, while de-regulation in financial, pharmaceutical, and energy sectors potentially spurring more activity in these sectors.

On the other hand, amending the Affordable Care Act could pose a downside risk to health care providers. And while promotion of domestic manufacturing may support demand for industrial real estate, this could be offset by potential trade conflicts that could arise. These would hurt demand for assets in the main U.S. port cities and tourism assets in key destinations stateside. Policies that would limit immigration could also negatively impact border cities, while restricting high-skill visa access would potentially impinge on growth prospects of many tech-driven economies.

Still, perhaps the most important downside risk stems from the potential for higher interest rates that unfunded deficits could spur. A sudden interest rate shock, similar in magnitude to the taper-tantrum, could wipe out much of the cap rate spread cushion that exists across many major U.S. markets, leaving some poised for a correction that, while much less systemic than the U.S. housing market, could nonetheless spread and potentially reverberate across the global financial system.

## Bottom line

There is no doubt that policy uncertainty stemming from the incoming administration adds another layer of risk to those already faced by the commercial real estate market. While many of the potential pro-growth policies could be beneficial for activity, and may help the market work through some existing demand-related weakness, there are also those which could negatively affect the market. Key among these is the risk of a lurch higher in interest rates, something that would further erode cap rate spreads, already thin across many major U.S. markets.

Still, this is not our base case scenario. Instead, we expect a very gradual rise in rates going forward. Coupled with moderate economic growth, such an outcome could give the market time to adjust to a higher interest rate environment. This adjustment has already begun, with transaction activity declining and price growth slowing. These trends should only become reinforced this year as foreign activity declines and credit conditions tighten. As such, we expect the market will gradually decelerate to be more in line with underlying fundamentals – something that should begin to materialize later this year.

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**Table 1: U.S. COMMERCIAL REAL ESTATE RISK HEATMAP**

	Cap Rate Spread Relative to Long-Term Avg.*										Risk Rank**		
	Apt.		Off.		Ret.		Ind.		CRE		CRE		
	15Q4	16Q4	15Q4	16Q4	15Q4	16Q4	15Q4	16Q4	15Q4	16Q4	15Q4	16Q	Δ
New York	-1.3	-1.1	-1.3	-1.2	-1.0	-0.9	0.6	0.8	-0.9	-0.8	1	1	0
Boston	-0.1	0.1	-1.7	-1.5	0.2	0.4	0.2	0.4	-0.6	-0.4	2	2	0
Washington D.C. (NoVA - MD)	0.1	0.2	-1.2	-1.2	-0.1	0.1	-0.4	-0.3	-0.5	-0.4	3	3	0
Newark (Northern New Jersey)	-0.2	-0.2	-2.3	-2.1	0.8	0.9	0.9	1.1	-0.2	-0.1	5	4	1
San Jose	1.2	1.3	-1.7	-1.4	-0.4	-0.3	0.7	1.0	-0.2	0.0	4	5	-1
Stamford	0.0	0.0	-0.7	-0.6	-1.0	-0.9	1.0	1.1	-0.1	0.0	6	6	0
Phoenix	0.4	0.5	-0.8	-0.7	-0.4	-0.4	0.0	0.2	-0.1	0.1	7	7	0
Atlanta	0.0	0.1	0.1	0.4	-0.4	-0.3	0.0	0.2	0.0	0.1	8	8	0
Oakland (East Bay)	0.6	0.6	-0.6	-0.4	-0.6	-0.5	0.5	0.7	0.1	0.2	9	9	0
Sacramento	0.7	0.6	-0.5	-0.3	-0.5	-0.5	0.7	0.8	0.2	0.2	11	10	1
Los Angeles	0.1	0.1	-0.5	-0.2	0.2	0.4	0.5	0.7	0.1	0.3	10	11	-1
Miami	0.2	0.2	-0.5	-0.4	0.4	0.7	0.4	0.5	0.2	0.3	12	12	0
Austin	0.5	0.6	-0.5	-0.3	0.3	0.4	0.6	0.8	0.2	0.3	13	13	0
Riverside (Inland Empire)	0.6	0.6	0.7	0.7	-0.4	-0.4	0.4	0.5	0.3	0.3	15	14	1
Orlando	0.2	0.2	-0.3	0.0	0.2	0.3	0.7	1.0	0.2	0.4	14	15	-1
Dallas - Fort Worth	0.8	0.8	0.0	0.1	-1.0	-1.0	0.7	0.9	0.3	0.4	18	16	2
Anaheim (Orange County)	0.5	0.5	-0.5	-0.2	0.2	0.3	0.7	0.8	0.3	0.4	17	17	0
San Diego	0.5	0.6	-0.5	-0.5	0.7	0.8	0.7	0.9	0.4	0.5	19	18	1
Philadelphia	0.0	0.0	0.0	0.0	0.5	0.5	1.2	1.3	0.5	0.5	21	19	2
Houston	0.0	0.3	0.2	0.4	-0.6	-0.4	1.3	1.5	0.3	0.5	16	20	-4
Denver	0.8	0.8	0.3	0.5	-0.2	-0.1	0.5	0.8	0.4	0.5	20	21	-1
San Francisco	0.7	0.6	-0.1	0.2	0.6	0.7	0.4	0.6	0.5	0.6	22	22	0
Las Vegas	0.6	0.6	0.1	0.3	0.0	0.0	1.2	1.3	0.5	0.6	26	23	3
Hartford	1.2	1.2	-0.8	-1.0	0.9	1.0	1.2	1.4	0.6	0.6	29	24	5
Charlotte	-0.2	-0.1	0.5	0.7	1.4	1.6	0.7	1.0	0.5	0.7	23	25	-2
Chicago	0.3	0.4	0.2	0.3	0.6	0.7	0.7	0.9	0.5	0.7	24	26	-2
Memphis	0.9	0.9	0.3	0.3	0.4	0.5	0.4	0.7	0.5	0.7	25	27	-2
Fort Lauderdale	0.9	0.9	0.3	0.4	0.7	0.8	0.3	0.5	0.6	0.7	27	28	-1
West Palm (Palm Beach County)	0.8	0.9	-0.2	-0.1	1.5	1.6	0.1	0.2	0.6	0.7	32	29	3
Minneapolis	0.3	0.4	1.0	1.3	0.1	0.2	0.8	1.1	0.6	0.7	28	30	-2
Cincinnati	1.3	1.4	-0.1	0.2	0.0	0.0	0.7	1.0	0.6	0.8	31	31	0
Richmond	1.1	1.1	0.4	0.4	0.0	0.2	0.9	1.2	0.6	0.8	33	32	1
Salt Lake City	1.3	1.4	0.1	0.3	0.5	0.6	0.5	0.8	0.6	0.8	30	33	-3
Jacksonville	0.9	0.9	0.4	0.5	1.0	1.1	0.4	0.6	0.7	0.8	35	34	1
Seattle	1.3	1.4	-0.2	0.1	0.6	0.8	0.9	1.1	0.7	0.8	34	35	-1
Portland (OR)	0.8	0.8	0.0	0.3	1.0	1.0	0.9	1.1	0.7	0.8	36	36	0
Tampa	0.8	0.8	0.4	0.6	0.7	0.9	1.1	1.3	0.8	0.9	37	37	0
Pittsburgh	1.2	1.2	0.7	0.7	1.3	1.3	0.3	0.5	0.8	0.9	39	38	1
Baltimore	0.4	0.5	0.7	0.8	1.0	1.2	1.2	1.4	0.8	0.9	38	39	-1
Milwaukee	1.8	1.9	1.0	1.1	0.4	0.6	0.6	0.7	0.9	1.0	40	40	0
Saint Louis	0.7	0.7	0.4	0.4	1.4	1.4	1.8	2.1	1.0	1.0	43	41	2
Raleigh	0.5	0.5	0.6	0.7	1.3	1.5	1.8	2.0	0.9	1.0	41	42	-1
Nassau-Suffolk (Long Island)	0.7	0.7	0.4	0.4	1.6	1.7	0.9	1.0	1.0	1.0	45	43	2
Columbus (OH)	1.3	1.4	0.8	1.1	0.5	0.6	0.9	1.2	1.0	1.1	42	44	-2
San Antonio	1.0	1.0	1.1	1.2	1.3	1.4	0.8	1.1	1.0	1.2	47	45	2
Cleveland	1.4	1.6	0.5	0.7	1.0	1.2	0.9	1.2	1.0	1.2	44	46	-2
Indianapolis	1.1	1.1	0.6	0.9	1.9	2.1	0.7	0.9	1.0	1.2	46	47	-1
Norfolk	1.5	1.5	0.7	0.7	1.6	1.8	0.5	0.7	1.2	1.3	48	48	0
Kansas City	1.9	1.9	1.1	1.4	1.5	1.6	0.9	1.1	1.3	1.4	49	49	0
Nashville	0.8	0.8	1.4	1.7	1.3	1.5	1.7	1.9	1.3	1.5	50	50	0
Oklahoma City	1.3	1.4	1.3	1.3	0.6	0.8	2.2	2.4	1.4	1.5	51	51	0
Honolulu	1.4	1.4	1.5	1.4	2.0	2.2	1.6	1.8	1.7	1.7	52	52	0
New Orleans	1.9	2.0	1.4	1.4	1.8	2.0	1.9	2.1	1.7	1.9	53	53	0
Detroit	2.0	2.0	1.5	1.8	0.9	1.0	2.3	2.5	1.8	1.9	54	54	0
<b>U.S. (54 Markets)</b>	<b>-0.1</b>	<b>0.0</b>	<b>-1.0</b>	<b>-0.8</b>	<b>0.0</b>	<b>0.1</b>	<b>0.5</b>	<b>0.7</b>	<b>-0.1</b>	<b>0.0</b>			

\* Risk metric is the spread in percentage points between the current cap rate and the 10-year U.S. Treasury yield relative to its average since 1990. Higher values typically denote less risk. \*\* Rank between 1 (highest risk) to 54 (lowest risk) among the U.S. main 54 commercial real estate markets.

Note: U.S. figures based on 54 main markets.

Source: CoStar, TD Economics. As of December 2016.

Table 2: U.S. Commercial Real Estate Forecast; Vacancy Rates (%)						
Segment	Market	History		Estimate	Forecast	
		1990-2016	1996-2005	2016Q4	2017	2018
Apartment	Boston	3.2	2.4	4.7	5.2	5.8
	New York	2.9	2.6	2.7	2.9	3.3
	Philadelphia	5.5	4.9	5.7	5.5	5.2
	Washington	4.8	4.3	5.6	5.7	6.0
	Charlotte	5.7	5.2	6.1	6.2	5.9
	Tampa	8.1	7.4	5.3	5.7	5.4
	Orlando	6.1	5.3	4.9	5.0	5.9
	Miami	6.0	6.7	4.8	5.4	6.1
	<b>U.S.</b>	<b>5.8</b>	<b>5.6</b>	<b>5.3</b>	<b>5.5</b>	<b>5.7</b>
Office	Boston	9.1	8.2	8.2	8.3	8.4
	New York	9.4	7.9	9.3	9.2	9.4
	Philadelphia	10.7	9.6	9.9	9.7	9.6
	Washington	11.2	8.3	15.0	15.0	15.0
	Charlotte	9.9	8.3	8.6	9.1	8.9
	Tampa	10.9	9.0	8.9	8.5	8.4
	Orlando	10.6	8.5	9.3	8.8	8.4
	Miami	10.8	8.7	10.0	9.9	9.6
	<b>U.S.</b>	<b>11.1</b>	<b>9.6</b>	<b>10.5</b>	<b>10.4</b>	<b>10.2</b>
Retail	Boston	4.8	4.8	3.0	3.0	3.1
	New York	6.6	7.1	4.4	4.3	4.1
	Philadelphia	6.4	6.5	5.6	5.6	5.5
	Washington	5.4	5.1	4.7	4.6	4.3
	Charlotte	6.3	5.5	4.8	4.9	5.1
	Tampa	7.0	6.6	5.4	5.3	5.3
	Orlando	6.1	5.5	5.7	5.6	5.7
	Miami	4.8	5.0	3.2	3.2	3.2
	<b>U.S.</b>	<b>6.9</b>	<b>6.7</b>	<b>5.4</b>	<b>5.3</b>	<b>5.3</b>
Industrial	Boston	7.1	5.9	4.7	4.3	4.1
	New York	6.8	6.1	5.0	5.1	5.0
	Philadelphia	9.4	9.2	7.0	7.0	7.1
	Washington	7.8	6.4	6.6	6.2	5.8
	Charlotte	8.2	9.2	4.8	4.7	4.6
	Tampa	5.7	4.8	4.1	4.0	4.0
	Orlando	7.7	7.2	4.8	4.5	4.5
	Miami	5.3	5.3	4.1	4.1	3.8
	<b>U.S.</b>	<b>7.3</b>	<b>7.0</b>	<b>5.3</b>	<b>5.2</b>	<b>5.2</b>
CRE	Boston	6.6	5.9	5.6	5.7	5.8
	New York	6.1	5.5	5.3	5.3	5.4
	Philadelphia	8.1	7.7	7.1	7.0	6.9
	Washington	7.6	6.1	8.9	8.9	8.9
	Charlotte	7.6	7.4	5.9	6.0	5.9
	Tampa	7.7	6.8	5.7	5.7	5.6
	Orlando	7.4	6.5	5.9	5.8	5.9
	Miami	6.4	6.2	5.2	5.3	5.3
	<b>U.S.</b>	<b>7.7</b>	<b>7.1</b>	<b>6.4</b>	<b>6.4</b>	<b>6.5</b>

Source: CoStar Portfolio Strategy, TD Economics. As of December 2016.



**Table 3: U.S. Commercial Real Estate Forecast; Price Index (y/y % chng.)**

Segment	Market	History		Estimate	Forecast	
		1990-2016 Avg.	1996-2005 Avg.	2016Q4	2017	2018
Apartment	Boston	5.8	12.5	4.3	5.3	3.4
	New York	5.9	10.2	4.5	1.9	1.0
	Philadelphia	3.8	9.5	5.9	5.1	4.5
	Washington	3.9	9.0	5.3	3.1	2.1
	Charlotte	3.4	6.5	5.9	4.6	3.3
	Tampa	4.7	9.1	8.4	9.4	6.0
	Orlando	4.6	8.6	8.5	9.3	4.7
	Miami	4.2	7.7	7.1	6.1	3.1
	<b>U.S.</b>	<b>4.5</b>	<b>8.4</b>	<b>6.6</b>	<b>5.1</b>	<b>3.1</b>
Office	Boston	4.0	6.1	2.1	0.1	2.2
	New York	6.3	11.3	6.8	0.1	0.6
	Philadelphia	2.9	5.4	4.7	1.6	1.8
	Washington	4.0	8.3	3.8	-1.2	-1.8
	Charlotte	3.6	6.9	4.4	3.6	2.4
	Tampa	3.7	8.6	3.8	4.8	4.8
	Orlando	4.4	7.7	1.6	4.0	4.4
	Miami	5.1	9.6	5.5	2.8	3.5
	<b>U.S.</b>	<b>3.9</b>	<b>7.6</b>	<b>4.3</b>	<b>1.6</b>	<b>2.1</b>
Retail	Boston	2.7	5.0	4.7	4.1	4.2
	New York	5.0	8.5	5.1	1.8	1.2
	Philadelphia	3.4	6.7	3.5	-0.1	-0.2
	Washington	4.2	8.3	3.6	1.8	1.3
	Charlotte	3.6	9.4	3.5	2.4	2.4
	Tampa	4.0	10.5	2.6	1.3	0.8
	Orlando	2.9	7.3	1.7	-0.9	0.0
	Miami	4.7	8.3	4.7	5.1	2.2
	<b>U.S.</b>	<b>3.2</b>	<b>7.3</b>	<b>3.1</b>	<b>1.6</b>	<b>1.5</b>
Industrial	Boston	2.2	5.8	4.7	5.0	5.1
	New York	2.3	5.3	4.4	4.8	4.9
	Philadelphia	1.4	4.5	2.6	1.3	1.9
	Washington	2.5	7.3	4.3	2.8	3.2
	Charlotte	1.7	4.8	4.6	4.7	3.9
	Tampa	1.9	5.9	4.8	4.3	4.2
	Orlando	3.0	7.1	5.3	5.1	5.2
	Miami	3.5	4.6	5.4	6.5	6.9
	<b>U.S.</b>	<b>2.3</b>	<b>5.6</b>	<b>4.8</b>	<b>5.2</b>	<b>4.8</b>
CRE	Boston	3.5	6.5	3.7	3.0	3.5
	New York	5.1	9.0	5.3	1.8	1.5
	Philadelphia	2.6	6.2	4.2	2.1	2.1
	Washington	3.8	8.4	4.4	1.2	0.6
	Charlotte	2.6	6.2	4.7	4.0	3.2
	Tampa	3.4	8.3	5.2	5.4	4.2
	Orlando	3.6	7.6	4.7	4.7	3.7
	Miami	4.2	6.8	5.7	5.4	4.2
	<b>U.S.</b>	<b>3.4</b>	<b>7.1</b>	<b>4.9</b>	<b>3.6</b>	<b>3.0</b>

Source: CoStar Portfolio Strategy, TD Economics. As of December 2016.

Table 4: U.S. Commercial Real Estate Forecast; Capitalization Rate Spread (pp)						
Segment	Market	History		Estimate	Forecast	
		1990-2016 Avg.	1996-2005 Avg.	2016Q4	2017	2018
Apartment	Boston	2.4	3.0	2.7	2.2	1.9
	New York	2.7	3.6	1.7	1.3	1.1
	Philadelphia	3.2	3.7	3.3	2.8	2.5
	Washington	2.2	2.5	2.4	2.0	1.7
	Charlotte	2.7	3.3	2.7	2.3	2.1
	Tampa	2.6	2.7	3.5	2.9	2.6
	Orlando	2.5	2.8	2.9	2.4	2.1
	Miami	2.7	2.9	3.0	2.5	2.1
	<b>U.S.</b>	<b>2.9</b>	<b>3.4</b>	<b>3.0</b>	<b>2.6</b>	<b>2.3</b>
Office	Boston	4.1	4.9	2.7	2.4	2.2
	New York	3.5	4.3	2.4	2.0	1.9
	Philadelphia	4.1	4.2	4.2	3.8	3.6
	Washington	3.9	4.6	2.8	2.5	2.3
	Charlotte	3.2	3.3	4.0	3.6	3.4
	Tampa	3.6	3.7	4.3	3.9	3.6
	Orlando	4.0	4.2	4.1	3.7	3.5
	Miami	3.4	3.7	3.1	2.8	2.6
	<b>U.S.</b>	<b>4.5</b>	<b>5.3</b>	<b>3.8</b>	<b>3.5</b>	<b>3.3</b>
Retail	Boston	2.9	3.1	3.4	3.0	2.8
	New York	3.2	3.9	2.4	2.0	1.8
	Philadelphia	3.3	3.6	4.0	3.6	3.4
	Washington	2.6	2.9	2.8	2.4	2.2
	Charlotte	2.8	2.4	4.5	4.1	3.9
	Tampa	2.9	2.9	3.9	3.5	3.3
	Orlando	3.3	3.5	3.7	3.3	3.1
	Miami	2.6	2.9	3.4	3.0	2.8
	<b>U.S.</b>	<b>3.6</b>	<b>3.9</b>	<b>3.8</b>	<b>3.4</b>	<b>3.2</b>
Industrial	Boston	4.9	5.4	5.4	5.0	4.7
	New York	3.3	3.6	4.2	3.8	3.6
	Philadelphia	3.5	3.2	4.9	4.5	4.3
	Washington	4.5	5.1	4.4	4.0	3.9
	Charlotte	4.3	4.4	5.3	5.0	4.8
	Tampa	4.3	4.5	5.8	5.4	5.2
	Orlando	4.3	4.5	5.4	5.0	4.8
	Miami	3.4	4.0	4.1	3.7	3.4
	<b>U.S.</b>	<b>3.9</b>	<b>4.3</b>	<b>4.8</b>	<b>4.4</b>	<b>4.1</b>
CRE	Boston	3.7	4.2	3.4	3.0	2.8
	New York	3.1	3.9	2.5	2.1	1.9
	Philadelphia	3.5	3.7	4.2	3.7	3.5
	Washington	3.1	3.6	2.9	2.5	2.2
	Charlotte	3.4	3.6	4.2	3.8	3.6
	Tampa	3.3	3.4	4.3	3.9	3.6
	Orlando	3.5	3.7	4.0	3.5	3.3
	Miami	3.1	3.5	3.5	3.1	2.8
	<b>U.S.</b>	<b>3.7</b>	<b>4.2</b>	<b>3.9</b>	<b>3.5</b>	<b>3.2</b>

Source: CoStar Portfolio Strategy, TD Economics. As of December 2016.