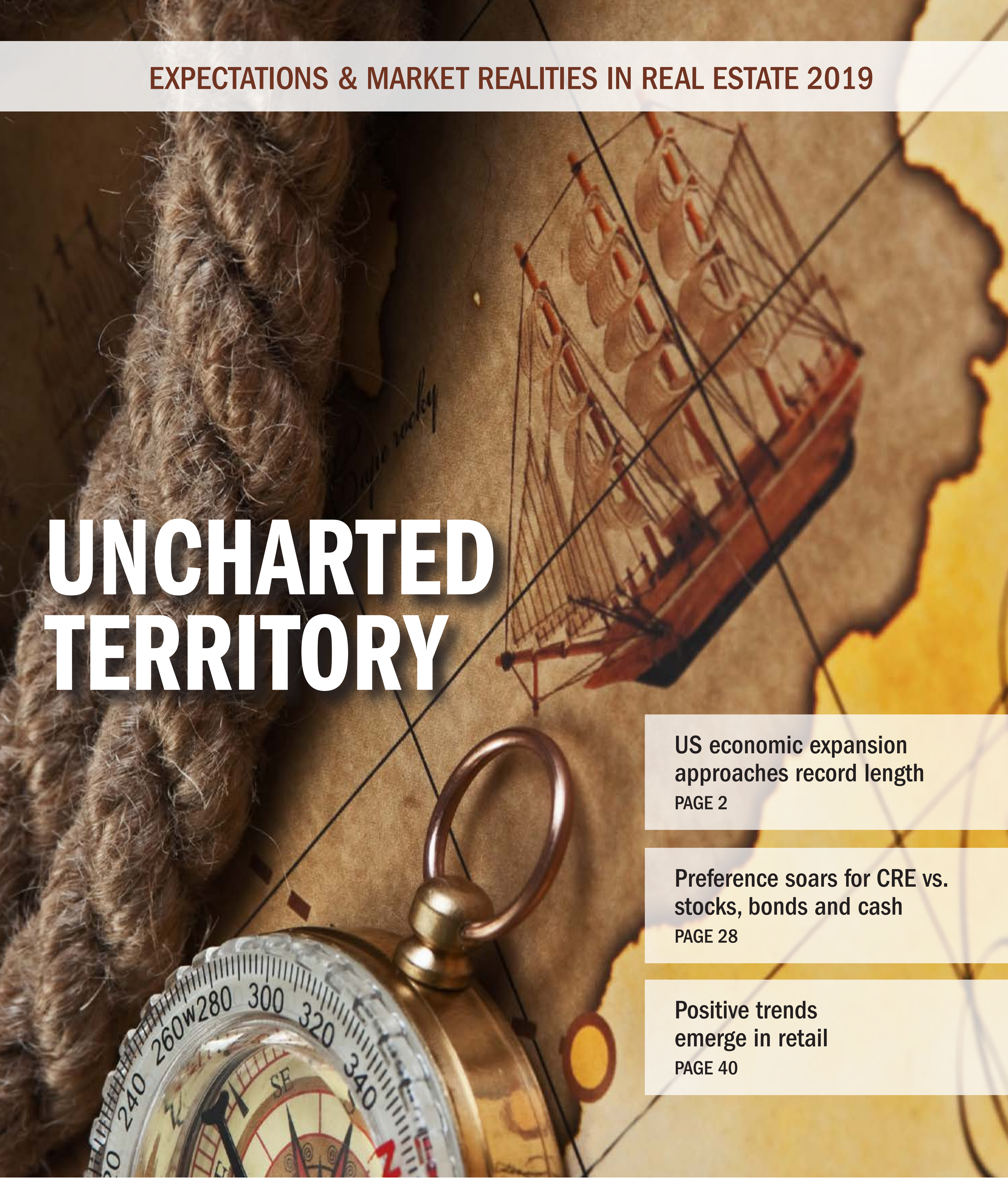
EXPECTATIONS & MARKET REALITIES IN REAL ESTATE 2019



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NATIONAL ASSOCIATION of REALTORS®

Situs RERC®

Expectations & Market Realities in Real Estate 2019
Uncharted Territory

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FOREWORD

Dear Readers,

Investors are traveling into **uncharted territory** as the US economy's expansion surpasses its 10-year anniversary in July 2019, which would break the record for the longest economic expansion since the government started collecting records in the 1850s. Unemployment fell below 4% – which would have been almost unthinkable a decade ago – without sparking inflation to rise much above 2%. While it is certainly good news that the economy has been growing for a decade in the wake of the worst downturn since the Great Depression, many fear that another downturn could be on the horizon. Investors are worried because they know nothing good lasts forever, and they see potential disruption in the economy – perhaps caused by political turmoil around the world, the potential for continued raising of interest rates, or uncertainty caused by global trade discussions. In 2018, the stock market rode a roller coaster and ended down for the year. So we enter 2019 asking the question: What will the year bring for the US and global economies and the commercial real estate (CRE) market?

The good news for CRE investors is that solid property fundamentals are underlying strong valuations and these valuations are supporting high prices. All the property types seem to be holding their own — including retail — which has struggled in recent years due to overbuilding and the rise in e-commerce. Surviving retailers are learning how to adapt to new technology and changes in consumer shopping tastes. As more consumers make online purchases, the need for distribution centers increases and demand for industrial space keeps growing. The apartment sector exhibits renewed strength, thanks — in part — to a continuing problem with affordability for single-family housing. In the hotel sector, room supply, room demand, occupancy, average daily rate (ADR) and revenue per available room (RevPAR) are at all-time highs. The office sector has been spurred by increased investment in non-major and suburban markets.

We expect continued volatility in the financial markets, along with a slow but steady rise in interest rates and Treasury rates. Debt and equity capital should continue to be readily available. We expect that equity capital will be more disciplined.

For this report, Situs RERC, Deloitte and the NATIONAL ASSOCIATION OF REALTORS® are once again pleased to provide you with our outlook into the commercial real estate market, the economy, the capital markets and the property markets and to provide our collective perspectives for 2019.

We would like to extend our gratitude to all who contributed to this report. This includes the data providers, survey respondents, economists, researchers and analysts, and reviewers and business colleagues, without whom this report would not have been possible. We also would like to thank our clients, subscribers and consultants for their continued support of this annual publication.

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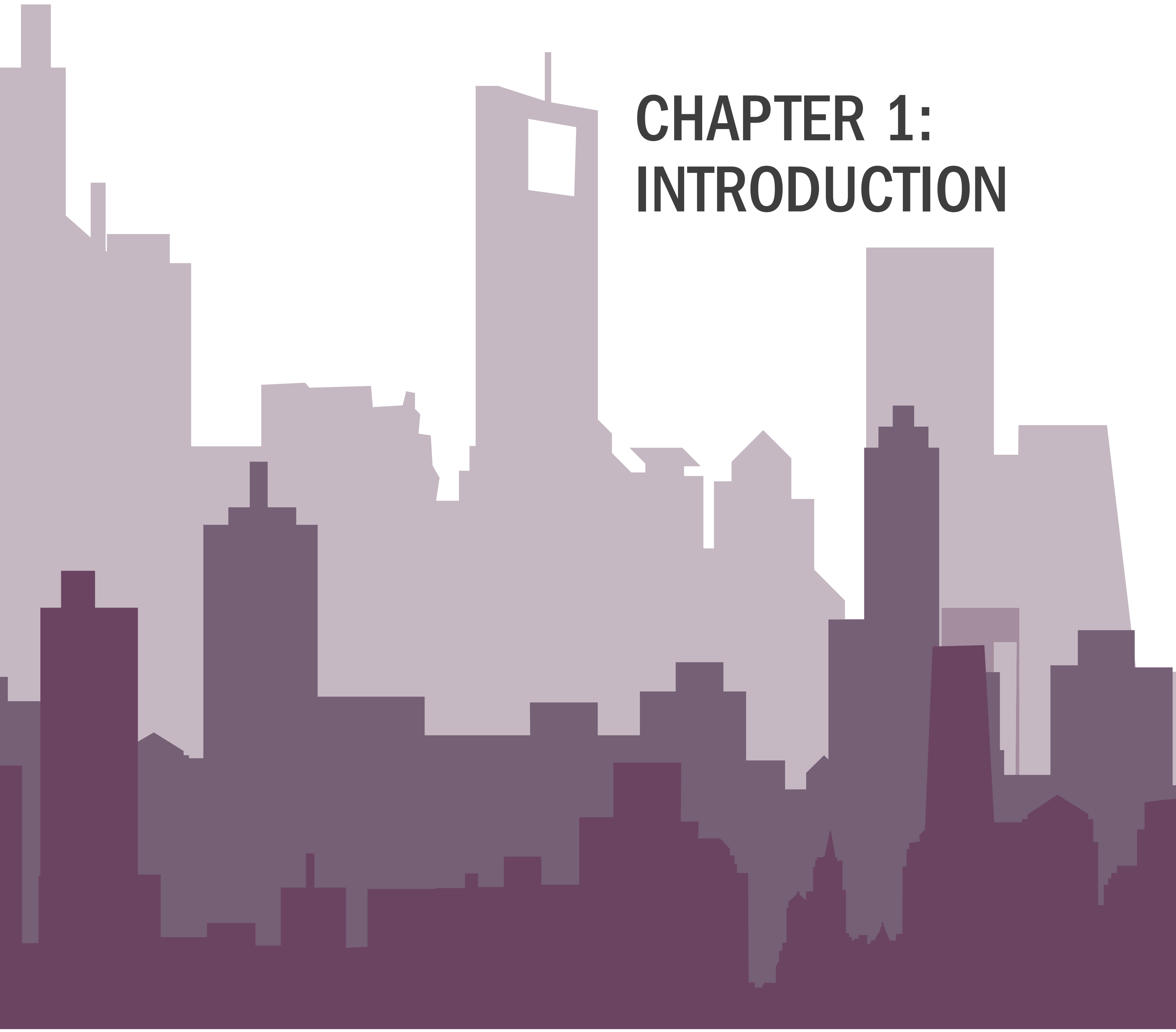
CHAPTER 1: INTRODUCTION



INTRODUCTION

UNCHARTED TERRITORY

Real estate has historically been known for its cycles, which have included some big highs and some low lows, but we are now at a unique time in the current cycle – and the norms of the past regarding pace and cadence are foundationally different. This causes us to ask, what does this mean and what can we expect?

We are entering **uncharted territory**. If the current economic expansion continues through June 2019, it would mark the longest expansion in US economic history since records started being collected in the 1850s. Based on data from the National Bureau of Economic Research (NBER), the average post-World War II expansion phase was 58.4 months; the current expansion phase will surpass 120 months in July 2019, assuming it reaches this historic milestone. We have been crawling the wall of worry for at least the past two years that a correction — in both real estate and the overall economy — is looming. A future recession is inevitable, but there is no way of knowing when it will occur or how severe it will be.

It's clear that the concerns and accompanying jitters caused by certain elements are impacting how people view the economic landscape and what will come next. The Federal Reserve's past and the potential for future rate increases, trade disputes, global and geographic disputes and the psychological effect of approaching 10 years of expansion are all contributors to these jitters. Even absent some other factors, just the psychological aspect of the 10-year mark is making people nervous, whether it's warranted or not.

The length of any cycle is not set in stone, and many things are different now from previous cycles. It is important to separate the cyclical changes from the structural changes. Even though there are many structural changes, we should not fall into the "this time will be different" mentality.

Before the Global Financial Crisis (GFC), people didn't believe that the problems in the residential lending market would be a trigger because they didn't take into account what was happening with derivatives and its ripple effect. It's entirely possible that the next economic downturn could be caused by something that the economic experts haven't anticipated. Maybe the lingering effects of the record-long US government shutdown or some unforeseen fallout from Brexit?

The GFC was the world's worst financial downturn since the Great Depression of the 1930s, and few believe the next downturn will approach anything that severe, according to a Forbes article titled *4 Market Trends to Watch in 2019*. The GFC was structurally different from past recessions and more like the Great Depression than a typical downturn. The deeper the ditch, the longer it takes to climb out, and that was the case in the aftermath from the GFC.

Investors are trying to predict the impact of the numerous challenges around the world and at home, including the US government shutdown, the collapse of Brexit talks, military conflicts across the globe and political and social unrest. It's unclear how any — or if — these challenges will end up affecting the US or world economy in major ways, but it's not unreasonable to worry.

US ECONOMY'S LONG AND SLOW RECOVERY

Gross Domestic Product (GDP) growth has been slow and steady during this expansion, averaging 2.3%. By comparison, GDP growth ranged from 2.9% to 7.0% (averaging 4.6%) across all other recovery cycles since the aftermath of World War II. Historically, slower economic growth has been associated with longer expansion periods.

The tax cuts passed at the end of 2017 likely helped boost GDP and wage growth in the short term. In 2Q 2018, GDP growth reached 4.2%, the highest rate in nearly four years, but declined to 3.4% in 3Q. The long-term effect of the tax cuts is uncertain. In December 2018, the Federal Open Market Committee (FOMC) projected that GDP growth would be 1.8% by 2021, 40 basis points (bps) lower than

2Q 2018's 2.2%. As the tax cuts have not been accompanied by a major decrease in federal spending, the federal deficit, which is already at historic highs, will continue to increase, weighing down on future economic growth.

Wage growth and inflation have finally begun to pick up, and the ultra-accommodative policies of the Fed began to reverse course just in the past two years. Public debt, which helped shake us out of the crisis, has been at or near 100% of GDP since 2012 and this has likely contributed to the ongoing sluggish economic growth since the recession. Recent pro-cyclical fiscal policies will likely only exacerbate the problem long term.

The unemployment rate — which remained 3.7% for three straight months before notching up to 4.0% in January despite continued job growth – is near a 50-year low, consumer confidence is at an 18-year high, and inflation and wages are finally starting to pick up. This has helped fuel continued GDP growth, which was 3.5% in 3Q 2018, down from 2Q 2018 but still above expectations and the 2.2% growth rate in 1Q 2018. The tight labor market, high consumer confidence and increasing wage growth continue to boost the economy.

AMID VOLATILITY OF STOCKS AND WEAKENING BONDS, CRE IS AN ATTRACTIVE INVESTMENT ALTERNATIVE

According to data from the Federal Reserve Bank of St. Louis (FRED), the Dow Jones Industrial Average (Dow) had its worst yearly price change in a decade in 2018, and the year was filled with volatility. The Dow increased or decreased by more than 2% in a single day on 21 occasions in 2018. After climbing to a record 26,616.71 on January 26 2018, the index fell 4% the next week, and on February 8 the Dow fell more than 1,000 points to 23,860.46. The market recovered, however, rising past 26,800 by October 3. Unfortunately for investors, the stock market experienced several major declines in October and November, essentially erasing all the 2018 gains. In just two days — November 19 and 20 — the Dow Jones dropped nearly 950 points or 3.73%. Then, in December, the Dow, S&P 500 and Nasdaq all dropped about 9%. The Dow finished the year barely above 23,000, a drop of about 7.5% from the beginning of the year, despite a record 1,080-point rise (4.9%) on December 27. Following the poor stock performance in December 2018, there was a rebound in January 2019.

The S&P 500 total return index and Nasdaq suffered through similar ups and downs in 2018 based on data from FRED. The S&P

500 either increased or decreased by greater than 2% in a single day on 18 occasions in 2018. The Nasdaq was arguably more volatile; it increased or decreased by greater than 3% in a single day on 11 occasions in 2018. The S&P 500 total return index stayed approximately in the 5,500-5,700 range during 3Q 2018, with a return of 7.82% year-to-date (YTD) as of September 30, 2018, while the Nasdaq stayed approximately in the 7,600-8,100 range during the quarter, with a return of 12.18% YTD as of September 30, 2018. By the end of the year, though, with losses paralleling those of the Dow in November and December, the S&P 500 tumbled to about 2,500 (down 7% since the beginning of the year) and the Nasdaq fell to below 6,600 (down about 5% for the year).

The attractiveness of a particular asset class is relative to the desirability of alternative asset classes, which can vary depending on the risk appetite of the market - risk on and risk off. Comparing historical private CRE returns to other investment alternatives, we find that private CRE holds its own against stocks over the long term without having the added risk of volatility. In 3Q 2018, private CRE total returns, as measured by the National Council of Real Estate Investment Fiduciaries (NCREIF) Property Index (NPI), declined slightly, but the institutional investors that we talk to are content with the enduring stability of the income component, considering the wildly fluctuating returns for other asset classes. As of 3Q 2018, YTD returns for CRE, as measured by the NPI, were roughly 250 bps lower than the S&P 500 and 130 bps less than the Dow. The NCREIF Fund Index-Open End Diversified Core Equity (NFI-ODCE) was just over 200 bps lower than the S&P 500 and only 81 bps lower than the Dow over the same period. See Exhibit 1-A for a comparison of returns.

Comparing historical Situs RERC real estate yields vis-à-vis capital market returns provides evidence that CRE returns remain at competitive and acceptable levels. 3Q YTD spreads between CRE and Moody's Aaa and Baa have averaged 400 bps and 320 bps, respectively. These spreads are commensurate with historical bond returns. The Moody's Aaa 10-year and 15-year average return spreads compared to private CRE return expectations were 420 bps and 400 bps respectively, while the Moody's Baa 10-year and 15-year average return spreads were 310 bps and 300 bps, respectively.

The 10-year Treasury rate increased almost 80 bps between January and its 2018 peak on November 8; however, the rate declined by over 50 bps between November and December 2018. Treasury rates are incredibly low from a historical perspective and appear to not be satiating investor appetite for yield. Situs RERC finds that CRE expected yield spreads have averaged 500 bps YTD as of 3Q 2018. While below the 10-year and 15-year average spreads of 600 bps and 550 bps, respectively, the cushion has still been enough to attract investors to the CRE asset class.

EXHIBIT 1-A. CRE & INVESTMENT ALTERNATIVES

	YTD[6]	1-Year	3-Year	5-Year	10-Year	15-Year
Current as of September 30, 2018						
Consumer Price Index[1]	1.23%	2.27%	2.00%	1.53%	1.42%	2.08%
10-Year Treasury Bond[2]	3.05%	2.33%	2.06%	2.64%	3.85%	3.96%
Dow Jones Industrial Average[3]	6.56%	20.76%	20.49%	14.57%	12.22%	9.97%
NASDAQ Composite[4]	12.18%	23.87%	20.31%	16.36%	14.47%	10.55%
NYSE Composite[4]	1.60%	7.15%	10.11%	6.34%	5.68%	5.76%
S&P 500[3]	7.82%	17.91%	17.31%	13.95%	11.97%	9.65%
NPI[5]	5.27%	7.16%	7.75%	9.57%	6.42%	8.97%
NFI-ODCE[5]	5.75%	7.71%	7.83%	9.71%	4.62%	7.28%
Nareit Index (Equity REITs)[3]	1.78%	4.31%	8.97%	9.57%	7.77%	9.63%

[1] Based on published data from the Bureau of Labor Statistics (seasonally adjusted).
[2] Based on average quarterly T-bond rates.
[3] Based on total return index, and includes the dividend yield.
[4] Based on price index, and does not include the dividend yield.
[5] NCREIF total return, composed of capital and income returns.
[6] Year-to-date (YTD) averages are not compounded annually except for CPI and NAREIT.
Sources BLS, Federal Reserve Board, S&P, Dow Jones, NCREIF, Nareit, compiled by Situs RERC, current as of September 30, 2018.

Over the past few years, the Fed has been relatively transparent (and dovish) with the timing and pace of its short-term rate increases. These steady, incremental short-term rate hikes have not appeared to have had much impact on CRE, but developers and investors may be adversely affected by higher borrowing costs if the Fed maintains its pace of rate hikes. Higher interest rates lead to higher capitalization (cap) rates and lower property valuation, which in turn will impact transaction volume. Research conducted by Situs RERC has found increased institutional investor concerns over the past year regarding the impact of higher interest rates on CRE. The extent to which the Fed will continue to openly communicate its policy decisions in advance and to be flexible with respect to rate increases and the winding down of its balance sheet will likely determine how the market reacts in the future. But even if the rate hikes are steady and transparent, they could take their toll over time if they continue for several years.

Private CRE gives investors a bond-like return plus an equity upside like that of a stock investment. Institutional CRE is currently positioned well to achieve reasonable returns in an otherwise shaky investment environment. The tangible nature of the CRE asset class creates these favorable investment dynamics: cost barriers or supply checks and balances; an observable and understandable investment; transparency in the form of market data; and consistent valuation methodologies used by the industry. These dynamics lead to relative stability and the predictability associated with operating income from commercial properties vs. other alternatives. Thus, buyers and sellers are on equal footing and are able to discern price vs. value in a more confident manner relative to alternatives, making it a viable asset class. In fact, Deloitte's *2019 Commercial Real Estate Outlook: Agility is Key to Winning in the Digital Era*[7] finds that 97% of global investors surveyed plan to increase their capital commitment to CRE over the next 18 months; respondents from the US plan to increase their capital commitments by 13% in this time frame, while those in Germany (13%) and Canada (12%) show similar levels of interest.

In the current environment, it's more important than ever to remember something Warren Buffet famously wrote in a 2008 letter to the shareholders of Berkshire Hathaway: "Price is what you pay; value is what you get." It is important to keep in mind that pricing and value are both grounded in the confidence that conclusions about price and value are valid.

As the CRE expansion continues amid rising interest rates, CRE total returns are expected to continue to decline from their recent peaks. With price and value gains now slowing to more of a measured pace, and net operating income (NOI) continuing on pace with a slow level of growth, CRE will rely on income to drive total returns moving forward versus value or price appreciation. This is especially true of the gateway cities and involves major core assets.

Prices are inflated in many markets, including CRE markets, but the underlying confidence on value of CRE generally supports the prices being paid today. Given the data provided to the authors of this report by CoStar[8] (and presented in chapter four of this report), investors should be confident that rent growth and space market fundamentals will continue to be strong. This confidence about expectations is crucial, and today there is confidence about the expectations of solid private CRE performance, even though these expectations are lower than historical levels.

YIELD CURVE INVERSION: SIGNAL OR NOISE?

There has been talk in the media and among investors about inverted yield curves and what they mean for the markets and the economy. Inverted yield curves have been a reliable leading indicator of recessions for the last 50 years, so the fear in the markets is reasonable. Data from the Research Division of FRED indicates that the two-year and 10-year Treasury yield curve declined

[7]To download the full Deloitte *2019 Commercial Real Estate Outlook: Agility is Key to Winning in the Digital Era*, visit https://www2.deloitte.com/us/en/pages/real-estate/articles/commercial-real-estate-industry-outlook.html

[8]CRE fundamentals data are provided by CoStar Market Analytics (www.costar.com), 3Q 2018. The information is provided "As Is" and without any representations, warranties or guarantees.

dramatically between late-November and early December 2018. The two-year and 10-year spread reached its tightest since June 2007 on both December 4 and December 11 at 11 bps.

Simply put, an inverted yield curve occurs when a short-term Treasury bond has a higher yield than a longer-term bond. The most commonly watched yield curve is between the two-year and 10-year bonds.
Yield curves in general represent the yields on US Treasurys with different maturities. Short-term yields are heavily influenced by the Fed's actions, while long-term yields are more heavily influenced by the market's longer-term view on economic growth. The Treasury yield curve, therefore, is often a proxy for investor sentiment on the direction of the economy.

A CNBC article titled *Why Investors Near Retirement Should Fear the Big Yield Curve Inversion* further summarizes the issue and explains why an inverted yield curve makes investors nervous. A 10-year Treasury bond usually pays a higher interest rate than a two-year Treasury bond to compensate investors for the risks associated with a longer holding period. The difference between these two bonds is called the spread. If the spread is greater than zero, the yield on the 10-year bond is higher than the yield on the two-year bond. Under this circumstance, the spread between these two bonds will create an upward-sloping yield curve. However, when the spread is negative, the two-year bond has a higher yield than the 10-year bond, and the yield curve inverts.

The same article explains that banks make more profit by borrowing short term at lower interest rates and charging borrowers higher longer-term interest rates. When the spread is negative, banks will lose money on their loans, turning their business unprofitable and forcing them to cut down on their lending. This will likely trickle down to reduced business investments and hiring as businesses won't be able to access capital from banks. If such an environment persists, the US economy will slip into a recession. It is important to remember that the statistic that specifically refers to an inversion is the spread between the two-year and 10-year Treasury bonds. The alarm in the markets in December 2018 was caused by the inversion of the two-year and three-year Treasury bonds and the five-year Treasury bond. According to the aforementioned CNBC article, the three-year and five-year Treasury yield curve inverted an average of 26.3 months before the recession in the last three recessions.

The three-year and five-year yield curve inversion may be foretelling that a recession is imminent; however, a yield curve is not a singular factor that moves the economy from growth to recession overnight. Yield curves tend to move slowly, and investors should view the inversion as a process rather than an event. The yield curve has been flattening for a few years, but the economy has kept humming along. Many factors have counteracted the effect of the yield curve on the overall economy, including the tax cuts, a strong labor market and robust consumer confidence.

At the same time, markets have gyrated on factors like the US-China trade tensions, rising short-term interest rates, the length of the current business cycle and declining bond buying by the world's central banks. A Financial Times article titled *US Credit Markets Dry Up as Volatility Rattles Investors* mentioned that not a single company in the US had borrowed money through the high-yield corporate bond market in December 2018 at the time of the writing. It would be the first time since November 2008 that no high-yield bonds were issued in the market, further illustrating the uncertainty in the markets.

The yield curve should not be ignored completely, but it important to weigh all the risk factors cautiously and find opportunities in the mix. Rising interest rates usually translate to rising cap rates and, thus, declining property prices. In general, higher interest rates also mean that investors will have to make higher interest payments on their debts. We believe that the yield curve will likely widen through 2019, but remain at low levels. Investors should be vigilant about their loan-to-value (LTV) ratios, income growth projections and whether their income growth will be able to service their debt. This may mean negotiating lease renewals now when the economy is still healthy and refinancing the loans at a lower rate while it is still available.

CYCLICAL AND STRUCTURAL CHANGES

Uncertainty is playing a major role in today's economy — and the investment world — and

this uncertainty is expected to continue through 2019. The key is being able to differentiate between the cyclical and structural parts of the CRE market.

Throughout this report, the authors will present analysis and outlooks primarily regarding the cyclical, or market forces, of CRE. For instance, since the recovery began, private CRE prices, as measured by the Real Capital Analytics Commercial Property Price Indices (RCA CPPI), have exceeded their pre-recession peaks for all property types, except retail. According to research by Situs RERC, solid property fundamentals are underlying strong valuations and these valuations are supporting high prices. Favorable economic conditions, including historic employment gains, are expected to allow further room for rent growth.

In addition to the short-term cyclical changes in CRE, long-term structural changes are affecting CRE investment strategies as well as the CRE industry itself. The question becomes, how much will the structural parts of CRE — the return characteristics, the hard assets' costs going up — absorb the cyclical impacts that are expected to eventually happen in the capital markets and the economy? For example, could structural changes support a strong rise in inflation? An estimate by Liberty Street Advisors, posted on the Federal Reserve Bank of New York's website, is that that the overall consumer price index (CPI) is 0.3 percentage points higher due to the imposition of tariffs.

CRE INVESTMENT

While the pressure on value is of some concern for investors, volumes are still pretty strong and private equity players seem to be active. There is more dry powder than ever before. The amount of dry powder earmarked in private equity real estate funds reached an all-time high of $180 billion as of September 30, 2018, with $70 billion allocated to North America-focused funds, according to an NREI article, *Will CRE remain a favored investment alternative in a volatile market?*

The *Deloitte Commercial Real Estate Outlook* also highlights the growing global interest in CRE. The majority of institutional investors surveyed for this report plan to increase their capital commitments to CRE in the next 18 months. Respondents from the United States plan to increase their capital commitments by 13% in this time frame, while those in Germany (13%) and Canada (12%) show similar levels of interest. In terms of inbound capital, the United States is the most preferred CRE market globally, followed by Hong Kong and China. Canada is the biggest foreign investor in the US real estate market in the last 12 months, led by Brookfield. There has also been a lot of activity on the debt side. Asian investors, especially South Koreans, have been very interested and have structured numerous big deals in debt positions in the last six to 12 months.

The increase in global capital flows is supported by research from Newmark Knight Frank (NKF) in its *3Q 2018 US Capital Markets Report,* which found that Canadian firms continue to invest the most in United States real estate, with multibillion-dollar entity-level purchases, such as the $15 billion Brookfield acquisition of GGP. France and Singapore took the second and third spots, respectively. Combined, these countries made up almost 64% of the international capital distribution in the 12 months ending in 3Q 2018. The same NKF report states that foreign lenders, faced with price compression in their home countries, have turned to higher yielding loans in the US. Canadian firms such as TD Bank, CIBC, RBC and Bank of Montreal in particular have become the top foreign lenders, with over $64 billion in US loans.

Some public REITs, however, are trading at less than active value, particularly malls and hospitality areas. Many of the successful malls and retailers tend to be held by investors and REITs for the long term and are infrequently on the market. According to the *2019 REIT Economic Outlook* by Nareit, investors in the past few years have been preoccupied with tech stocks and venture capital, and REITs have become undervalued; investors finally started noticing the advantages of REITs in October 2018. Through mid-December, REIT returns for 2018 were 2.6% – better than the stock market but unimpressive. However, NOI from REIT-owned properties is growing; same-store NOI has grown 2.82% over the past four quarters, according to Nareit's T-Tracker®. Nareit found that the average occupancy rate at REIT-owned properties is

94.29%, the highest percentage since data began being collected in 2000, and that the occupancy rate for REIT-owned retail properties is 95.43%. REITs are set up to perform well in the near future, thanks to current valuations and underlying operating fundamentals; investors are looking for value.

CRE MARKET[9]

The CRE market is fully priced generally, especially for core property types. Even as a record amount of capital continues to pour in, the market has reached maturity. There still are sellers and buyers despite being so far into this recovery. However, as we enter into the peak and/or potential correction area, it is important to understand that the double-digit unleveraged returns enjoyed during the beginning of the financial recovery are a thing of the past, and the market understands that.

According to the Bureau of Economic Analysis (BEA) advanced estimate, personal consumption expenditures increased by 4% quarter over quarter (QoQ) in 3Q 2018. With approximately 68% of the nation's GDP coming from personal consumption expenditures, higher wage growth and increased consumer confidence are an integral part of the US economy. Increased consumer spending will support certain segments of the retail sector that are struggling. Higher wage growth may impel discouraged workers to leave the sidelines and raise the labor force participation rate — which has been stagnant despite the exceptionally low unemployment rate — and boost demand for office space. Higher wages will also support apartment sector rent growth, which is already being buoyed by lowered housing affordability and rising mortgage rates, especially for first-time buyers. More spending will likely also translate into more demand for industrial space as consumer tastes for shopping through e-commerce increases the need for order processing and delivery centers.

IMPACT OF TECHNOLOGY[*]

Technology is transforming every property type and the industry as a whole. As advances in technology continue to grow at an exponential rate, they will likely be the biggest drivers of structural change in the near future. Below, the authors of this report explore some of the ways that technology will likely shape the property types.

As the last of the millennials (generally considered those born from 1981 to 1996) start entering the workforce, office landlords, tenants, construction companies and all employers should — more than ever — consider their needs. Millennials are obviously not a monolithic group, but surveys have shown they prefer to work in offices with open floor plans to those with cubicles and private offices. These preferences, combined with the rapid changes in technology, are forcing investors in CRE to be more creative. Landlords need to offer spaces with sleek designs and state-of-the-art technologies that produce a "wow factor" to attract new tenants. In addition, in part due to changes in technology and tastes, more people are working remotely. As a result, many offices are using less square feet per employee – but companies will probably still need central spaces for their employees. Office tenants, however, will likely want more tech options in their buildings – smart devices, employee tracking systems, fiber internet, etc. Some of these may be very costly to update in older buildings, inspiring the continued need for new developments. WeWork, Knotel and other flexible office providers will continue to grow over the next year, according to an article in The Real Deal titled *Co-working Goes Corporate*. New technologies inspire entrepreneurship; as the number of startups and entrepreneurs grow, the demand for flexible work spaces should grow as well. Flex spaces often have top-notch amenities that can help business attract workers without having to invest in their own real estate upgrades. Flex leasing options are likely to become more popular as the flex office sector grows. Flex leasing options allow tenants to sign leases by the year, month or sometimes even the hour (when five to 10 years has historically been the norm), according to a Bisnow article titled *LiquidSpace Report Highlights Rise of Flex Office Space*. We can expect the changes to accelerate as Generation Z workers enter the workforce. They have needs and preferences of their own, and they are expected to account for 32% of the global population

[9,*]The viewpoints represented in this section represent the collective perspectives of the authors of this report and may not represent the viewpoints of the sponsoring firms as a whole.

in 2019, a larger percentage than all other generations, according to an August 2018 Bloomberg article titled *Gen Z is Set to Outnumber Millennials Within a Year.*

In the industrial sector, e-commerce will likely continue to gain popularity with consumers and industrial CRE will have to adapt to changing space requirements. Advances in supply chain management are likely to lead to additional changes. End-to-end supply chain is becoming more challenging and complex, as customers want their shipments faster. The focus on "first mile" delivery (i.e., the process of getting goods from a manufacturer or retailer to a distribution center) and "last mile" delivery (i.e., the process of getting goods from a distribution center to the end consumer) changes space requirements. Industrial properties will need to be able to accommodate technological advances in inventory and network optimization tools, warehouse management and yard management. Industrial assets will continue to be tied to the cost efficiencies in transportation, including the infrastructure requirements of driverless trucks. Improvements in methods like 3-D printing and the use of delivery drones could create leaner supply chains and transition manufacturing facilities closer to major population centers, despite the scarcity and high costs of developable land near major arteries. We expect that data centers, especially those that can meet the infrastructure and space needs of cloud-based companies, will continue to increase in popularity. The full impact of tariffs on the manufacturing industry has yet to be seen, but we anticipate that a rise in new business formation of small manufacturing companies that sell their goods via e-commerce will stoke demand in the flex sector in 2019.

Advances in technology have also had a profound effect on the retail industry – primarily the rise of e-commerce. The retail landscape is littered with large chains that have either gone out of business, declared bankruptcy or find themselves in extreme peril. The survivors — including some of the largest malls — have adapted by making the shopping experience more fun, adding more restaurants, theaters, rock-climbing facilities, bowling alleys and the like. Many retailers are cutting down their space, moving their inventory to warehouses because so many consumers prefer to shop online and get their products shipped directly to their homes. Retailers have also been challenged by growing income inequality. According to the Deloitte report *The Great Retail Bifurcation*[10], only 20% of consumers had improved their financial situations from 2007 to 2016, leaving them with little money left for discretionary income spending. In addition, technological changes have forced many of those less well-off to spend significantly more on digital devices than they had previously, leaving less money for other types of purchases. It's not surprising, therefore, that the companies that have performed the best during these times have been those that appeal to "premium" consumers and "priced-based" consumers, while the "balanced" retailers have struggled. Even though the store closings of the balanced retailers have received the most attention, price-based and premium retailers are opening more stores than they're closing.

Housing affordability in many major markets, combined with slow wage growth and high student debt, has forced many individuals, especially millennials, to rent out of necessity. Up until recently, millennials have postponed household formation and child bearing, which has also helped fuel demand for apartments in the recent past. A survey conducted by Situs RERC in 2Q 2018 found that just over 60% of current renters cited financial obstacles to homeownership as the primary reason that they rent instead of own. A significant share of renters would prefer to own a home, but have been unable to purchase one because they can't afford it or meet the mortgage finance requirements. At the same time, baby boomers are furthering apartment demand as they age out of the workforce and move into rental units. Changing demographics and economic trends will likely impact the apartment sector for years to come. The economic situation is finally starting to improve for many consumers, who have struggled since the financial crisis. Moderate wage growth has finally emerged, and it's hoped to be strong in 2019. At the start of 2019, more millennials were starting families

[10]For more information, download the full Deloitte Insights report, *The Great Retail Bifurcation: Why the Retail "Apocalypse" is Really a Renaissance*, visit https://www2.deloitte.com/insights/us/en/industry/retail-distribution/future-of-retail-renaissance-apocalypse.html

and moving to suburban areas, which offer greater affordability and more space, similar to previous generations. The Collingwood Group, a Situs company, projects a dramatic expansion of household creation. Over the next five to eight years, millennials are projected to create roughly 25 million new households, yet we will likely not see homeownership return to the levels seen in the late 1990s and early 2000s. As of 3Q 2018, the homeownership rate was 64.4%, far below the historical peak of 69.2% in 4Q 2004, based on data from FRED. We anticipate that structural changes such as the ones mentioned above will keep the homeownership rate near the long-term average of 65%, which will benefit the apartment sector. Alternative housing, such as single-family rentals and communal-style living, is expected to become more commonplace in the real estate sector, based on survey data from Situs. Seen as an evolution of the on-demand accommodations provided by platforms like Craigslist and Airbnb, startups such as Common and WeLive are pioneering a business model around luxury buildings with full amenities and a more flexible, short-term approach to rent. This type of living arrangement offers a more affordable and convenient way for individuals to live in large metro areas without sacrificing amenities. And while rents will likely be the ongoing major driver of apartment demand, renter tastes for smart technology and cutting-edge appliances in units will be a major asset differentiator in the future.

THE DELOITTE 2019 COMMERCIAL REAL ESTATE OUTLOOK[7]

In addition to the structural changes that should likely continue to transform tenant demands and the use of assets, several trends are expected to change the CRE industry itself and the strategies that firms can leverage to better adapt to these changes.

GLOBAL CAPITAL FLOWS

Business models are shifting in the CRE industry even as the economy stays strong. In order to maintain capital commitment and investment, Deloitte suggests investing in new and emerging business models that reflect the changing nature of work and tenant preferences. This involves investments offering flexible and varying leasing options, as well flexible spaces.

Mixed-use, data centers, senior housing and mobile towers are all potentially beneficial to include in a portfolio. Portfolios should include experimental and engaging properties that focus on the tenant and make use of augmented reality (AR) and virtual reality (VR) technology to interact with potential tenants. Internet of Things (IoT), artificial intelligence (AI), and predictive analytics technology can be valuable to suit and anticipate tenant needs in order to get and retain valuable client bases for each property.

TECHNOLOGY

The CRE industry is playing catch-up in technological advancement compared to other industries. The industry needs to update its digital strategy and infrastructure. Data from this Deloitte outlook report indicate that institutional investors wish to see an increase in the use of predictive analytics and business intelligence in order to make their buildings future ready and to better utilize IoT in the design and redesign of buildings.

CRE companies should consider being more proactive in embracing technology. Their digital core should be more dynamic, automated and easily integrated with emerging solutions. Much of this technology can take advantage of external cloud-based services. Machine learning and other predictive analytics can help generate valuable insights from large data sets, allowing for an easier, faster and more informed business decision-making process.

CYBER RISK MANAGEMENT

Traditional CRE risk management centers around interest rates and financing risk, but as the use of technology increases, the scope of risk expands. This can lead to increased concerns about information and data privacy, including potential holes in safe IoT integration.

The scope of risk is expanding with the increased use of technology in the industry, so companies should plan accordingly. CRE boards and members of senior management should get involved in governance and oversight. They should create policies to deal with emerging issues, designate roles and responsibilities, create consistent reporting and tracking methods, and budget accordingly. There should be constant communication about emerging risks, and all employees should be trained and aware.

TALENT

The workforce is changing and talent strategies are constantly evolving. Most Gen Z and Millennial workers prefer a startup culture. The industry seems to be struggling to recruit, engage and retain this new pool of talent, according to the Deloitte 2019 Commercial Real Estate Outlook. As a result, many CRE companies face a scarcity of skilled employees. In addition, many companies are unprepared to deal with the high number of baby boomers expected to retire in the coming years. The survey also notes that the majority of respondents believe that a more diversified board helps generate better returns.

Companies can use technology to screen resumes and spot risk for turnover. They should highlight social responsibility and community engagement opportunities when reaching out to younger generations. Strong branding and a robust social media presence should help attract new talent. Knowledge-transfer programs can help retool existing talent and help create a culture of lifelong learning. Making efforts to teach inclusion, connection and mentorship can also help women and minority populations prepare for leadership roles.

THE 2018 DELOITTE DBRIEF

For the past seven years, the authors of this report have conducted a webcast, known as Deloitte Dbrief, to showcase the results of our report. Each year, we poll the webcast participants to gauge their sentiment about the market. The 2018 Dbrief poll was conducted on January 30. The number of responses for these survey questions ranged from 1,779 to 2,475. See Exhibits 1-B through 1-F for charts of the poll results.

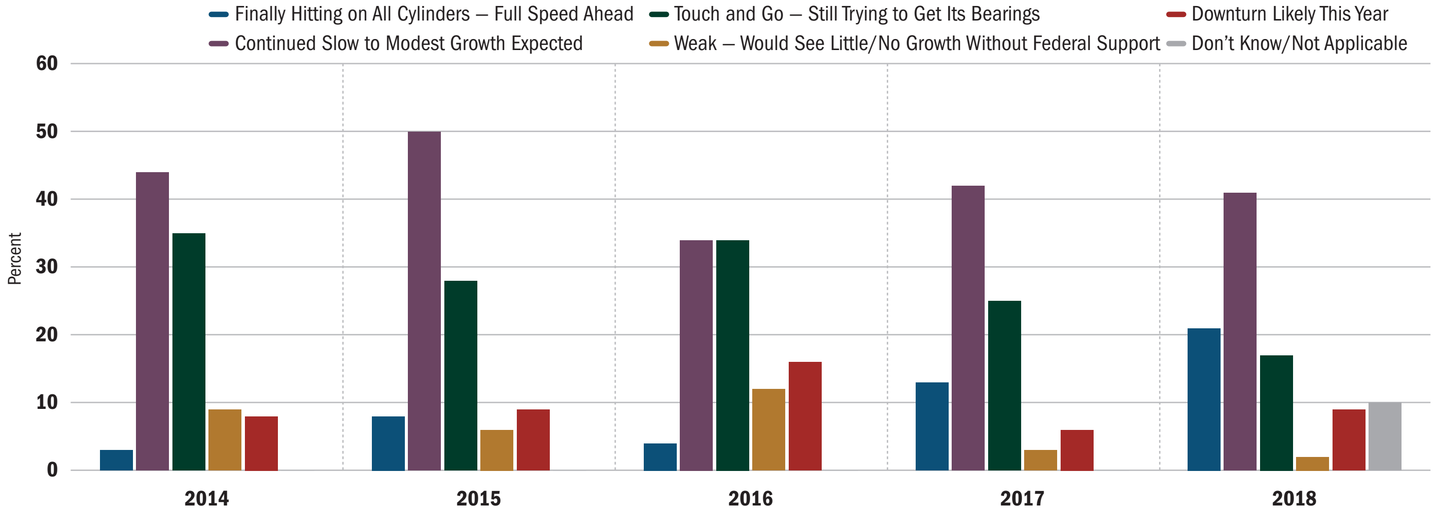
The 2018 Dbrief poll participants showed increased confidence in the state of the economy and a relatively optimistic view of the CRE market. About 20% of the respondents believed that the economy would hit on all cylinders in 2018, compared to 13.1% in 2017. Additionally, 41.5% of the respondents believed that the economy would continue to grow in a slow to modest pace in 2018, comparable to 42.1% of the respondents in 2017.

In terms of the CRE market, about 19% of the respondents believed that robust transaction volume and price appreciation would continue in the CRE market in 2018, while the highest number of respondents — 34.8% — believed that the CRE market was experiencing a gradual slowing of deal volume and price increase. Only 2.7% of the respondents believed that the CRE market would experience a deceleration in 2018, compared to 3.9% in 2017. Respondents were split between anticipating minimal change (-2% to +2%) and moderate improvement (+2% to +5%) in CRE values over the next 12 months, similar to responses in 2017.

About 37% of the respondents believed that multifamily assets would offer the most favorable investment opportunity based on recent performance of fundamentals, the largest percentage among the property types. However, the endorsement of multifamily declined by 10 percentage points year over year (YoY). The largest yearly increase among the property types was for industrial/warehouse, deemed favorable by approximately 20% of the respondents, up from about 14% in 2017. Hotel offered the least favorable investment opportunity, with only 4% of the respondents preferring the asset class.

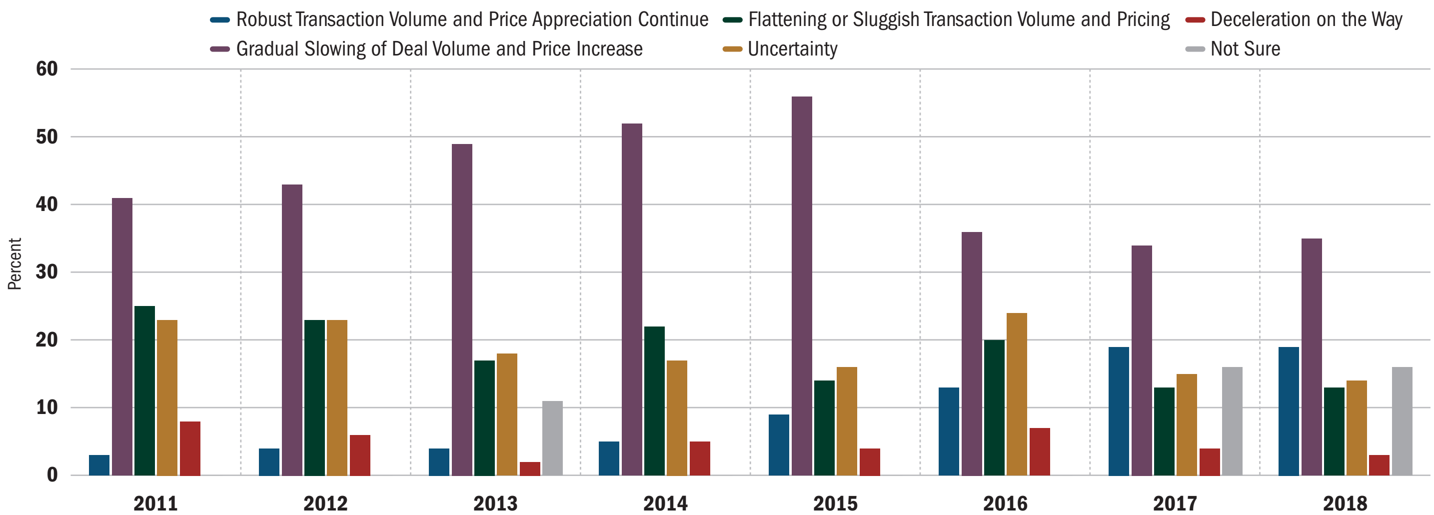
Dbrief participants believed that the capital availability for CRE in 2018 would remain comparable to that of 2017. About 30% of the respondents believed that the standards and availability would remain the same in 2018 compared to 2017. The percentage of respondents suggesting they would seek riskier positions declined from 29% in 2017 to 24.8% in 2018.

EXHIBIT 1-B. DELOITTE Dbrief POLL RESULTS — WHAT IS YOUR VIEW OF THE STATE OF THE ECONOMY?



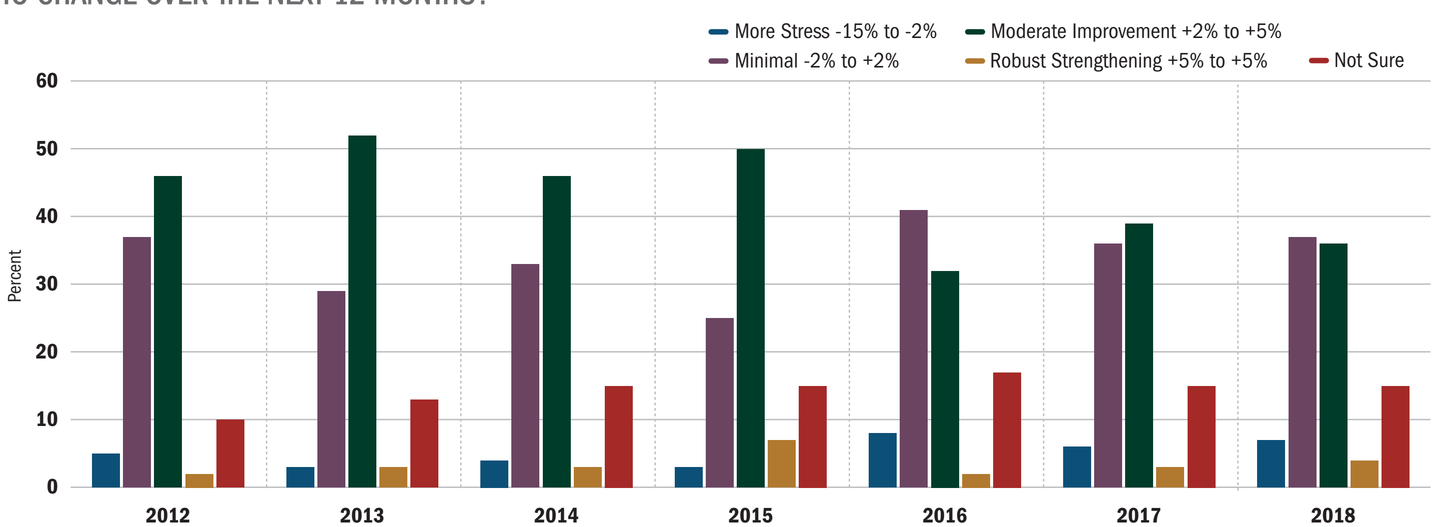
Sources The Deloitte Dbriefs Real Estate series, *Expectations and Market Realities in Real Estate*, January 2018.

EXHIBIT 1-C. DELOITTE Dbrief POLL RESULTS — WHAT IS YOUR VIEW OF THE CURRENT STATE OF CRE?



Sources The Deloitte Dbriefs Real Estate series, *Expectations and Market Realities in Real Estate*, January 2018.

EXHIBIT 1-D. DELOITTE Dbrief POLL RESULTS — TO WHAT EXTENT DO YOU EXPECT COMMERCIAL REAL ESTATE VALUES TO CHANGE OVER THE NEXT 12 MONTHS?



Sources The Deloitte Dbriefs Real Estate series, *Expectations and Market Realities in Real Estate*, January 2018.

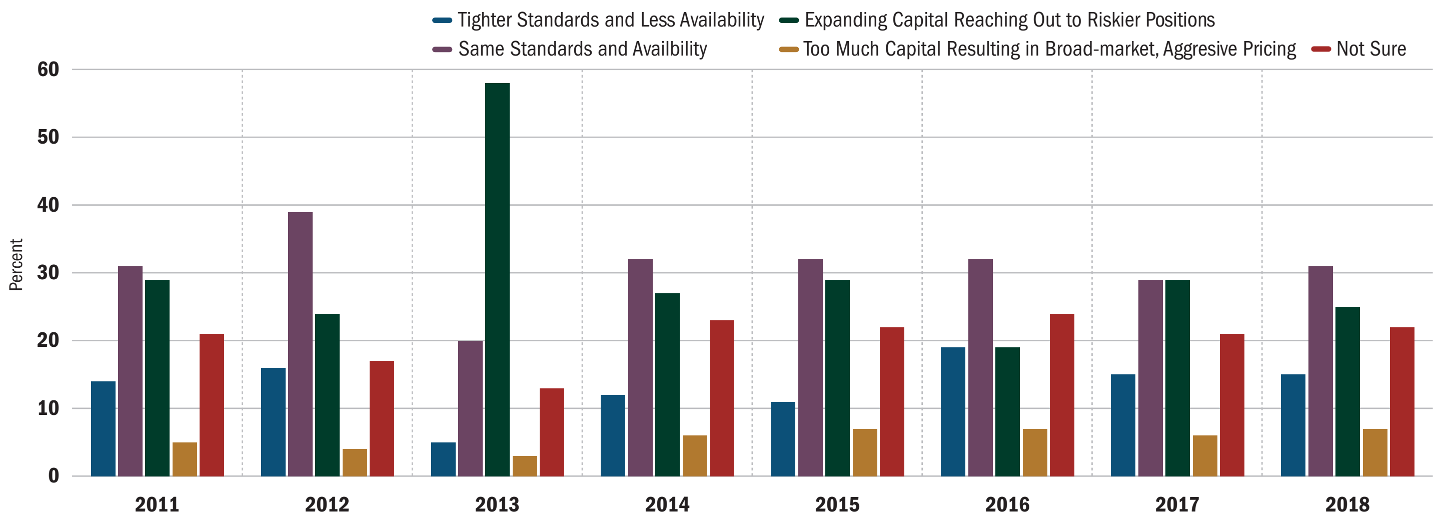
EXHIBIT 1-E. DELOITTE Dbrief POLL RESULTS — PROPERTY TYPE INVESTMENT OPPORTUNITY

WHICH PROPERTY TYPE DO YOU VIEW AS OFFERING THE MOST FAVORABLE INVESTMENT OPPORTUNITY BASED ON RECENT PERFORMANCE OF FUNDAMENTALS?

	2011	2012	2013	2014	2015	2016	2017	2018
Office	17.5	13.1	12.3	13.0	16.0	14.0	11.5	14.0
Industrial/Warehouse	11.9	10.0	11.1	12.4	12.8	10.4	14.0	20.4
Multifamily	29.2	45.8	46.8	45.5	35.5	40.7	46.8	36.8
Retail	9.4	8.4	8.4	6.5	8.3	7.7	6.8	7.1
Hotel	4.7	3.7	3.2	4.4	6.0	6.9	3.8	4.0
Not Sure	27.4	19.1	18.2	18.2	21.4	20.3	17.1	17.7

Sources The Deloitte Dbriefs Real Estate series, *Expectations and Market Realities in Real Estate*, January 2018.

EXHIBIT 1-F. DELOITTE Dbrief POLL RESULTS — HOW DO YOU VIEW THE OUTLOOK FOR CAPITAL AVAILABILITY FOR COMMERCIAL REAL ESTATE IN 2018 VERSUS LAST YEAR?



Note Wording of this response option changed slightly in 2015.
Sources The Deloitte Dbriefs Real Estate series, *Expectations and Market Realities in Real Estate*, January 2018.

CHAPTER 2: THE ECONOMY

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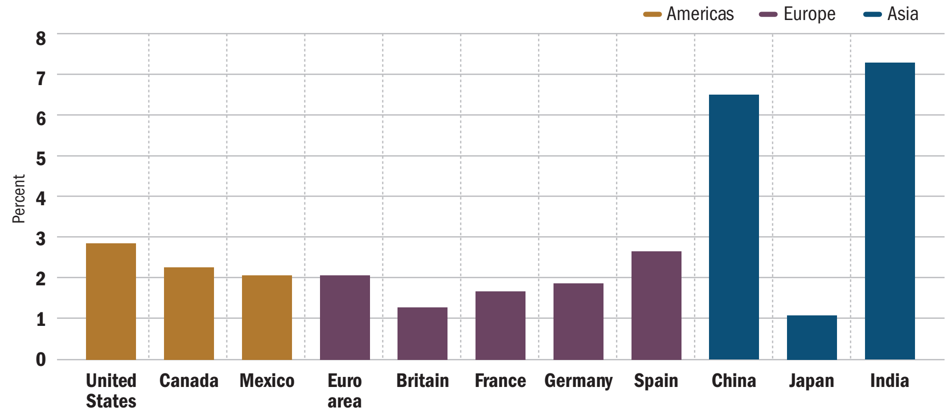
THE ECONOMY[11]

GLOBAL PERSPECTIVES

Global economic activity continued on an expansionary path in 2018. However, the strong momentum of the second half of 2017 lost its verve in the first half of 2018. While monetary policies remained accommodative for a large swath of developed economies — although less so for the United States — economic gains became less homogeneous across geographic areas during the year. In addition, the year witnessed increasing trade tensions as the US imposed tariffs on some trading partners and more broadly shifted away from a multilateral trading framework, as did the UK as it prepared to leave the European Union. Within this changing landscape, the International Monetary Fund (IMF) projected in its October 2018 *World Economic Outlook* that global economic growth would notch a 3.7% annual gain in 2018–2019. The figure represented a 20 bps downgrade from its April 2018 estimate, and placed the pace of growth on par with that of 2017. See Exhibit 2-A for a comparison of annual GDP growth by region.

EXHIBIT 2-A. 2018* ANNUAL GDP GROWTH BY REGION



Source *Forecast by Economist Intelligence Unit, based on Haver Analytics data.

Facing higher energy prices, softer export demand and rising political uncertainty, European economies experienced a slower pace of growth in 2018. According to The Economist Intelligence Unit, gross domestic product for the euro area rose to only a 0.6% rate during the third quarter of the year, reflecting weakening fundamentals. The European Central Bank (ECB) maintained its easing monetary stance through the year, with its main lending rate staying at 0%. The ECB remained committed to its plan to scale back its bond-buying program, which it initiated in January of 2018, announcing at its October meeting that it would cease purchases by December.

The larger European Union (EU) economies — Germany, France, Italy, Belgium — recorded modest economic gains during the year, placing their respective annual GDP growth in a range of 1.1% to 1.9%. Emerging European economies and those at the periphery maintained stronger comparative trajectories during 2018. Based on the latest quarterly data, the economy of Poland advanced at a 4.1% annualized rate, the Dutch economy rose at an annual rate of 3.3%, and the Swedish economy posted a 3.1% annualized gain.

With plans for the United Kingdom's exit from the European Union solidifying into a draft agreement in November of 2018, the UK economy was poised to notch a modest 1.3%

[11]The viewpoints represented in this chapter are those of the NATIONAL ASSOCIATION OF REALTORS® (NAR) and do not necessarily reflect the viewpoints of the other sponsoring firms of this report.

annual gain by the end of the year, based on projections by The Economist's Intelligence Unit. According to a BBC article titled Brexit: *All You Need to Know About the UK Leaving the EU*, the situation became more complicated after the Parliament in January 2019 soundly rejected the Brexit agreement that Prime Minister Theresa May had negotiated with the EU. The hardcore Brexit advocates thought the deal was too accommodating to the EU, while others are holding out hope for a new national referendum to reverse the original vote and keep the UK in the EU. The main opposition Labour Party pushed for a no-confidence vote to bring down May's government, so it could negotiate its own agreement, but the Parliament rebuffed that move. The March 29, 2019, deadline looms with the real possibility that the UK will withdraw with no new agreement in place. This could lead to chaos regarding various financial arrangements, citizenship rights, trade, customs and other issues.

Asian economies showed stronger growth than the EU, with domestic demand driving economic output in India and China, the two dominant players in the region. India's economy was expected to register a 7.4% annual growth rate in 2018, according to The Economist's Intelligence Unit. Following tightening regulations in the property and financial intermediation sectors, the momentum of China's economy slowed down, leading to a 6.6% GDP advance in the third quarter. The Bank of Japan continued its monetary stimulus program, as economic growth remained subpar, with its GDP expected to increase by 1.1% in 2018. Other Asian economies — including Indonesia, Malaysia, the Philippines, Singapore, South Korea and Thailand — reflected solid regional fundamentals, with GDP growth in a higher range of 2.3% to 5.7%. Australia's economy stood out during 2018, posting accelerating growth fueled by domestic consumption and exports, and recorded a 3.5% GDP advance in the latest quarter.

The economies of the Middle East and North Africa offered a similarly mixed picture, as political uncertainty and military conflict impacted output. The IMF expected the region's economies to collectively post an annual gain of 2.4% in 2018, with stronger comparative growth in Egypt, Pakistan and Morocco. Iran's economy was projected to decline 1.5% in 2018.

In the Americas, renegotiations of the North American Free Trade Agreement (NAFTA) continued during 2018, casting a long shadow over economic discussions. The US, Canada and Mexico reached a multilateral agreement in October to update the original 1994 deal. The renegotiated agreement was expected to boost several sectors, including automotive, pharmaceutical and agricultural. Although the US imposed tariffs on Canadian steel during the year, Canada's GDP posted a 2.3% increase in its 3Q 2018 GDP, placing its annual GDP on a path to a 2.9% annual gain, according to The Economist's Intelligence Unit. Mexico's economy remained on a more moderate path, with GDP projected to close 2018 with a 2.1% gain. For Latin American economies, the economic landscape remained mixed. Brazil's economy moderated through the midyear, placing its GDP on track for a 1.5% gain in 2018. Argentina's economy underwent a recession, with GDP expected to decline 2.3% during the year. The economies of Colombia, Chile and Peru experienced improving conditions, with accelerating GDP gains in the 2.7% to 4.1% range. Venezuela's political crisis placed the country in default during the early part of 2018, putting the economy in a steep decline.

Continuing as a significant driver of global economic activity, the United States experienced accelerating economic trends during its 10 consecutive years of expansion. The solid gains in economic output permitted the US central bank to continued tightening of monetary policy, in contrast to the other major central banks around the world. With employment and wages driving consumer optimism, concerns about overheating marked the Fed's deliberations and interest rate decisions. However, the US economy found several clouds accumulating over the economic horizon during the year, including significant volatility in capital markets, a slowing housing market and escalating trade tensions.

US ECONOMY

Approaching 10 years of expansion, the US

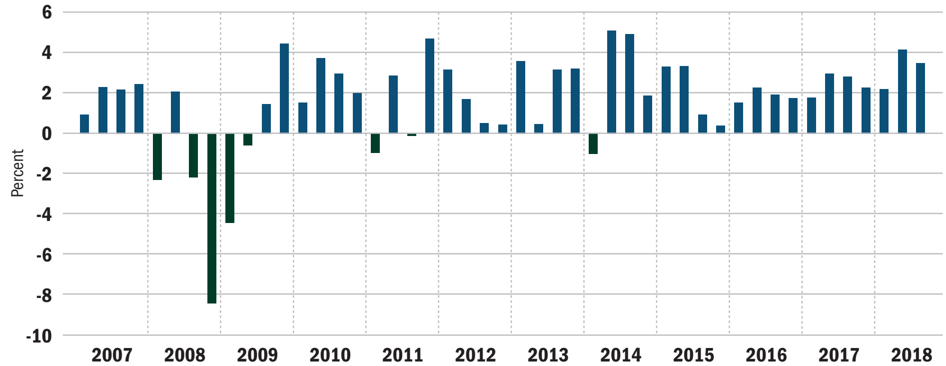

LONDON

economy picked up speed in 2018, buoyed by reductions in personal and corporate taxes and increased government spending. The year started in the wake of the December 2017 passage of the Tax Cuts and Jobs Act, with the corporate outlook lifted by reduced tax rates and a budget deal that increased government spending. As the hiring momentum continued and wage growth accelerated, consumers' optimism translated into higher spending. Following the first quarter's GDP advance at an annualized 2.2% rate, 2Q output rose 4.2%, according to data from the BEA. The upward trend continued in the third quarter, with a GDP gain of 3.5% (see Exhibit 2-B).

The pace of economic gains during the first nine months of 2018 was the fastest in over a decade. Growth in GDP was the result of higher consumer spending, solid exports in the first half and rising government spending. Real wage growth accelerated during the year, exceeding 3.0% by the third quarter. As disposable income rose, consumers purchased more cars and light trucks, in addition to recreational goods and vehicles. Based on data from BEA, recreational spending experienced noticeable 9.4% and 12.4% annual gains in the second and third quarters, respectively. Spending on services also increased, as consumers opened their wallets wider for lodging and restaurants, as well as housing and health care.

Based on our analysis of BEA data, it appears that businesses started 2018 with a strong investment mindset, encouraged by lower tax rates. Nonresidential fixed investment rose at an 11.5% annual rate in the first quarter, according to BEA. The momentum moderated in the ensuing two quarters, as volatility in financial markets tempered the outlook, but investments continued on an upward path. Companies' capital investments in information processing and industrial equipment experienced double-digit gains in the first nine months. Businesses spent more on intellectual property products, with software investment advancing at a double-digit annual rate during the first three quarters of the year. Investments in commercial real estate accelerated during the first half of 2018, but moderated by the third quarter. Investments in residential real estate declined during the year, as a construction labor shortage combined with higher steel and lumber costs constrained

EXHIBIT 2-B. QUARTERLY GDP GROWTH IN THE US



Source Bureau of Economic Analysis (BEA), 3Q 2018.

developers' budgets.

International trade remained a major contributor to economic activity, even as the White House expanded the scope of its initial tariffs on solar panels and washing machines to steel and aluminum, as well as about $200 billion worth of Chinese products. Against this backdrop, exports advanced in the first six months, but retreated in the third quarter, as trading partners took retaliatory measures against US goods. Imports — a negative contribution to GDP — offered a mixed picture, advancing 3.0 % in the first quarter, declining 0.6% in the second and rising a solid 9.1% in the third quarter, based on data from BEA.

The other major GDP component — government spending — posted gains in each of the first three quarters. The federal government boosted its spending on both defense and nondefense goods and services. State and local governments also accelerated their spending and infrastructure investments.

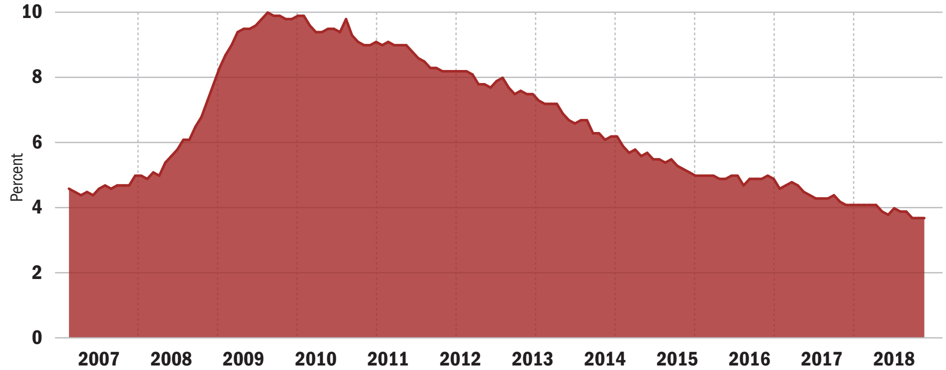
EMPLOYMENT TRENDS

As economic output expanded and employers continued to be relatively optimistic, job growth maintained an upward trajectory during 2018 (see Exhibit 2-C). Payroll employment recorded a net gain of 2.64 million new positions in 2018, based on data from the Bureau of Labor Statistics (BLS). The private sector accounted for the majority of new jobs. As of the third quarter of the year, average weekly earnings of private employees increased by 3.1% compared to the prior year.

Private service-providing industries were the driver of employment growth dynamics, accounting for 1.94 million net new jobs in 2018, based on data from BLS. Within the service industries, riding the wave of an expanding corporate sector, professional and business services companies hired 583,000 new employees during the period. As financial services added an additional 110,000 new positions, demand for office space remained solid during the year, posting positive net absorption figures.

The education and health services sectors were the second-largest employment base, with 517,000 net new positions, based on data from the BLS. Benefitting from consumers' renewed interest in travel and recreation, the leisure and hospitality sectors added 306,000 net new employees to payrolls by the end of December.

EXHIBIT 2-C. HISTORICAL US UNEMPLOYMENT RATES



Source Bureau of Labor Statistics (BLS), 3Q 2018.

Even with higher import tariffs, demand for industrial warehouses and distribution centers continued on an upward path, boosted by strong advances in e-commerce, leading to noticeable transportation and warehousing employment gains of 189,800 new positions. The trend also benefitted the wholesale trade sector, which added 88,900 net new positions to payrolls. The same advance in e-commerce had the opposite result for the traditional retail sector, which experienced continued store closings and attendant layoffs. Retail trade employment increased by 69,300 jobs in the first quarter, only to decline by 30,800 jobs during the April-through-October time frame, according to BLS. The traditional holiday season experienced a rebound, leading to a gain of 53,100 payroll positions.

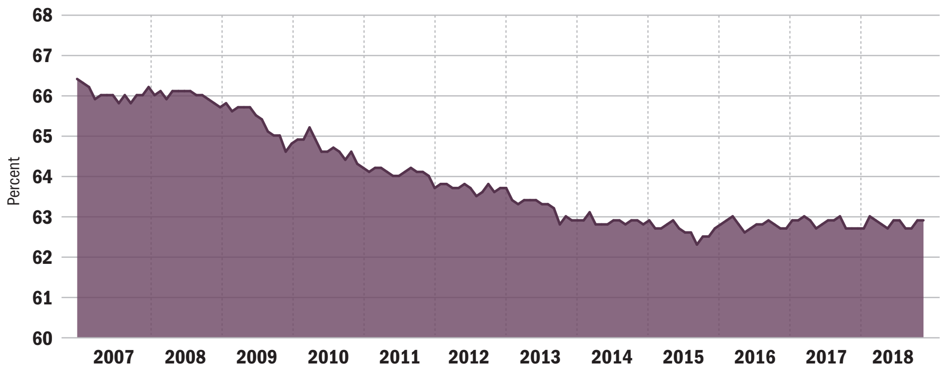
Accompanying solid growth in service industries, employment in goods-producing industries experienced its second-strongest gain of the post-Great Recession expansion during 2018, with a total 624,000 net new jobs, according to BLS. With the White House encouraging domestic production, manufacturing companies responded by expanding existing US operations and added 284,000 new positions to payrolls during the period, based on data from BLS. Construction companies added 280,000 new jobs by the end of the year. The mining and logging sector continued its expansion, with a net gain of 60,000 new positions.

Following employment advances, the unemployment rate decreased throughout the year, from 4.1% in the first quarter to 3.9% by the end of December, based on information from BLS. The average duration of unemployment fluctuated during the year, but declined from 24 weeks in January to 22 weeks in December. The number of Americans employed part time for economic reasons declined from 5.1 million in the first quarter to 4.7 million by the end of the year. Mirroring the trends, the average number of employees quitting their jobs for other opportunities rose to 35.8 million during the January to November time frame, an 8.7% increase from 2017 and a 13.9% gain from 2016.

The labor force participation (LFP) rate, which had been on a downward trend for almost two decades, has flattened (see Exhibit 2-D). From a high of 67.3% during the 1998-2000 period, the LFP rate fell to 62.3% in September 2015, the same level as in October 1977, according to BLS data. The LFP rate has been moving mostly sideways for the past three years — despite monthly shifts — at 62.9%. The figure held steady during 2018, with 163.2 million Americans in the labor force as of the end of December.

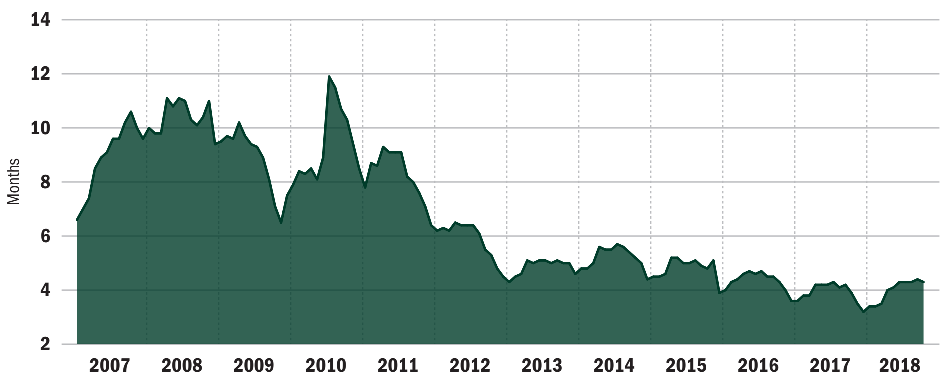
The solid employment gains of 2018 were reflected in the main measures of consumer confidence. The Conference Board's Consumer Confidence Index advanced to 128.1 by December, the highest value since

EXHIBIT 2-D. HISTORICAL LABOR FORCE PARTICIPATION RATE

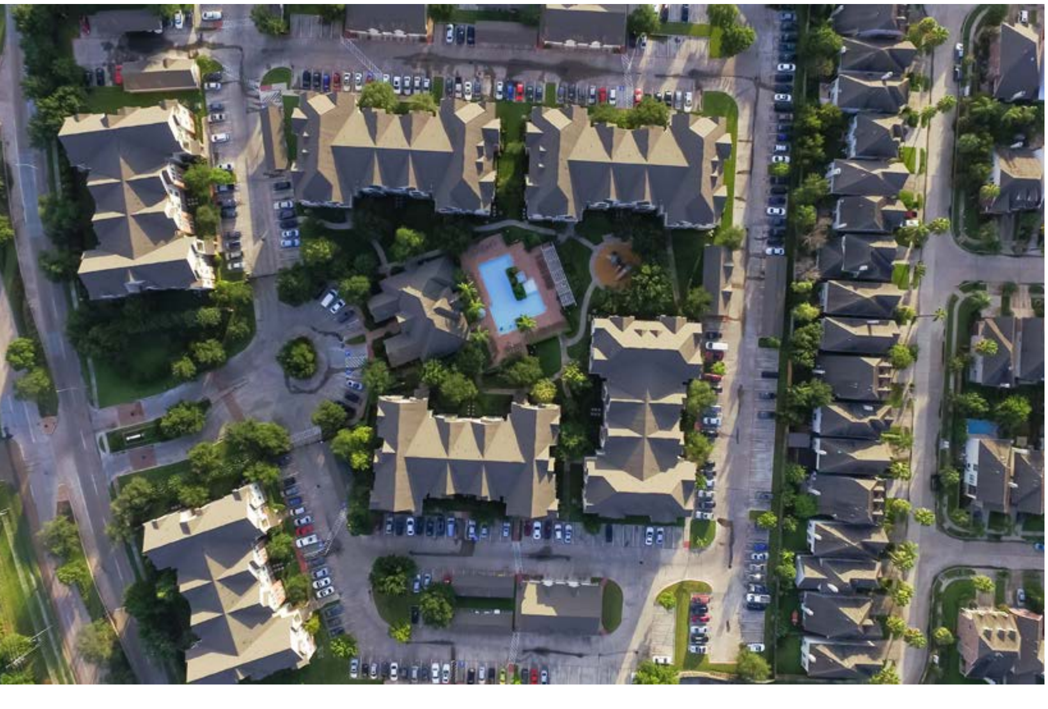


Source Bureau of Labor Statistics (BLS), 3Q 2018.

EXHIBIT 2-E. TOTAL SUPPLY OF EXISTING HOMES (MONTHS)



Source NATIONAL ASSOCIATION OF REALTORS®, October 2018.



September of 2000. The index was 6.4% higher in the fourth quarter of the year, compared with the value from 2017. Separately, the Consumer Sentiment Index compiled by the University of Michigan rose from 95.7 in January to 98.3 in December of 2018, while posting a 2.5% higher reading YoY.

HOUSING

Housing markets across the US wrestled for much of 2018 with declining affordability, due to growing demand and undersupply. Based on data from the NATIONAL ASSOCIATION OF REALTORS® (NAR), the Housing Affordability Index, which peaked at 215.1 in January 2013, recorded a value of 144.0 in November of 2018. The reading represented a 10.6% decline from the same month in 2017, and a 33.1% drop from its peak. Moreover, according to NAR's September 2018 Affordability Score for the 100 largest US metropolitan areas, only 22 metros registered a score at or above 1.0 — the threshold that denotes that a market is considered affordable.

On the supply side, the shortage of existing inventory, which characterized the housing markets over the past few years, continued in 2018 (see Exhibit 2-E). While the historical inventory equilibrium moved in a narrow range of 6-7 months' supply, the supply of existing homes started the year at the 3.4-month mark at the national level, according to data from NAR. As tight inventory combined with rising mortgage interest rates, the pace of existing-home sales declined, leading to an uptick in inventory during the March-October period. The level of months' supply moved from 3.5 in March to 4.3 in November of 2018.

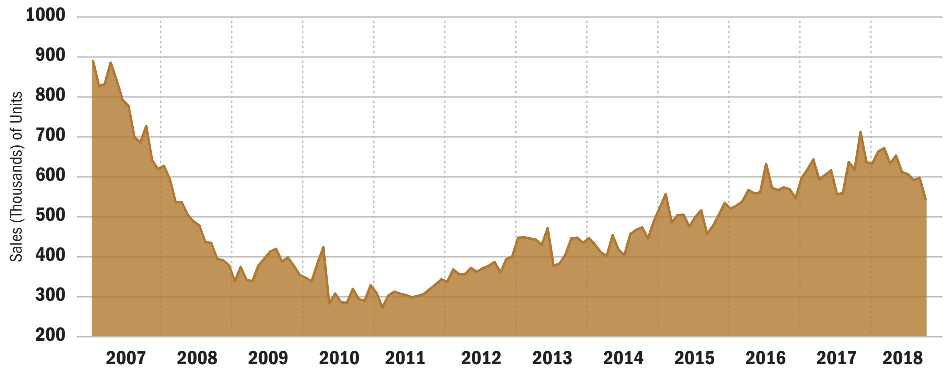
The subpar supply of new homes coming to market added a double whammy to affordability, as construction faced rising labor and materials costs. Building permits for housing units totaled 1.0 million over the first three quarters of 2018, based on information from the Census Bureau. Authorized permits for multifamily housing units added an additional 111,900 to the mix. However, completions of new housing units lagged behind permitting, totaling only 891,800 units during the first nine months of the year.

Lagging new supply was met by continued increases in the number of households. With population growth at 8.0% over the past decade, household formation moved toward long-run trends. Over the 1956-2007 period, household formation averaged 1.2 million net new households each year, according to the Census Bureau. During the GFC, formation dropped to an average of 264,500 new households. During 2010-2017, there were an average of 1.1 million new households formed each year. In the first nine months of 2018, there were 910,000 new households, a solid measure of housing demand.

These trends were felt in housing transactions during the year. New single-family home sales — seasonally adjusted — averaged a modest 623,000 units during the first three quarters of 2018, based on data from the Census Bureau (see Exhibit 2-F). The figure represented a 3.4% increase from the prior year, but it obscured the progressively declining pace of sales through the year.

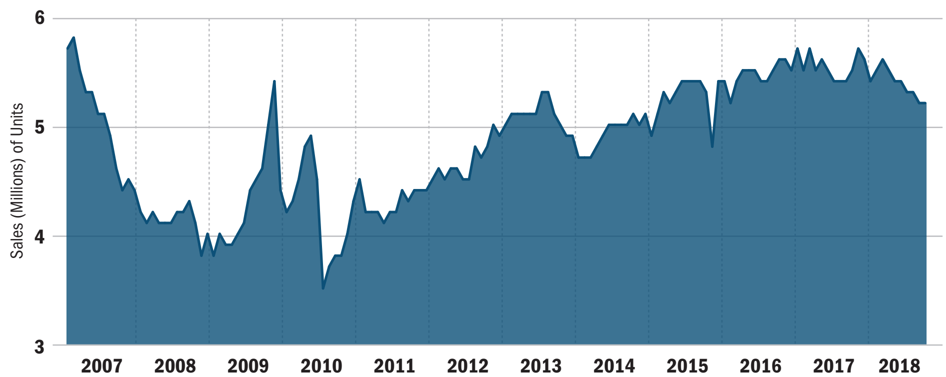
Meanwhile, beset by tight inventory, existing-homes sales slid from a seasonally adjusted average annual rate of 5.50 million units in the first quarter of the year to 5.15 million units by the end of September, according to NAR (see Exhibit 2-G). The pace of price appreciation reflected slowing sales activity, with the median price of existing homes reaching $255,400 in October of 2018 (see Exhibit 2-H). The figure represented a 4.2% increase YoY, a noticeable slowdown in the pace of growth from the average 7.0% rate typical of the 2012-2017 period. As the US population continues growing and demand for housing remains on an upward trend, the undersupply of new homes will continue to weigh on markets into 2019.

EXHIBIT 2-F. NEW SINGLE-FAMILY HOME SALES



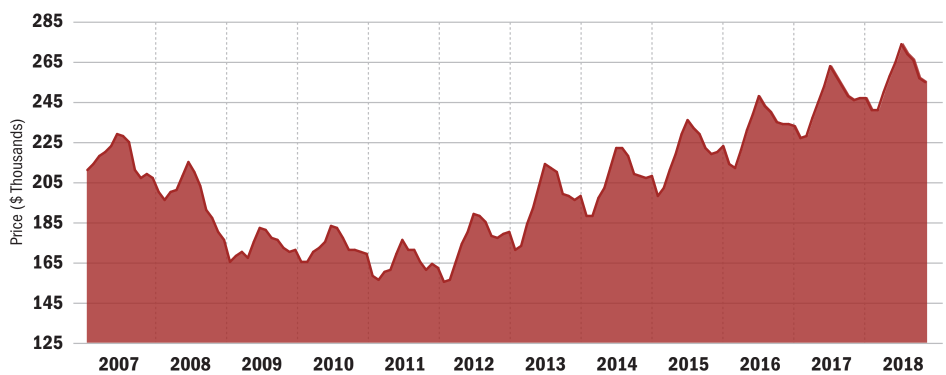
Source US Census Bureau, October 2018.

EXHIBIT 2-G. ANNUALIZED EXISTING-HOME SALES

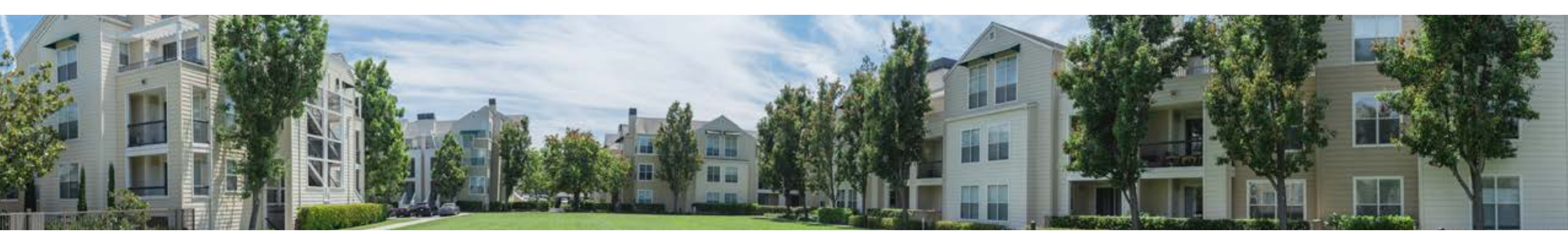


Source NATIONAL ASSOCIATION OF REALTORS®, October 2018.

EXHIBIT 2-H. ANNUALIZED EXISTING-HOME SALES – PRICE



Source NATIONAL ASSOCIATION OF REALTORS®, October 2018.



CHAPTER 3: THE CAPITAL MARKETS

THE CAPITAL MARKETS

LAWS AND POLICIES IMPACTING THE CAPITAL MARKETS

THE ECONOMIC GROWTH, REGULATORY RELIEF, AND CONSUMER PROTECTION ACT[12]

In May 2018, President Trump signed legislation to partially repeal the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (Dodd-Frank). The Economic Growth, Regulatory Relief and Consumer Protection Act aims to cut numerous restrictions imposed on banks and financial institutions by the Dodd-Frank response to the financial crisis. S. 2155 reduces the frequency and thresholds for stress testing and enhanced supervision. In March 2018, in an effort to lessen the confusion surrounding the Basel III High Volatility Commercial Real Estate (HVCRE) rule created for construction loans, the Senate also incorporated provisions from S. 2405, Clarifying Commercial Real Estate Loans, into the larger package of bills included under S. 2155.

S. 2155 amends Dodd-Frank to exempt small, mid-size and community banks from some of the most burdensome requirements. Under the legislation, banks with less than $100 billion in assets will no longer be subject to stress testing. Banks with assets between $100 billion and $250 billion may require only periodic stress testing as opposed to an annual review, subject to regulatory approval.

Perhaps most notably, the legislation raises the threshold for enhanced supervision of "systemically important financial institutions" from $50 billion to $250 billion in assets. Banks with less than $10 billion in assets will be exempt from the Volcker Rule as well. Several provisions are designed to provide targeted relief to community banks, including a simplification of capital calculations and longer exam cycles.

In addition to changes in capital calculations and exam cycles for small and mid-sized banks, the legislation includes provisions from H.R. 2148, Clarifying Commercial Real Estate Loans, legislation that passed the House in November 2017, devoted exclusively to CRE considerations, aimed at improving the workability of Basel III and Dodd-Frank rules.

The passage of H.R. 2148 followed the release of the Office of Comptroller of the Currency (OCC), Federal Deposit Insurance Corporation (FDIC) and Federal Reserve Board's proposed rule to refine HVCRE requirements, which were first imposed by Dodd-Frank's codification of Basel III standards. Basel III significantly increased the requirements for HVCRE loans, increasing the risk weighting from 100% to 150% and raising holding requirements from 8% to 12%. Last year's proposed rule from the OCC, FDIC and Federal Reserve Board reduced the size of the capital charge from 150% to 130%, but actually expanded the number of loans subject to higher capital charges under the HVCRE definition.

The legislation also provides some clarity for High Volatility Acquisition, Development or Construction (HVADC) loans. HVADC loans can be exempt from HVCRE statutory requirements if the loan-to-value (LTV) is 80% or lower, the borrower contributes 15% capital in cash or "readily marketable assets" and the borrower's 15% capital is contributed prior to lender's funding.

Under S. 2155, CRE borrowers will be able to fulfill the 15% equity threshold for HVCRE exemption using the appraised value of the property, in lieu of the current cost basis assessment. All loans originated prior to 2015, when the Basel III standards became effective, will be exempt from the need to satisfy HVCRE criteria. The legislation also creates an off-ramp from HVCRE status once an ADC loan reaches maturity.

The banking industry has praised the new

[12]Unless otherwise noted, the analysis of The Economic Growth, Regulatory Relief and Consumer Protection Act was taken from an article by Situs, *CRE Clarifications & Concentrated Supervision in New Legislation Could Drive Community Investment & Economic Development*, and may not reflect the viewpoints of the other sponsoring firms of this report.

law, saying it will now be easier for borrowers to obtain mortgages from community banks and credit unions - especially in rural areas where banking options are more limited, according to the the New York Times (*Congress Approves First Big Dodd-Frank Rollback*). The hope is that the relief from red tape will help invigorate small communities and encourage more investment there in CRE and home mortgages. All Republicans voted in favor of the new bill, along with some Democrats.

In the wake of the original law, there has been a huge increase in the amount of nonbank lending in this decade – from just under 10% of the market in 2010 to about half in 2017, according to CNBC. Tougher regulations on banks opened the door for nonbank lenders like Quicken Loans, loanDepot and Caliber Home Loans to move in free from many of the regulations imposed on banks. Deregulation could stop or even reverse that trend, with big banks increasing their involvement in the mortgage market. Analysts expect smaller banks to increase their lending activity as well.

Situs posits that the law delivers some considerable wins for the CRE market by implementing key clarifications to HVCRE and ADC lending requirements. The broader changes designed to better tailor regulatory oversight and the amended CRE provisions could spur new investment and development by easing capital and regulatory requirements, reducing borrowing costs and opening up credit.

The original HVCRE requirements in some instances required borrowers to refinance an ADC loan at the end of the risk period. Now, borrowers will be allowed to deploy their own internal capital in an ADC project. Finally, the legislation provides a new exemption for refinancing loans on performing income-generating properties. This provision should ease the restrictions on acquiring and renovating existing rental properties by allowing borrowers to bypass capital penalties. The clarifications to ADC lending will likely have a positive impact across the CRE market, from local communities to small banks and borrowers. The amended requirements provide CRE borrowers more flexibility to navigate and satisfy HVCRE standards and meet exemption thresholds when possible. The workable requirements and revised supervisory thresholds should also allow more small and mid-size banks to play a greater role in CRE lending. The illumination of a clear HVCRE definition under Basel III and new federal proposed regulations should reduce borrower costs and expand credit in the area. Most importantly, the impact of S. 2155 should have the combined result of driving new investment, economic development, construction and job growth in communities across the country.

TARIFFS

At of the end of December 2018, the trade dispute between the United States and China was in a "cease-fire." When President Trump and Chinese President Xi Jinping met on December 1 in Buenos Aires during the G-20 summit, they agreed that neither side would escalate the "war" for three months. According to Politico's *'Incredible Deal' or Face-Saving Punt? How the Next 90 Days Must Save the US-China Agreement*, China offered no public guarantee that it would address US concerns about: China's subsidies of state-owned businesses; its policy of forcing US firms to hand over technology to do business there; and its toleration of outright intellectual property theft. But China agreed to resume buying an unspecified amount of US agricultural goods, which it had suspended when the US first imposed new tariffs on China.

From 1790 to 1860, tariffs — taxes on imports, collected by Customs and Border Protection agents at hundreds of ports of entry — produced about 90% of federal revenue, compared to about 1% at the beginning of

President Trump's term, according to a CBS News article titled *What Exactly are Trump's Tariffs, and How Would They Work?* In addition to raising revenue, tariffs are designed to increase the price of imports or to punish foreign countries for committing unfair trade practices, like subsidizing their exporters and dumping their products at unfairly low prices.

According to a CBS News article titled What Exactly are Trump's Tariffs, and How Would They Work?, tariffs have fallen out of favor since the end of World War II. Most economists worry that tariffs drive up the costs of imports for domestic consumers because even domestic producers can take advantage of them by increasing their prices as well. Companies that rely on foreign steel, for example, are at a competitive disadvantage because their foreign rivals can buy steel more cheaply and sell their products at lower prices. By the time President Trump took office, the US and the EU each had one of the lowest average tariffs in the world – 1.6%.

In March 2018, the White House added a 25% tariff to about $31 billion worth of imported steel and a 10% tariff to $17 billion of imported aluminum. In July and August, President Trump imposed an extra 25% tariff on $50 billion worth of imports from China, which retaliated, so Trump added $10% more on $200 billion in Chinese goods, according to a New York Times article titled *Trump's Tariffs Haven't Really Transformed Trade. Yet*. Before the "cease-fire," the administration announced plans for a second round of tariffs on China from 10% to 25%, starting in January, and the president threatened to broaden his offensive by imposing a 25% tariff on all of the roughly $500 billion of goods and services imported from China.

It's hard to predict where this will all end, according to The New York Times article. President Trump has vowed to win the trade disputes, but most economists are skeptical. If all the tariffs are imposed, the average US tariff rate will rise to about 3.2%, about the level during the Clinton administration in the 1990s. In comparison, the average tariff rate was 20% in the 1930s and 30% in the early 1900s.

"Winning" an economic war when tariffs are already low has very little effect, according to The New York Times article. But economic theory suggests that if the tariff rate were to jump to 10%, it could inflict a disproportional amount of damage in distortions to the economy. If tariffs get too high throughout the economy, they could not only lead to fewer imports, but they could persuade people to cut back on their spending. And if President Trump follows through on his threat to withdraw from the World Trade Organizations (WTO), the US would no longer be bound by past multilateral trade agreements that together determine nearly all American tariff rates. This could lead to an executive order to revert to even higher rates.

According to a Deloitte Insights report, *United States Economic Forecast – 3rd Quarter 2018*, the magnitude of the impact of the tariffs depends on whether they turn out to be temporary or permanent. While temporary trade restrictions might slow growth for a year or two, permanent tariffs would reduce aggregate output and could have a substantial impact on the economy. While tariffs are unlikely to cause a recession in and of themselves, declines in growth due to rising costs and disrupted supply chains, supply shortages and potentially decreased business investment make the US economy more susceptible to other shocks. Uncertainty regarding tariff policy is likely to continue to spook investors.

OPPORTUNITY ZONES[13]

The Qualified Opportunity Zones ("QOZ") program was enacted in the 2017 Tax Cuts and Jobs Act to encourage economic growth in underserved communities through tax incentives for investors. Along with those tax benefits, it presents opportunities for real estate investment and development in those communities. US states and territories, including Washington, DC, nominated areas (by census tract) to be designated as QOZs in 2018, and the Internal Revenue Service (IRS) and Treasury finalized the designations that year. This program presents opportunities for real estate investment and development in distressed communities.

[13]Unless otherwise noted, the analysis of qualified opportunity zones was taken from an issue summary by the NATIONAL ASSOCIATION OF REALTORS® (NAR), *Federal Tax/Qualified Opportunity Zones*, and may not reflect the viewpoints of the other sponsoring firms of this report.

Investments in Opportunity Funds (O Funds) may be gains from a previous sale (within 180 days) and/or non-gains funds, but only reinvested capital gains are eligible for the tax benefits. If both gains and non-gains funds are invested, they are treated as separate investments and will receive different tax treatments. To qualify for the tax benefits, investments into a QOZ must be made through an O Fund, which may be a partnership or corporation organized for the purpose of investing in QOZ property.

An O Fund must hold at least 90% of its assets in QOZ property (which can be stock, partnership interests, and/or tangible property used in a trade or business within a QOZ, such as real estate) and it must certify with the Treasury and IRS, via a self-certification filed with federal tax returns (Form 8996).

In addition, at least 70% of the "QOZ business property" that an O Fund invests in must be in a QOZ. The statute also requires that after an O Fund acquires QOZ business property that it be either new or "substantially improved," which means investing at least as much on the improvement as was paid for the used asset. The proposed rules state that the basis of the land a business sits on does not need to be included for that requirement, thus reducing the required investment amounts.

The Treasury released the first set of proposed rules for QOZs in October 2018, which outlined several administrative aspects of the program. Further proposed rules are expected to address the remaining questions, including how to define "original use" or QOZ business property that was abandoned or vacant. The IRS had been scheduled to hold a public hearing on January 12, 2019, to help provide clarity and guidelines for potential investors in the so-called O Zones, but the meeting was canceled because of the government shutdown. According to an article in the Wall Street, *Government Shutdown Stymies Opportunity-Zone Investors*, potential investors were frustrated by the delay because they didn't want to take any action until they were clear about how the tax breaks will work. They do understand, however, that the benefits from the program decline over time, and they want to get started as soon as possible.

On December 12, 2018, the White House issued an Executive Order establishing the White House Opportunity and Revitalization Council, chaired by Housing and Urban Development Secretary Ben Carson and composed of 13 federal agencies. The Council will focus on ways to revitalize low-income communities, through streamlining coordinating existing federal programs to economically distressed areas, including Opportunity Zones. Though the program does not have final regulations yet, an extension bill was introduced by Rep. Mark Meadows (R-NC) in September 2018: H.R. 6890, the Creating Advancement and Personal Improvement in Targeted American Localities (CAPITAL) Act, which would allow for the designation of new opportunity zones every 10 years.

There are several potential tax benefits for investors in a QOZs, if all requirements are met. First, capital gains reinvested (within 180 days of a sale to a nonrelated person) into a QOZ are tax-free for up to nine years, through 2026. If held for five years, the tax ultimately paid on the reinvested gains is reduced by 10%; if held for seven years, that reduction is increased to 15%. In addition, gains accrued on deferred-gains funds while invested in a QOZ are tax-free if they are held for at least 10 years.

On the front end, it provides a way for real estate investors to invest capital gains without paying the tax on those gains immediately, which may encourage them to sell real estate assets they might otherwise hold on to in order to avoid taxes. On the back end, the O Funds created to invest in the zones will likely be looking for business property to invest in, which in many cases will include real property and/or involve development opportunities for real estate.

However, opponents of the QOZ program argue that it will encourage gentrification of neighborhoods as opposed to creating economic opportunities for current residents. They argue that the perceived lack of "guardrails" from the government about what is developed (e.g., affordable housing, or requirements that jobs be created) will lead to fraud and abuse of the program.

ENVIRONMENTAL POLICIES AND CLIMATE CHANGE

President Trump has pushed hard for deregulation of the rules enforced by the Environmental Protection Agency (EPA), which may have a direct impact on CRE. According to Commercial Property Executive (CPE), the Insurance Information Institute, based on data compiled by Munich's Re's Natural Catastrophe (NatCat) Service, cites concerns about a long-term trend of increasing numbers of natural catastrophes linked to global warming and exposing real estate owners and investors to rising insurance premiums. A 29-company coalition of insurers is warning about a growing "protection gap" between covered losses and actual costs of disasters. The same CPE article states that

PORTLAND

the EPA's actions to reduce climate regulations could lead to more climate disasters in the future. Besides the environmental effects, this will also put increased pressure on insurance companies and increase the chances of property owners not being adequately insured for natural disasters.

In the last few months of 2018, President Trump proposed looser regulations or changes in numerous environmental areas, including: emission limits for new coal power plants; fuel-efficiency standards for 2022–2025 passenger vehicles; and the Endangered Species Act, according to the Brookings Institution.

While the effects of environmental deregulation are up for debate, the potential stakes are enormous. According to a Deloitte Perspectives article, the result of inaction on climate change could be an acceleration of the frequency and severity of devastating storms, droughts, floods, famine and other catastrophes - with a large part of the damage paid for by insurers.

Global insured natural catastrophe losses in 2018 were $79 billion, the fourth highest on record and higher than the average of the previous 10 years, according to the Swiss Re Institute's latest report. However, insurance covered only about 30% of last year's total losses, with underpenetrated developing markets absorbing the biggest share. The resulting "protection gap," noted Swiss Re, was $180 billion in 2016, the latest numbers available .
According to Situs RERC, climate change also has the potential to directly impact CRE. If sea levels rise, metros near the coastlines, which encompass most of the major metropolitan statistical areas (MSAs) and a substantial proportion of the US population, will likely become submerged and catastrophic property damage will occur. Even for non-coastal areas, the preponderance of natural disasters may be enough to stymie CRE investment.

However, any increase in extreme weather could expand green lending as the need grows for more resilient construction, according to Situs. In response to greater attention to such disasters and shifting tenant expectations, legislation on building requirements could be fast-tracked, causing accelerated demand for green capital. Industry stakeholders appear to believe green lending has the potential to overtake the vast majority of the CRE market. The trajectory of green lending going forward is dependent on when a premium will be paid in the general marketplace for green bonds and green loans. While unlikely that a "green premium" in the near future, a discount for properties using outdated techniques, systems and materials in traditional bond and lending markets is likely to emerge as energy efficiency becomes the norm.

THE GOVERNMENT SHUTDOWN

Beginning on December 22, 2018, about 800,000 employees were furloughed or required to work without pay due to what ended up being the longest partial shutdown of the US government in history – 35 days. In the short term, it led to the closing of national parks and museums and the slowing or halting of food safety inspections and initial public offerings on the stock market, according to a CNBC article, *Industries Affected by the Government Shutdown*. The New York Times reported in a January 15 article, (*Shutdown's Economic Damage Starts to Pile Up, Threatening an End to Growth*) that White House economists projected that every week of the shutdown reduced growth by 0.13 percentage points – more than half a percentage point in the first month alone. The Congressional Budget Office estimated that the shutdown cost the economy $11 billion, including a $3 billion permanent loss.

Economic growth resumed once the shutdown ended as federal workers started receiving back pay, but the effects of it had already spread through the economy, and Congress balked at proposals to require reimbursement for the hundreds of thousands of contract workers who weren't paid during the shutdown. Retailers will most likely feel the most immediate effects, but financial institutions were also impacted as some mortgage payments went unpaid. The most damage in the long term may certainly come from the decreased global confidence in the US government's ability to respond to crises. The November elections brought divided government to Washington, and passing any meaningful legislation will likely be a challenge.

In terms of the real estate industry, the agencies most affected were the Treasury Department, Housing and Urban Development

(HUD) and the IRS, including the Small Business Administration (SBA), Federal Housing Authority (FHA) and US Census data, according to National Real Estate Investor (NREI) in an article titled *A Breakdown of the Government Shutdown's Impact on CRE*. The FDIC and the Fed remained open and continued their oversight of the banking industry. An analyst quoted in the same NREI article said the short-term effect was minimal and she hoped it would be business as usual once the agencies reopened.

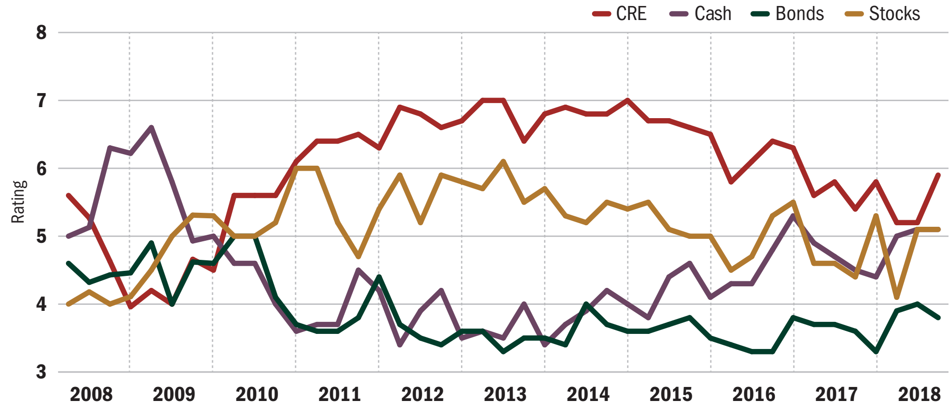
FINANCIAL AND CAPITAL MARKETS OVERVIEW

THE EQUITY MARKET

The US equity market demonstrated strength through most of 2018, but experienced extreme volatility in the fourth quarter. The S&P 500 total return index stayed approximately in the 5,500-5,700 range during 3Q 2018, with a return of 7.82% YTD as of September 30, 2018, while the Nasdaq stayed approximately in the 7,600-8,100 range during the quarter, with a return of 12.18% YTD as of September 30, 2018 (see Exhibit 1-A). However, the stock market experienced several major declines in October and November, which essentially erased all 2018 gains. In just two days — November 19 and 20 — the Dow Jones dropped nearly 950 points or 3.73%. Then, in December, the Dow, S&P and Nasdaq all dropped about 9%. By the end of 2018, the Dow had its worst year in a decade, finishing barely above 23,000 after starting the year at nearly 25,000 and peaking at 26,828.39 in October. The S&P 500 total return index tumbled to about 5,000 by the end of the year, and the Nasdaq fell to below 6,600. The stock volatility was attributed to major declines in tech stocks, poor retail earnings estimates, rising tensions between the US and its trading partners, volatile commodity prices and the declining strength of the US dollar.

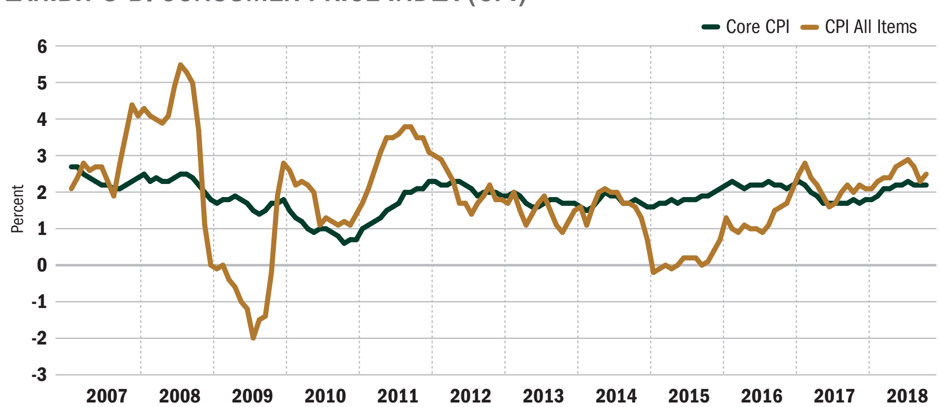
In general, investors are exposed not only to the US stock market, but also to the international markets. The emerging market equities were lackluster over concerns about a global trade war, higher oil prices and the impact of higher US interest rates on the economies that rely on external funding. It is possible that investors view the global

EXHIBIT 3-A. SITUS RERC RATINGS OF INVESTMENT ALTERNATIVES



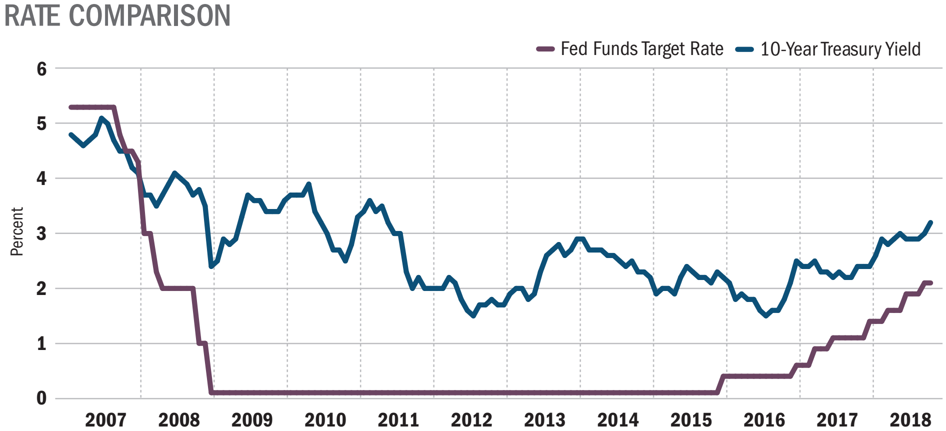
Source Situs RERC, 3Q 2018.

EXHIBIT 3-B. CONSUMER PRICE INDEX (CPI)



Source Bureau of Labor Statistics (BLS), November 2018.

EXHIBIT 3-C. 10-YEAR TREASURY NOTE YIELD AND FEDERAL FUNDS RATE COMPARISON

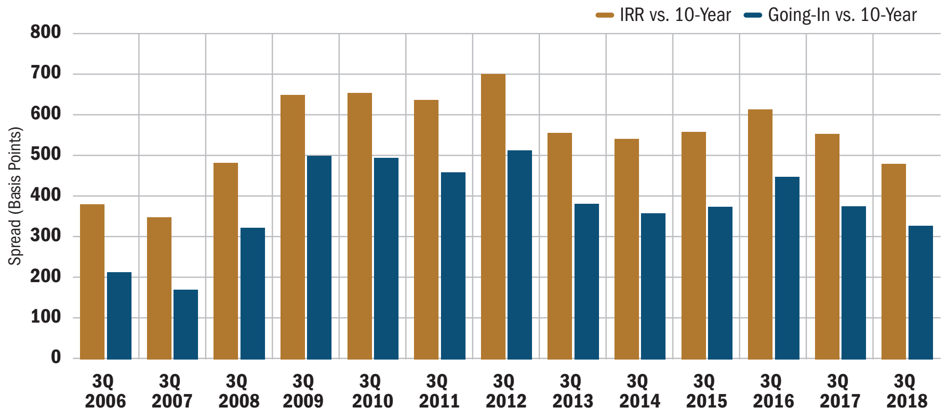


Source Federal Reserve Board, November 2018.

equities market as one, which could explain the flat rating for stocks despite the strong US equity market. However, stock market volatility in October and November may greatly influence our future survey rating for stocks.

While strong economic data and rising consumer confidence have encouraged the Fed to hike rates, fixed-income returns have been unimpressive as investors have struggled to keep up with the rising rates. Moreover, with the yield curve still relatively flat, the preference for bonds is expected to decline in the coming quarters.

EXHIBIT 3-D. SITUS RERC HISTORICAL CAP RATES



Source Situs RERC, Federal Reserve 3Q 2018.

INVESTMENT ALTERNATIVES

The preference for CRE soared from 5.2 in 2Q 2018 to 5.9 in 3Q 2018 (on a scale of 1 to 10, with 10 being excellent), while the preference for stocks was unchanged at 5.1 in 3Q 2018, according to a Situs RERC survey of institutional investors. Cash had the same rating in 2Q 2018 and 3Q 2018 (5.1), while the preference for bonds dipped from 4.0 in 2Q 2018 to 3.8 in 3Q 2018, far below the other alternatives. While the preference for CRE greatly increased in 3Q 2018, the CRE Preference Index shows that the preference for CRE over the alternatives of stocks, bonds and cash has been generally declining since 1Q 2015. See Exhibit 3-A for historical investment alternative ratings.

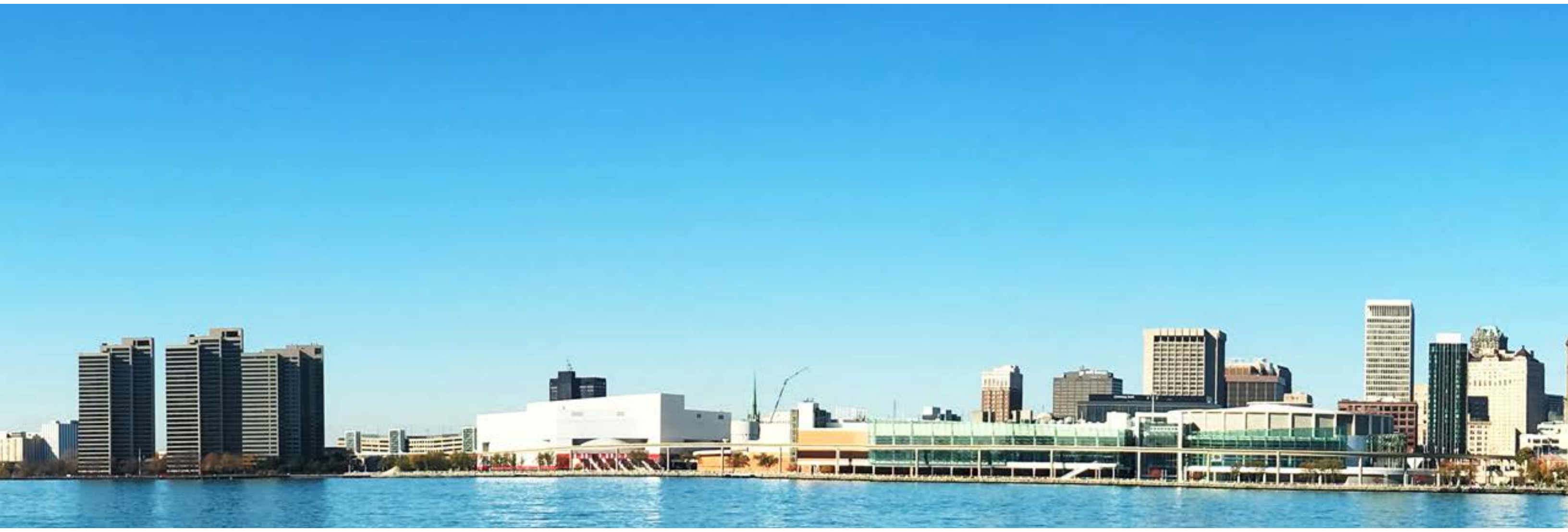
INFLATION AND THE FED

With an accelerating economy and rising wages, consumer prices picked up speed during 2018 (see Exhibit 3-B). Consumer price inflation, as measured by the Consumer Price Index, averaged 1.7% annually from 2010 to 2017, according to BLS. During the last few months of 2017, the CPI began recording upward movement. The trend intensified in 2018, with consumer prices rising by an average of 2.5% YoY during the first nine months of the year.

Core inflation — which excludes food and energy — spent most of the year above 2.0%, averaging 2.1% over the January-September time frame, based on data from BLS. The cost of housing, both rent and owners' equivalent rent, comprises about a third of the Consumer Price Index. Prices for shelter advanced at a faster clip during 2018, compared with 2017, averaging 3.3% in the first nine months.

These gains moved inflation above the Fed's 2.0% target, which, combined with the unemployment rate below 4.0%, prompted the central bank to act on its promise from 2016 to continue scaling back its quantitative easing. The Federal Open Market Committee (FOMC) voted to increase its funds target rate by 25 bps four times during 2018, at its March, June, September and December meetings (see Exhibit 3-C).

The Fed has emphasized the US economy's strength and that it might need to keep raising rates to prevent the economy from overheating or inflation from getting out of hand.



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The Fed also removed "accommodative" language from its press release, perhaps implying that the economy can grow without the monetary push. Likewise, the US Treasurys were considered a more attractive risk hedge compared to the Eurozone bonds.

While steady, incremental hikes do not have much impact on CRE, developers and investors may be adversely affected by higher borrowing costs if the Fed maintains its pace of rate hikes. Higher interest rates lead to higher cap rates and lower property valuation, which in turn will impact transaction volume. Over the past year, Situs RERC's institutional survey respondents have voiced a growing concern over the impact of higher interest rates on CRE. For now, CRE has remained a stable asset class with NPI-ODCE and NFI-ODCE returning 5.27% and 5.75% YTD as of September 30, 2018, respectively. See Exhibit 3-D for CRE rates and 10-year Treasury spreads.

AVAILABILITY OF CAPITAL AND DISCIPLINE OF UNDERWRITING STANDARDS

The 3Q 2018 *Situs RERC Real Estate Report* shows that since its post-recession peak in 3Q 2014, the availability of capital generally trended downward, but it has been trending back up since 1Q 2017. On a scale of 1 to 10, with 10 being excellent, the availability of capital remained at 7.5 QoQ in 3Q 2018, up slightly YoY from 7.4 in 3Q 2017. Since peaking in 4Q 2009, discipline (underwriting standards) has generally trended downward, but it has been trending slightly upward since 4Q 2016. However, underwriting standards appear to have stabilized over the past year (despite a dip in 1Q 2018). The discipline rating was 6.5 in 3Q 2018, compared to 6.6 in 2Q 2018 and 6.6 in 3Q 2017. The Situs RERC Underwriting Index shows the extent to which the availability of capital and discipline of underwriting standards are aligned. The index has generally increased over the past year, indicating that the availability of capital is exceeding discipline. This is a trend to watch over the coming quarters, but the index is still historically low, so there is no cause for concern yet.

In 2Q 2014, Situs RERC began analyzing the availability and discipline of capital for debt and equity separately. In 3Q 2018, the availability of equity capital rating declined QoQ, while the underwriting standards for equity capital increased. Institutional investors noted that uncertainty about the direction of the economic cycle, and pricing that feels like it is at a peak, are making equity capital cautious.

Survey research by Situs RERC shows the availability of debt capital rating increased QoQ and the underwriting standards for the debt capital declined in 3Q 2018. Situs RERC's institutional survey respondents rated the availability of debt capital 7.7 in 3Q 2018 compared to 7.1 in 3Q 2017. These respondents indicated that debt is very available and the competitiveness of debt funds in the market is causing a slight erosion of overall underwriting standards. However, the stricter requirements that have been in place since the beginning of the recovery remain and have generally kept lending in check. The discipline in debt underwriting was rated at 6.6 in 3Q 2018, compared to 6.8 in 3Q 2017.

CRE DEBT MARKET

According to RCA, the LTV ratio for the apartment sector started at 68% in the beginning of the year and declined to 62% by August 2018. On the other hand, the LTV ratio for commercial (office, industrial and retail) stayed in the range of 60% to 62% during the first three quarters of 2018, reaching 62% in August 2018.

Data on debt yield ratios were provided by RCA. Debt yield ratios declined slowly from 10.7% in January 2018 to 10.4% in August 2018 for the retail, industrial and office sectors combined. Debt yield ratios for the apartment sector hovered around 8.6% during the year, but jumped to 9.2% in August 2018. Debt yield ratios were below the high of 15% in 2010 for the retail, industrial and office sectors and the 10.5% for the apartment sector recorded in 2004.

RCA provided trends analysis regarding the debt service coverage ratio (DSCR). According to RCA's methodology, DSCR is provided through commercial mortgage-backed securities (CMBS) tapes and only includes ratios between 1 and 2.5. The commercial DSCR was volatile during 2018 - starting the year at 1.87, sliding to 1.73 in March but climbing back to

1.78 in August. The apartment sector was volatile as well, with the DSCR at 1.54 in January, falling 1.45 in May and climbing to 1.62 in August. The volatility in the ratio could be, in part, due to the late stage of the cycle as investors increase leverage to stay competitive. The investors, however, also have concerns about servicing the higher leverage.

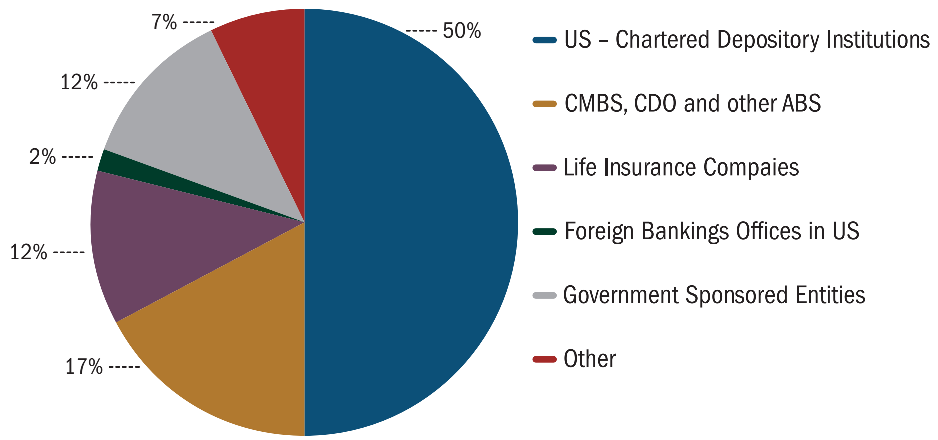
The *Q2 2018 Commercial/Multifamily Quarterly Data Book* reported that the delinquency rates for commercial and multifamily mortgage loans remained relatively flat in 2Q 2018, with only 0.03% of the balance of commercial and multifamily mortgages held by life insurance companies and only 0.01% of the balance of multifamily mortgages held by Freddie Mac being delinquent. Likewise, 3.52% of the balance held by CMBS was delinquent in 2Q 2018.

The CMBS lending market declined after the financial crisis due to the stagnant CRE fundamentals.

According to the NREI article *Stuck in Neutral: CMBS Issuance Stalls Amid Stiff Competition*, CMBS volume slowed down in 2018 mainly because of the shrinking pipeline of maturities and investors' demand for higher yields. According to the December 14, 2018, issue of the Commercial Mortgage Alert (CMA) weekly newsletter, the spreads have widened in 2018. Spreads on AAA conduits were S+98, which is up from the previous week's spread of S+90 and the 52-week average of 78. Spreads of BBB- conduits were S+315, lower than both the week prior (S+275) and the 52-week average of 306. The rising spreads were ascribed to volatility in the fixed-income, equities and leverages-loans market.

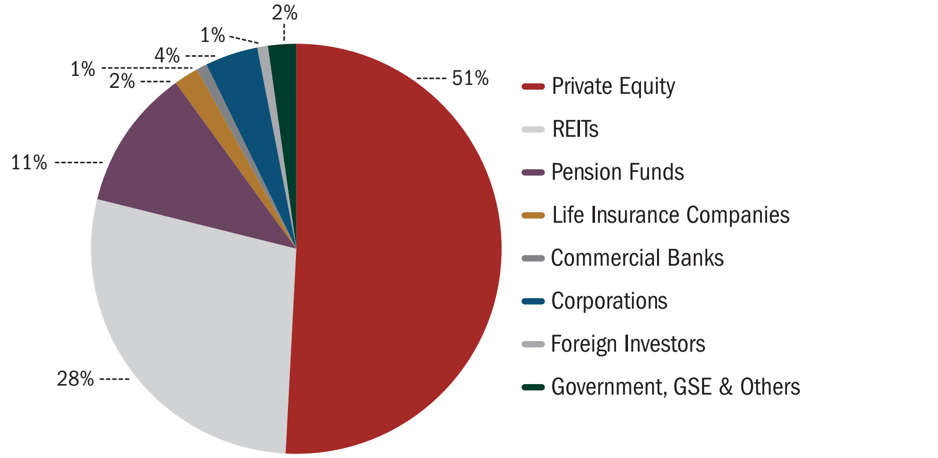
The *Q2 2018 Commercial/Multifamily Quarterly Data Book* reported that the commercial and multifamily mortgage debt outstanding increased by $52.3 billion in 2Q 2018. The total commercial and multifamily debt outstanding stood at $3.27 trillion at the end of 2Q 2018, with the multifamily mortgage debt outstanding at $1.3 trillion - an increase of $20 billion or 1.6% from the first quarter. The increase was backed by agency and GSE portfolio and MBS investments. For commercial and multifamily mortgage debt investments combined, banks and thrifts registered the largest increase in their holdings – $23.9 billion or 1.9%. The same report

EXHIBIT 3-E. COMMERCIAL REAL ESTATE DEBT UNIVERSE



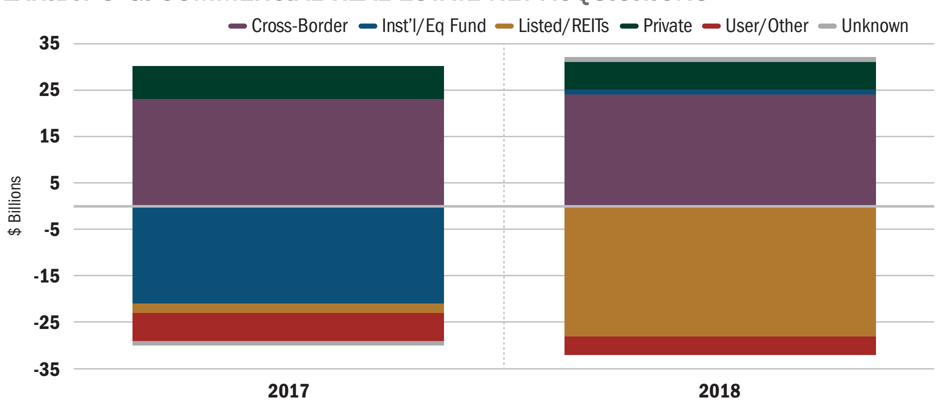
Source Federal Reserve Board, 3Q 2018.

EXHIBIT 3-F. INSTITUTIONAL COMMERCIAL REAL ESTATE EQUITY INVESTMENTS



Source NAREIT, NCREIF, RCA, compiled by Situs RERC, 3Q 2018.

EXHIBIT 3-G. COMMERCIAL REAL ESTATE NET ACQUISITIONS



Note Data reflect first three quarters of each year.
Source RCA, 3Q 2018.

stated the total CMBS outstanding was $475 billion as of June 20, 2018.

Situs RERC estimates the investment market for CRE in the US in debt-based institutional investment properties and equity-based institutional investment properties. As shown in Exhibit 3-E, key investors in the debt market included US-chartered depository institutions (banks and savings institutions), government-sponsored entities (GSEs), CMBS, collateralized debt obligations (CDOs) and other asset-backed securities (ABS), life insurance companies, and foreign banking offices, among others.

The Fed indicated that originations grew roughly 6% in 3Q 2018 compared to the previous year. The US-chartered depository institutions, which constituted roughly half of the total debt, grew 4.4% YoY in originations in 3Q 2018. While foreign banking offices in US accounted for only about 2% of total debt, the category grew another 2.2% YoY in 3Q 2018, after particularly strong growth in 2017. The CMBS, CDO and other ABS category strengthened, as its proportion of the debt market rose to 17% in 3Q 2018 from 16% in 3Q 2017. The originations by this category increased by 13.5% YoY in 3Q 2018. GSE totaled 12% of the debt market, and gained 3.3% YoY in debt levels in 3Q 2018.

CRE EQUITY MARKET

Equity investors included private investors, REITs, pension funds, foreign investors, life insurance companies, commercial banks, GSEs and others, as shown in Exhibit 3-F.

At 51% as of 3Q 2018, Situs RERC estimates that private equity continued to hold the majority of equity-based CRE. REIT investment continued to account for the next largest piece of the investor universe, at roughly 28% of total equity. The remaining equity investment was held by pension funds (11%), corporations (4%), life insurers (2%), government, GSEs and others (2%), foreign investors (1%), and commercial banks (1%).

Over $396 billion in total CRE acquisitions occurred through the first three quarters of 2018, according to RCA. This is an 11.4%

EXHIBIT 3-H. REAL ESTATE TRANSACTIONS

NAME	BUYER	SELLER	PLACE	DATE	SF/UNITS		
Chelsea Market	Alphabet Inc.	Jamestown	New York, NY	March 2018	1,200,000	$2.40b	OFFICE
10 Hudson Yards	STRS Ohio	Related Cos, Oxford Properties Group, JP Morgan Chase, Kuwait Investment Authrity, Allianz RE of America	New York, NY	May 2018	1,813,465	$2.18b	OFFICE
One Astor Plaza	Allianz RE of America	SL Green	New York, NY	February 2018	1,750,000	$1.95b	OFFICE
GIC Iconic US Hotel Portfolio	Blackstone	GIC	Various	April 2018	Unknown	$1.64b	HOTEL
666 Fifth (Condo Leasehold)	Brookfield AM	Kushner Companies	New York, NY	August 2018	1,426,395	$1.29b	OFFICE

Source RCA, 2018.

increase over the approximately $356 billion in total acquisitions during the same period in 2017. However, per RCA, net capital flows (acquisitions less dispositions) through the first three quarters of 2018 were negative. Institutional investors, foreign investors and private investors contributed positive net capital flows in the first three quarters of 2018, while REITs made up the bulk of dispositions through 3Q 2018 (see Exhibit 3-G).

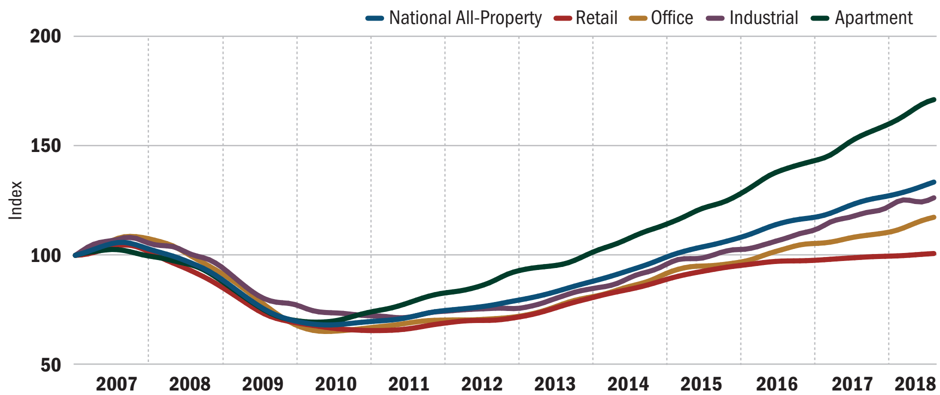
As of 3Q 2018, foreign investment in the US CRE market totaled nearly $77.2 billion on a trailing four-quarter basis, according to RCA. Canadian investment, according to RCA, made up the lion's share of the total cross-border transactions — approximately 41% — which drove the increase in total volume despite a decrease in investment from former major players like China. In 2018, Canada, France and Singapore were the top three countries investing in the US, while Chinese investment into the US dropped 54% and fell one spot to fourth, per RCA data. After being the top cross-border investor into the US in 2016, China's decline in investment volume can be largely attributed to more stringent Chinese regulations that have been implemented over recent quarters. Investment from Germany increased 21% YoY, allowing it to round out the top five investor countries, according to RCA. The majority of investment, based on transaction volumes, went to the Manhattan, Los Angeles and Chicago markets.

Situs RERC believes the outlook for foreign investment into US CRE is encouraging, but will be impacted by trepidation over US and China relations over tariffs, and rising interest rates, which will increase foreign buyers' costs of acquiring assets. However, property fundamentals remain sturdy. That, coupled with a more diverse group of investors into the market, should account for a continuation of foreign capital into the US in spite of the higher cost.

According to RCA, CRE net equity flows increased through the first three quarters of 2018 compared to the first three quarters of 2017. Per RCA, the biggest changes in investor composition were evident in a pullback of capital by REIT's in the first three quarters of 2017 versus the first three quarters of 2018. Additionally, through the first three quarters of 2018, institutional investors increased acquisitions by nearly 8% while reducing dispositions by over 16% compared to the first three quarters of 2017, according to RCA. A list of major transactions, as reported by RCA, can be found in Exhibit 3-H.

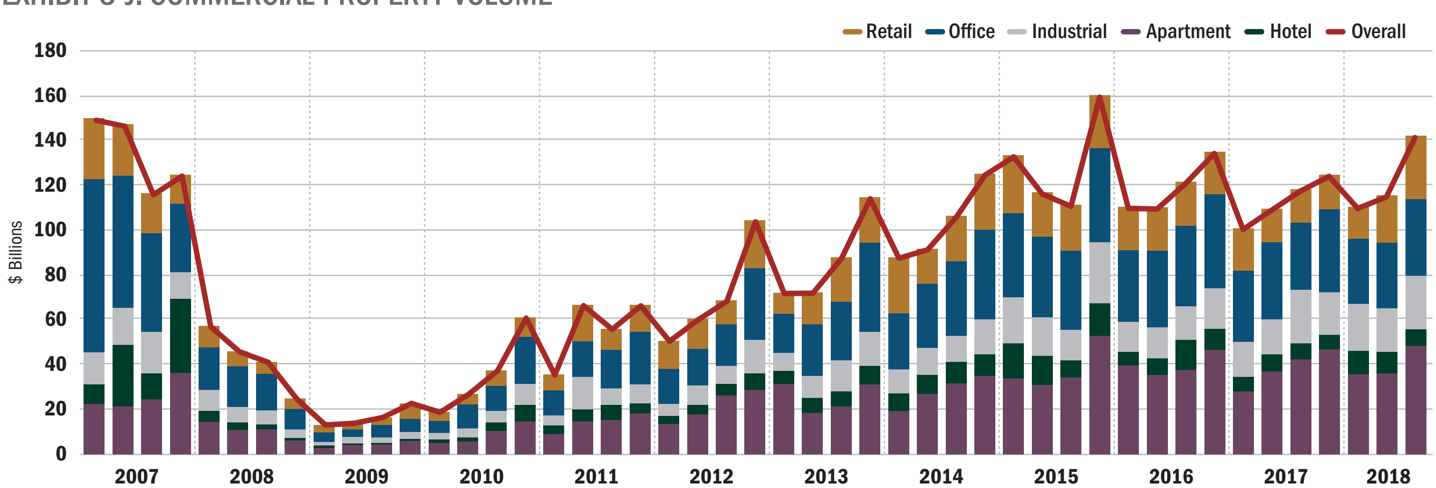
Since the recovery began, private CRE prices, as measured by the RCA Commercial Property Price Index (CPPI), have exceeded their pre-recession peaks for all property types, except retail (Exhibit 3-I). But are property valuations in line with these price increases? According to research by Situs RERC, solid property fundamentals are underlying strong valuations, and these valuations are supporting high prices. Favorable economic conditions, including historic employment gains, are expected to allow further room for rent growth. The RCA CPPI National

EXHIBIT 3-I. REAL CAPITAL ANALYTICS CPPI



The RCA CPPI is based on repeat-sales (RS) transactions that occurred at any time up through the month of the current report.
Source RCA, 3Q 2018.

EXHIBIT 3-J. COMMERCIAL PROPERTY VOLUME



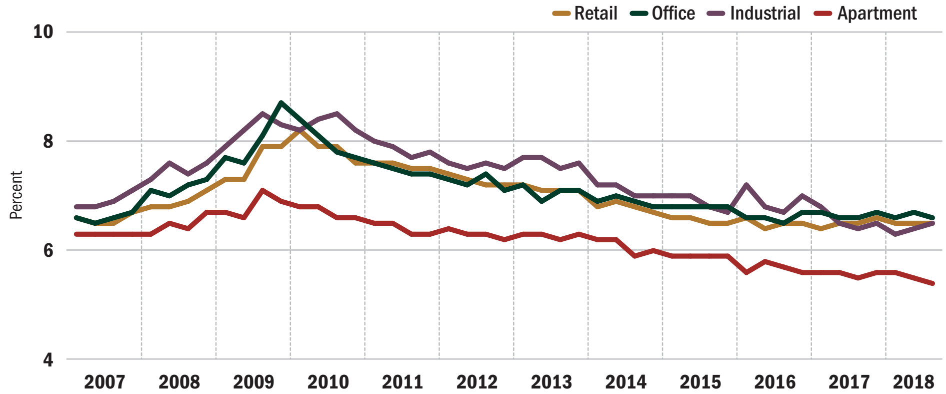
Source RCA, 3Q 2018.

All-Property Index rose 2.3% in 3Q 2018 from 2Q 2018. The index was up 7.2% in 3Q 2018 from one year prior. US deal volume in the 3Q 2018 was the highest quarterly volume since 4Q 2015, and was made up primarily of apartment and office transactions. Overall transaction volume increased 20% over 3Q 2017 (Exhibit 3-J).

According to transaction data from RCA, overall volume for the first three quarters of 2018 was up 12% from the first three quarters of 2017. Total office volume increased 15% YoY in 3Q 2018, with the majority of the transacted volume in the suburban office sector, which was on par with suburban office volume one year ago. Central business district (CBD) office, on the other hand, increased 58% YoY as of 3Q 2018, according to RCA, but made up only 35% of total transaction volume. Although medical office volume was down 5% YoY per RCA, quarterly dollar volume was even with the sector's seven-year average and well above its historical average since 2001. Cap rates for the overall office sector reached their pre-GFC low of 6.5% in 2016 and have increased only slightly in recent quarters to 6.6% in 3Q 2018, according to RCA (see Exhibit 3-K for cap rates by property type). Overall industrial transaction volume in 3Q 2018 remained steady from one year ago, but ramped up from the prior quarter by over 21%, according to RCA. Warehouse transactions continued to far surpass flex in terms of dollars transacted and number of properties, making up over 80% of total dollar volume in 3Q 2018, according to RCA. Cap rates for the overall industrial property type and warehouse subtype remained near their record lows, 6.5% and 6.3% respectively, in 3Q 2018, according to RCA data.

The love-hate relationship in retail is evidenced in transaction data for 3Q 2018. While the general perception of the retail sector is negative, overall retail transaction volume in 3Q 2018 was up over 90% compared to transaction volume in 3Q 2017, according to RCA. This is only the second YoY increase in transaction volume for overall retail since mid-2015, and was also the highest quarterly dollar volume since 4Q 2004, according to RCA. The large increase was driven primarily by retail center transactions, which nearly doubled in volume over last quarter, and increased 164% YoY, according to RCA. However, this momentum was not contained

EXHIBIT 3-K. COMMERCIAL PROPERTY CAP RATES



Source RCA, 3Q 2018.

to retail center space. Despite pessimism swirling around malls, Situs RERC is seeing capital coming back to this sector as prices come down. According to RCA, malls saw their second consecutive quarter of positive growth, skyrocketing to nearly 50 times its 3Q 2017 number and posting the highest quarterly dollar volume in their recorded history, back to 2001, according to RCA. This surge was mostly due to Brookfield's acquisition of General Growth Properties, but was also driven by developers adapting to the "new normal" in the retail sector.

Apartment transaction volume in 3Q 2018 was up approximately 14% compared to the same time the prior year. Lifted by Greystar's take-private transaction for EdR, most of the growth came from mid- to high-rise properties, which increased 34% YoY, and posted a historic quarterly high in terms of dollar volume in 3Q 2018, according to RCA. Cap rates also hit a historic low in the overall apartment sector (5.4%) and in the garden (5.5%) and mid- to high-rise (4.8%) subtypes, according to RCA. Student housing transaction volume increased three times its volume in 3Q 2017, also reaching a historic high, according to RCA.

Situs RERC collects survey data from institutional investors that uses a scale of 1 to 10 (with 10 indicating that value greatly outweighs price) to measure the relative relationship between CRE value and price. Situs RERC's value vs. price rating for overall CRE declined from 4.6 in 2Q 2018 to 4.3 in 3Q 2018, continuing to stay below average and indicating that the overall CRE market is overpriced relative to value. The rating has not been this low since 4Q 2008 and is considerably lower than the post-recession average of 5.1. The value vs. price rating for overall CRE has generally trended downward since 4Q 2015, and respondents have rated the CRE market as overpriced since 1Q 2016, except for a brief spike in 4Q 2016. Investors are concerned that prices are getting ahead of market fundamentals. One institutional investor warned of a potential weakness in future net income growth due to rising expenses and potential capital expenditures that could be exaggerated by any rise in cap rates.

Among the property types, the industrial sector offered the most value relative to price. After Situs RERC institutional investors indicated that the industrial sector was slightly overpriced in 2Q 2018 with a rating of 4.9, the industrial sector rating rose significantly to 5.5 in 3Q 2018. The latest rating reflects a return to the norm, as the sector's rating has otherwise been over 5.0 in every quarter since 4Q 2009. The only other property type that was rated as underpriced was the apartment sector, which held steady at 5.1 in 3Q 2018. The rest of the property sectors were rated as overpriced in 3Q 2018. The office sector's rating has remained in the range of 4.5 to 5.5 since 3Q 2009, but has been seen as overpriced the last two quarters. The value vs. price rating for the hotel sector decreased slightly to 4.7 in 3Q 2018. The sector has been on a declining value vs. price trend for five years. The retail sector's value vs. price rating dropped for the second straight quarter, to 4.5 in 3Q 2018. Retail assets continue to be viewed as overpriced; except for a brief spike in 2016, they have been viewed as increasingly overpriced over the past three years.

CHAPTER 4: THE PROPERTY MARKETS

THE OFFICE MARKET

TRANSACTION TRENDS (VOLUME, PRICING, CAP RATES)

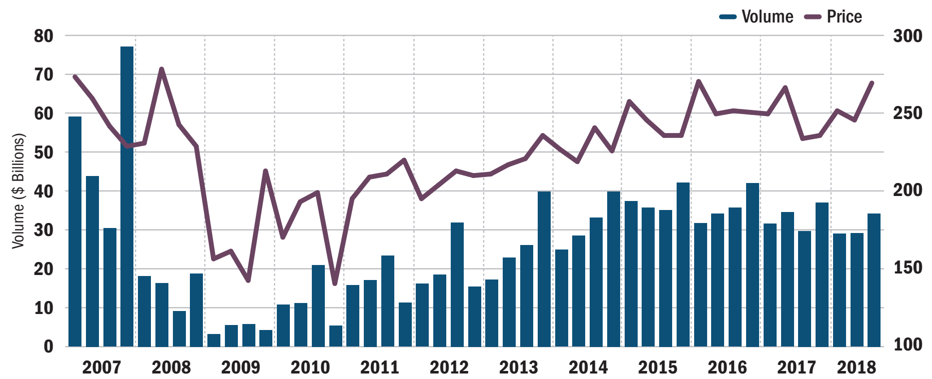
Total office volume increased 15% YoY in 3Q 2018, according to data provided by RCA (see Exhibit 4-A). The majority of the transacted volume was in the suburban office sector, which was on par with suburban office volume one year ago. CBD office, on the other hand, increased 58% YoY, but made up only 35% of total transaction volume. Although medical office volume was down 5% YoY, quarterly dollar volume was even with the sector's seven-year average and well above its historical average since 2001.

Per RCA, the office sector experienced an uptick in individual and portfolio sales YoY in 3Q 2018, but a significant decline in entity sales. Individual and portfolio shares increased by approximately 21% and 13%, respectively, while entity sales decreased by 84%.

Non-major markets attracted most of the office investment in 3Q 2018 at $17.4 billion, based on data from RCA. This is an almost 35% increase QoQ and a 14% increase YoY. Major markets attracted $16.2 billion in 3Q 2018, a 4% increase from the previous quarter and a 12% increase YoY. Investment volume in the major markets did outpace non-major markets in the first three quarters of 2018 combined. According to RCA, Manhattan ranked the highest for office investment, with almost $3.9 billion in sales during 3Q 2018, a 129% increase YoY and almost $1.8 billion more than the second highest metro, Seattle, which had $2.14 billion in volume. Los Angeles ($2.08 billion), Chicago ($1.6 billion), and Dallas ($1.5 billion) rounded out the top five markets for investment.

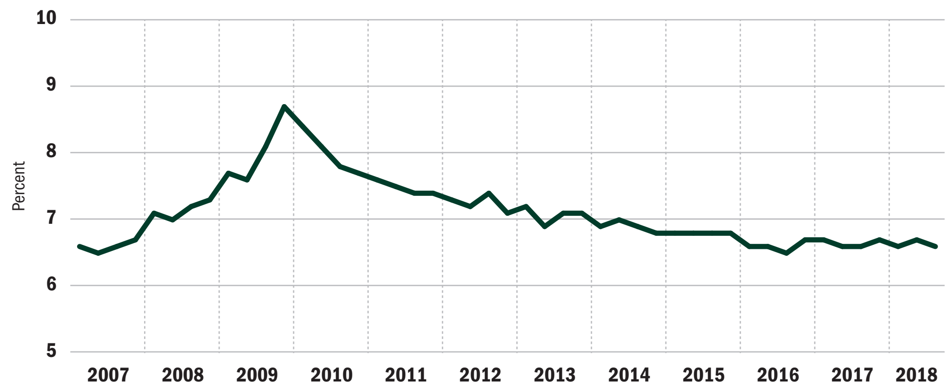
Price per square foot (PPSF) for the overall office market was $269 in 3Q 2018, an increase of 10% QoQ and 18% YoY, according to RCA. Among the office subtypes, CBD had the largest price growth, increasing by over 38%. Medical office PPSF increased 29% YoY and suburban office increased by 8% YoY. Manhattan had the most expensive office space at $1,000 per square foot, a 35% increase YoY. San Francisco ($712), Washington, DC ($683), San Jose ($627) and Boston ($468) rounded out the top five for office sector pricing.

EXHIBIT 4-A. OFFICE VOLUME AND PRICING



Source RCA, 3Q 2018.

EXHIBIT 4-B. AVERAGE OFFICE CAP RATES



Source RCA, 3Q 2018.

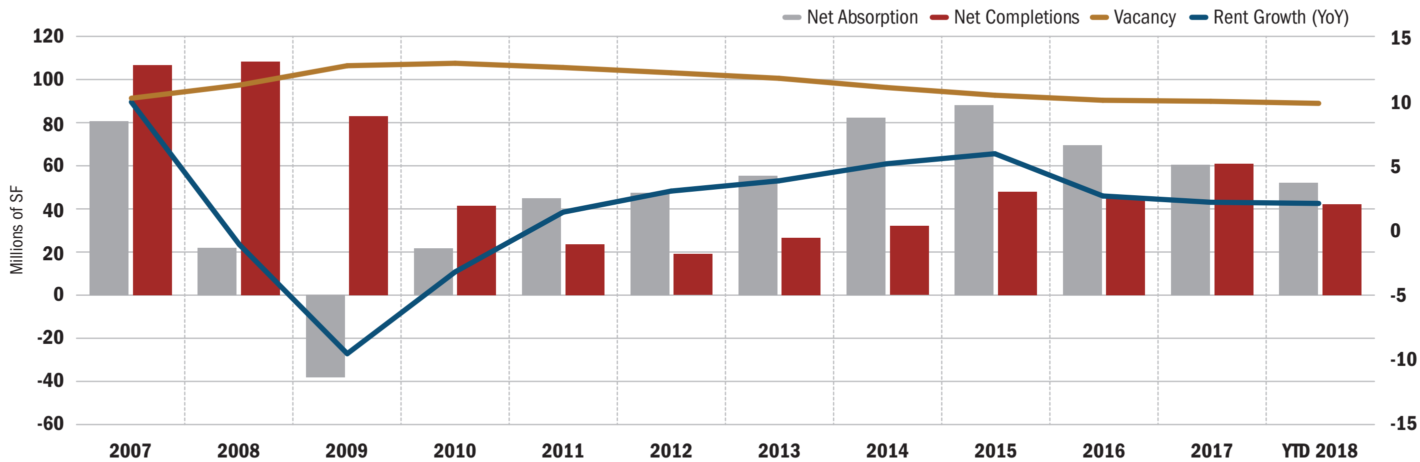
Cap rates for the overall office sector reached their pre-GFC low of 6.5% in 2016 and have increased only slightly in recent quarters to 6.6% in 3Q 2018, according to RCA (see Exhibit 4-B). CBD cap rates increased from 5.2% to 5.4% QoQ in 3Q 2018 but are down 60 bps YoY. Throughout 2018, CBD cap rates have been near pre-recession lows. Suburban cap rates have been remarkably consistent, hovering around 6.9% for the past three years. The suburban cap rate remained the same, at 6.9%, QoQ in 3Q 2018 and increased by only 10 bps YoY.

INVESTOR COMPOSITION

Accounting for 41% of the total office volume, private buyers were the most active in 3Q 2018. Private buyers also accounted for the largest increase (31%) in acquisitions YoY, per RCA. Institutional investors/equity funds were the second most active buyers, accounting for 29% of acquisitions. Cross-border acquisitions saw a large increase in acquisitions YoY, with a jump of over 25%. Listed/REITs increased their acquisitions by just over 6%, but account for only 3% of total acquisitions.

According to RCA data, private and institutional/equity investors were also the most active sellers of office in 3Q 2018, each accounting for almost 36% of all dispositions. Cross-border dispositions increased dramatically – by over 313% YoY. Listed/REITs and institutional/equity sellers were the only market sectors to decrease their dispositions, at

EXHIBIT 4-C. OFFICE PROPERTY TYPE FUNDAMENTALS



The information provided is "As Is" and without any representations, warranties or guarantees.
Source CoStar Market Analytics, 3Q 2018.

31% and 12%, respectively. Cross-border and private investors were the only net buyers of office in 3Q 2018. Institutional/equity investors and listed/REITs were net sellers of office.

FUNDAMENTALS

The office sector has many factors that continue to work in its favor (see Exhibit 4-C). Vacancy is currently at a historic low of 10%, according to CoStar Market Analytics[14], and a humming economy and strong job growth bode well for the sector. In 3Q 2018, 12-month net absorption totaled 67.7 million SF in 3Q 2018, the highest level in a year. Absorption increased almost 19% YoY. As of 3Q 2018, 12-month net completions were 56.1 million SF, a YoY decline of 1.8%. Net completions over the past two years have outpaced post-recession annual averages, but are well below the pre-recession high of 108 million SF in 2008. Although new supply is slowing, the oversupply of product in the pipeline remains an issue, especially in top-tier markets, and is causing rent growth and vacancy to level out. Annual rent growth has been declining since 2015 in the office sector and stands at 2.2% YoY as of 3Q 2018.

[14] CRE fundamentals data are provided by CoStar Market Analytics (www.costar.com), 3Q 2018. The information is provided "As Is" and without any representations, warranties or guarantees.

THE INDUSTRIAL MARKET

TRANSACTION TRENDS (VOLUME, PRICING, CAP RATES)

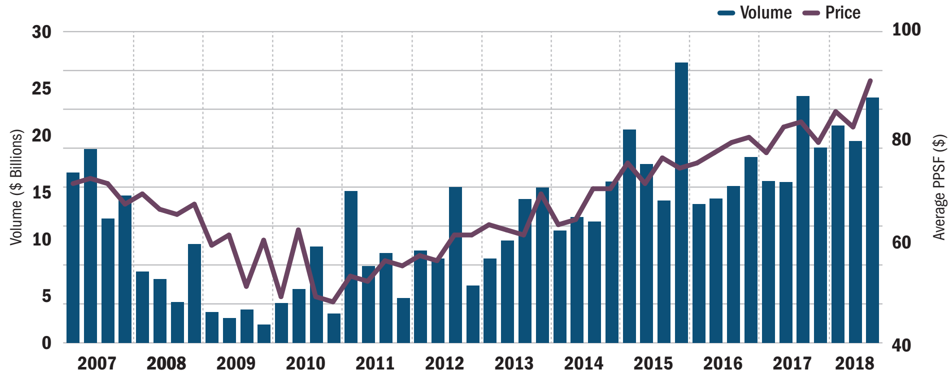
Overall industrial transaction volume in 3Q 2018 remained steady from one year ago, but ramped up from 2Q 2018 by over 21%, according to data provided by RCA (see Exhibit 4-D). Warehouse transactions continued to far surpass flex in terms of dollars transacted and number of properties, making up over 80% of total dollar volume in 3Q 2018.

Entity sales buoyed the industrial sector, with a YoY increase in volume of 76% in 3Q 2018, per RCA. Individual sales increased by nearly 9% YoY, but portfolio sales declined by 60%. Portfolio sales account for only 13% of total industrial volume, however. Individual sales comprise 52% and entity sales comprise 35% of the total.

As reported by RCA, transaction volume in the industrial sector was driven by investments in the non-major US markets. Non-major markets accounted for $14.5 billion during in 3Q 2018, up from $12.5 billion during the year prior. Investments in the major markets declined YoY from $11.1 billion in 3Q 2017 to $8.8 billion in 3Q 2018. Chicago ranked the highest for industrial assets investments with $2.1 billion in transaction volume in 3Q 2018, a 22% increase. Dallas was second with $1.4 billion in volume, a YoY increase of over 77%. The Inland Empire ($1.24 billion), Atlanta ($1.23 billion) and Los Angeles ($1.1 billion) finished out the top five in industrial volume.

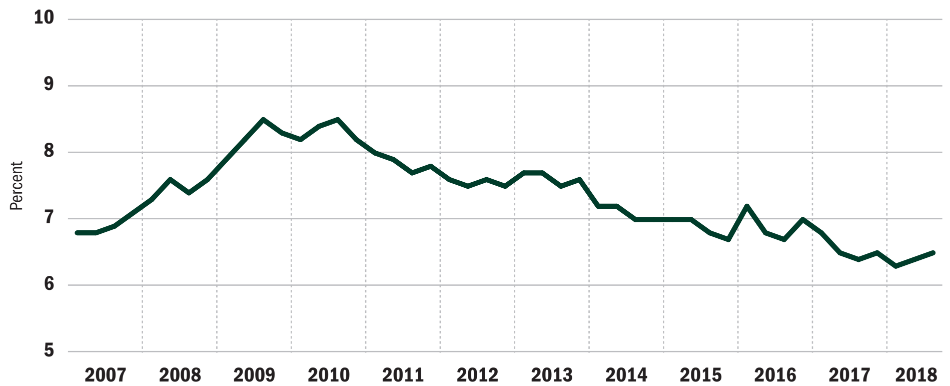
The PPSF for the overall industrial market was $95 in 3Q 2018, an increase of 17% YoY, according to RCA data. Flex had the largest price and greatest YoY price growth of the industrial subtypes, increasing by 32% to $148 per SF. Warehouse prices increased by 11% YoY, to an average of $85 per SF in 3Q 2018. Industrial prices varied widely by market. Washington, DC, was the most expensive industrial market at $600 per SF in 3Q 2018, a 43% YoY increase. San Francisco ($486), the New York City boroughs ($376), San Jose ($344) and Raleigh/Durham ($206) completed the top five most expensive metros for industrial space.

EXHIBIT 4-D. INDUSTRIAL VOLUME AND PRICING



Source RCA, 3Q 2018.

EXHIBIT 4-E. AVERAGE INDUSTRIAL CAP RATES



Source RCA, 3Q 2018.

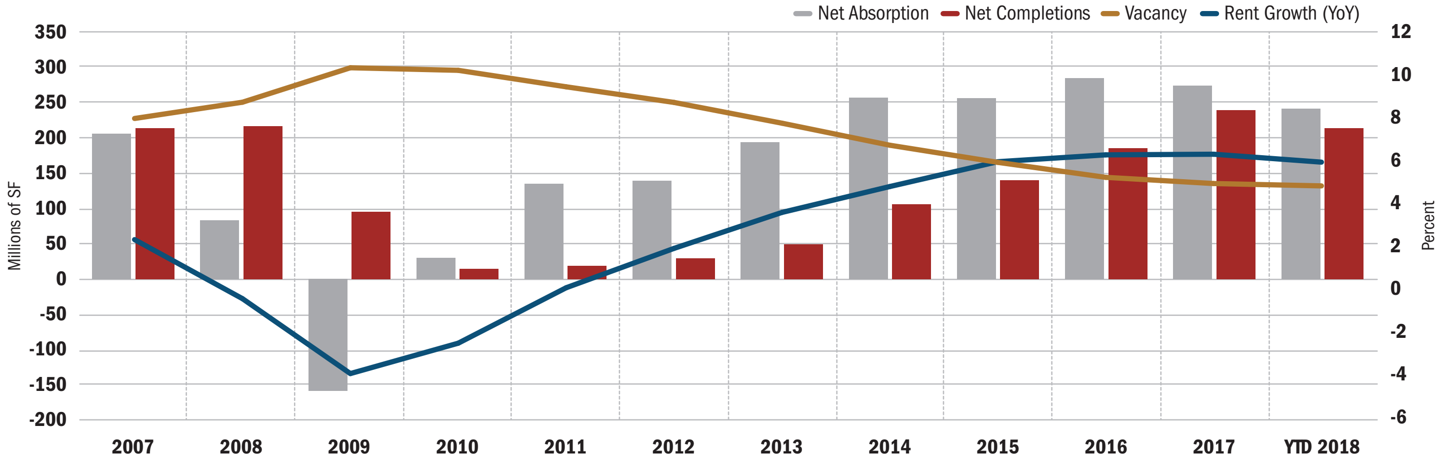
Per RCA, cap rates for the overall industrial property type and warehouse subtype remained near their record lows, 6.5% and 6.3% respectively, in 3Q 2018 (see Exhibit 4-E). Both the overall industrial sector and warehouse subtype cap rates increased by 10 bps YoY. The cap rate for flex increased by 10 bps both QoQ and YoY, to 7.0%

INVESTOR COMPOSITION

Listed/REITs were the most active buyers in 3Q 2018, accounting for 41% of total industrial purchases, based on data provided by RCA. Listed/REITs were also the only group to increase their acquisitions (by 40% YoY) in 3Q 2018. Cross-border and private investors as well as institutional/equity funds all decreased their acquisitions. The second most active buyer of industrial CRE was private investors, at 31% of total industrial purchases.

According to RCA, listed/REITs were also the most active sellers in 3Q 2018, increasing dispositions by 99% YoY. Private investors were the second-most active sellers in 3Q 2018, but they decreased their dispositions by 7% YoY. Together, listed/REITs and private investors accounted for 73% of total industrial sales. Cross-border investors increased their sales by 25% YoY while institutional/equity investors decreased their sales by over 61%. Private investors and user/others were the only net sellers of industrial. Cross-border, institutional/equity investors and listed/REITs were net buyers.

EXHIBIT 4-F. INDUSTRIAL PROPERTY TYPE FUNDAMENTALS



The information provided is "As Is" and without any representations, warranties or guarantees.
Source CoStar Market Analytics, 3Q 2018.

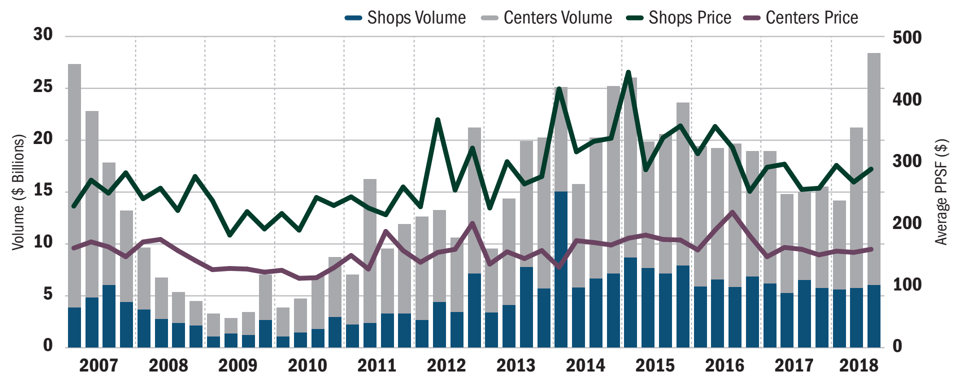
FUNDAMENTALS

Industrial continues to be the star of CRE, with its strength reflected in the sector's record-low vacancy (see Exhibit 4-F). In 3Q 2018, industrial's vacancy rate reached another record low of 4.8%, according to CoStar[14]. In 3Q 2018, YoY rent growth dipped below 6.0% for the first time in three years; however, rent growth is still near record-low levels. In 3Q 2018, 12-month net absorption totaled 239.8 million SF, the lowest level in four years and a nearly 10% decline YoY. Absorption is still well above the post-recession average of 155.5 million SF. Net completions also declined in 3Q 2018; 12-month net completions totaled 212.5 million SF, an 8% decline YoY. However, completions are also above the post-recession average of 101.3 million SF.

THE RETAIL MARKET

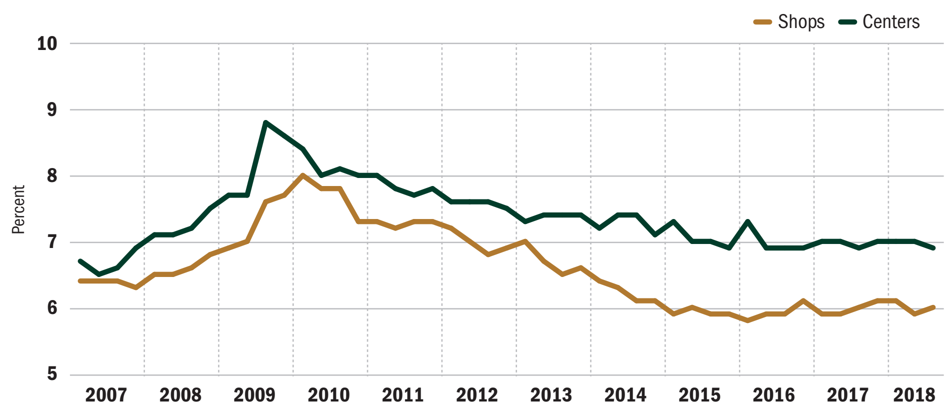
TRANSACTION TRENDS (VOLUME, PRICING, CAP RATES)

EXHIBIT 4-G. RETAIL (SHOPS AND STRIP CENTERS) VOLUME AND PRICING



Source RCA, 3Q 2018.

EXHIBIT 4-H. AVERAGE RETAIL CAP RATES



Source RCA, 3Q 2018.

According to RCA, 3Q 2018 volume and pricing data, volume of retail property sales totaled approximately $63.8 billion YTD as of 3Q 2018, which represents a 30.7% increase in retail property sales from $48.8 billion in the same period in 2017 (see Exhibit 4-G). While the majority of the retail subcategories experienced decreases in property sales, the mall subcategory experienced a significant increase in YoY sales, which contributed to the increase for the retail market as a whole. Shop space, anchored retail and unanchored retail showed minor decreases in sales, reporting decreases of 3.2%, 6.7% and 4.8%, respectively. Additionally, grocery space, single-tenant retail, drugstore space and big box space reported larger decreases in sales – 28.1%, 11.3%, 34.8% and 25.8%, respectively. However, the increases in property sales of 50.3%, 1.2% and 15.2% for the retail center, lifestyle/power center and urban retail subcategories, respectively, helped the overall volume of property sales increase since 2017. There was a substantial increase in the sale of malls from $1.7 billion as of 3Q 2017 to $21.0 billion as of 3Q 2018. A contributing factor to this increase is that mall REITs have been trading at net asset value discounts to private market values.

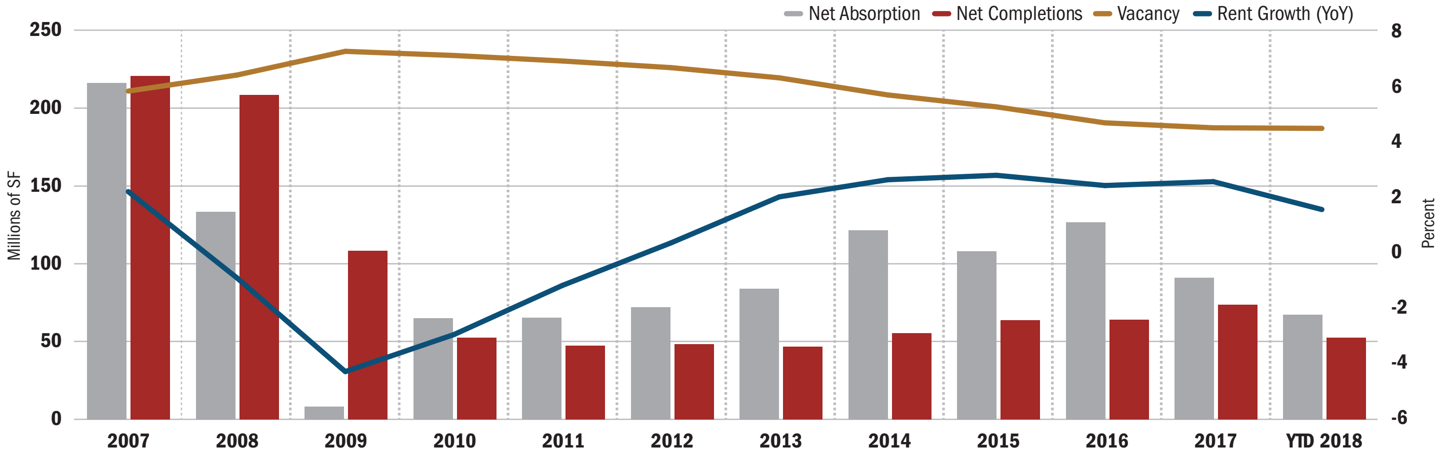
Average retail PPSF of the first three quarters of 2018 was slightly higher than the first three quarters of 2017 – $188 per square foot in 2018, compared to $186 per square foot in 2017. Within the retail shop subcategory, the average PPSF increased from $280 per square foot in the first three quarters of 2017 to $282 per square foot in the first three quarters of 2018. Within 2018, the average PPSF has fluctuated, reaching $293 per square foot, $266 per square foot and $287 per square foot in 1Q, 2Q and 3Q, respectively. In the centers subcategory, the average PPSF has remained relatively stable at $154 per square foot. This figure has fluctuated during 2018 from $154 per square foot, $152 per square foot and $157 per square foot in 1Q, 2Q and 3Q, respectively. According to 3Q 2018 data from RCA, it appears that the retail market as a whole is improving at a slow rate as the market recovers from its drop-off that occurred between 2016 and 2017.

Average cap rates remain stable, experiencing an occasional 10 bps change since 1Q 2017, according to 3Q 2018 RCA data, which shows cap rates remaining at 6.5% for five of the seven quarters between 1Q 2017 and 3Q 2018. Throughout that time, average cap rates decreased by 10 bps for one quarter, slipping to 6.4%, and increased by 10 bps for one quarter, reaching 6.6%. Cap rates for shop space and retail centers remained relatively consistent between 1Q 2017 and 3Q 2018 as well, fluctuating slightly between 5.9% and 6.1% for shop space, and between 6.9% and 7.1% for retail centers (see Exhibit 4-H). Consistency among cap rates likely implies that the retail market is stable at the moment.

INVESTOR COMPOSITION

According to 3Q 2018 RCA investment composition data, cross-border investors owned the majority of the buyer pool at 55% in 3Q 2018. This is the first time that cross-border investors were the largest buyer pool since 2Q 2001. Private investors took the secondary buyer position, making up 33% of the buyer pool. Institutional/fund investors decreased their share of the buyer pool, from 14% in 3Q 2017 to 6.8% as of 3Q 2018. REITs and user/other investors together make up a little over 5% of the buyer pool,

EXHIBIT 4-I. RETAIL PROPERTY TYPE FUNDAMENTALS (OVERALL RETAIL)



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Source CoStar Market Analytics, 3Q 2018.

with REITs' share down significantly from 14% in 3Q 2017.

The lender pool proportions have seen some minor shifts between 2017 and August 2018, according to the August 2018 *Real Capital Analytics Trends Report*. Making up the largest portion of the lender pool, CMBS, at 29% of the pool, slightly ahead of regional/local banks at 27%. The two combined continue to make up more than half of the lender pool. It should be noted that CMBS has gradually increased its share of the pool by marginal amounts over the last three years to pass regional/local banks and lead the market. National banks and insurance agencies at 16% and 13%, respectively, round out the leading players. Financial agencies, international banks and private/other agencies combined comprise the remaining 15% of the lender pool.

FUNDAMENTALS

According to 3Q 2018 CoStar[14] data, vacancy rates within the national overall retail market have decreased slightly since 1Q 2017, down just 20 bps from 4.7% to 4.5% (see Exhibit 4-I). This represents a continued decrease from the highest within the last five years of 6.2% in 1Q 2014. The current vacancy rate represents the lowest since 2006, and is forecasted to keep decreasing over the coming quarters.

Net asking rents for the overall retail market averaged $20.91 per square foot as of 3Q 2018, which represents a 1.6% increase over asking rents of $20.59 per square foot in 2017, according to CoStar. Similar to the patterns observed in vacancy rates, $20.91 per square foot is the high mark of the last five years, and is anticipated to increase by 1.4% by 3Q 2019. Rents have been slowly improving since decreases in net asking rent were observed in 2010 and 2011, pointing to the stable state of the retail real estate market.

RETAIL TRENDS

The September 2018 US Census Bureau report on monthly and annual retail trade indicates that sales in the retail and food service industry are up 5.4% since 2017, greater than the 3.8% increase in the previous year. While the majority of the reported subcategories experienced growth of over 3% from 2017, the sporting goods, hobby, musical instrument and bookstore category experienced a 2.7% decline. The department store subcategory experienced a more modest decline at 0.3%. The non-store retailers category, including electronic shopping, has grown by almost 10% YoY. With the growth in both online and traditional retail, Deloitte, NAR and Situs RERC posit that the retail sector has seen a transformation: electronic shopping and brick-and-mortar stores can now coexist in the market. The market has stabilized in many ways compared to previous years, with industry players coming to the realization that this is the new normal.

The "doom and gloom" narrative of the retail industry appeared to shift toward something more positive in 2018. The conversation is no longer about e-commerce and technology destroying the industry, but now focuses on how the two are helping it evolve. Many experts in the market today are focusing the conversation on tenant mix, specifically how the desirability of the types of tenants for malls and shopping centers has changed over time. According to the CBRE forecast titled *US Retail Real Estate to See More Evolution, Gains in 2018*, store concepts — such as pop-up shops that may be around for only a few months — are gaining popularity. Buxton's 2018 article titled *What Cities Need to Know About 2018's Retail Real Estate Trends* elaborates on this concept, stating that experiential retailers are bringing excitement back to visiting brick-and-mortar retail properties. Along with the wave of experiential tenants comes a change in how property owners manage their properties. The October 2018 Curbed article titled *The 10 Top Emerging Trends That Will Shape Real Estate in 2019* notes that these new spaces are affecting how leases are written, bringing about an increase in short-term and even pop-up leases to accommodate these tenants.

Former powerhouse retailers have now

shuttered many locations across the nation as they go out of business or drastically cut back on their number of locations. Redevelopment of these existing retail spaces continues to be a hot topic, as developers get creative with how to revamp the space. The trend continues to be transforming abandoned big box or anchor tenant space into entertainment-use space. Developers are doing anything to contribute to the live-work-play focus of many of these new mixed-use retail redevelopments. According to a January CNBC article titled *Enough with the Doom and Gloom. Retail and Its Real Estate have Bright Spots*, retail concepts that include a restaurant, full bar, event space and activity space (bowling lanes, arcade games, music stage, etc.) have been coming in to mall anchor stores or outdoor shopping centers. These tenants not only help retail properties by occupying once-vacant space, but also contribute to the success of the center as they draw large crowds for various events. In fact, as noted in the September 2018 Forbes article titled *How Can Commercial Real Estate Investors Protect Their Property in the Digital Age*, industry specialists point out that if the experience concept is distinctive enough, social media may contribute to the success of the tenant and, in turn, the property. By thinking strategically about dealing with large, vacant spaces at their properties, landlords are demonstrating why many best-in-class malls continued to thrive, regardless of the worries in the marketplace.

Other trends in desirable tenant mix the market has seen throughout the year is the popularity of discount, or "off-price," retailers, according to the January 2018 CBRE article *US Retail Real Estate to See More Evolution, Gains in 2018*. This concept, in which national department stores sell their items at steeply discounted prices, has been sought after by shopping centers, boosting the success of the middle tier of retail properties. Dollar stores and grocery tenants are included in the list of popular and resilient retail tenants, according to CNBC. Some are concerned, however, that this trend may reverse in the near future, as grocery delivery services gain in popularity.

According to a Statista article titled *Online-Shopping and E-Commerce Worldwide Statistics & Facts*, approximately 42% of consumers in the US had purchased products online as of 2017. Online orders through the computer and shopping through mobile devices are increasingly popular among consumers, with mobile shopping accounting for over 20% of all digital spending. Online shopping is expected to keep increasing in the coming years. However, an October 2018 Business 2 Community article titled *14 Holiday Shopping Stats to Help You Plan in 2018*, which focuses on shopping trends during the holiday season states that 46% of shoppers still prefer the tactile side of shopping, desiring to touch and feel products prior to purchasing. This realization is leading some traditionally online companies, such as a popular eyeglass manufacturer and retailer, to introduce or expand their brick-and-mortar presence, sometimes by 100 or more stores nationally, according to Forbes' June 2018 article titled *3 Retail and CRE Trends to Watch In The Second Half of 2018*. Throughout recent years, it has been interesting to observe how e-commerce, mobile commerce (m-commerce) and the traditional brick-and-mortar stores have all come together to form one cohesive retail industry.

National retailers scaling back their number of locations, or even going out of business altogether, has become less of a shock each time it is announced. Industry leaders have now had a few years of experience dealing with the changing market to realize that their properties can still succeed as they adapt to the ever-changing competitive retail landscape. The retail real estate market is learning that the retail industry will survive, and even thrive, even when several players scale back their presence.

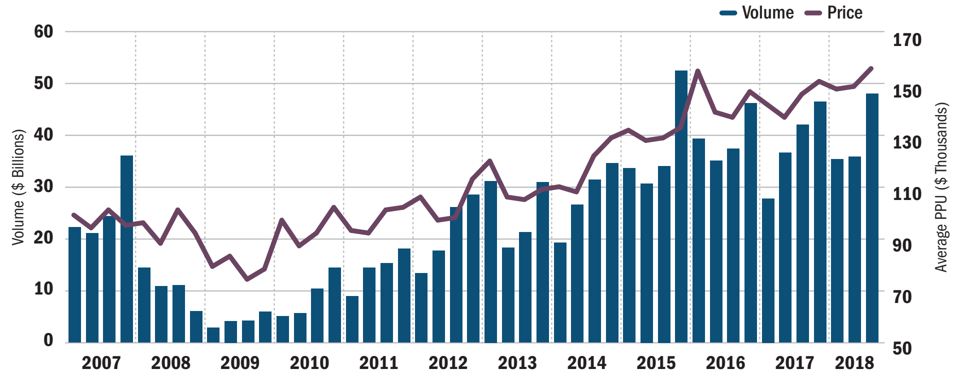
THE APARTMENT MARKET

TRANSACTION TRENDS (VOLUME, PRICING, CAP RATES)

Deep into the latest CRE, apartments continue to exhibit strength. Following the first year of decline since 2009, US apartment volume is on pace to rebound by the end of 2018 (see Exhibit 4-J). A total of $120.1 billion of significant apartment properties were sold in the first three quarters of 2018, representing a YoY increase of 12% based on RCA data. This is notable considering that the trend in volume over the prior two years had been downward with a 35% increase in 2015 followed by a marginally positive increase of 5% in 2016, and a decrease of 3% in 2017. Though the 2018 rebound from the prior year is not expected to lead to further significant volume increases in the foreseeable future, it does indicate that many investors continue to favor this property type despite its prolonged run.

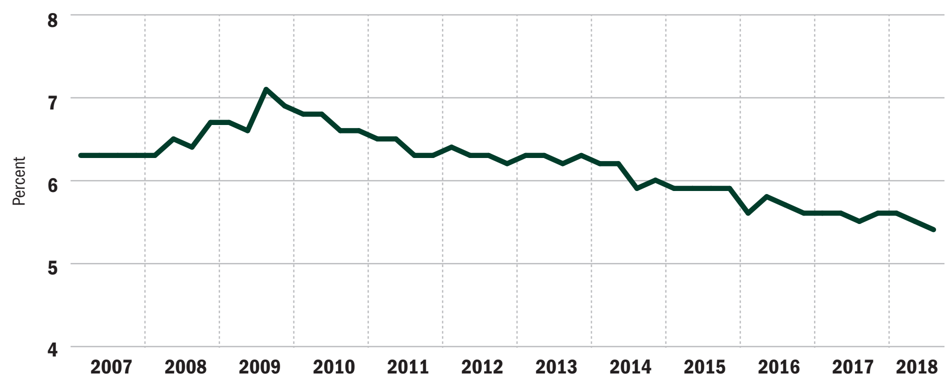
While the US apartment volume over the first three quarters of 2018 included some portfolio or entity-level transactions, the deal volume for the sale of individual apartment assets of $91.4 billion over this time frame is a record for the first three quarters of a year. Among apartment types, the increase in volume for mid/high-rise properties far surpassed that of garden-style properties in the first three quarters of 2018.

EXHIBIT 4-J. APARTMENT VOLUME AND PRICING



Source RCA, 3Q 2018.

EXHIBIT 4-K. AVERAGE APARTMENT CAP RATES



Source RCA, 3Q 2018.

Investors are continuing to focus outside the major urban areas, with a YOY sales volume increase of 21% for secondary and tertiary markets, compared to -2% for major metro markets. This is not surprising considering the cap rate compression in major markets and the opportunity for higher yields with apartments properties in non-core markets.

Based on the RCA CPPI, pricing for apartment properties nationally has increased approximately 11% YoY through September 2018. This is the largest increase of the major property types over this time frame, and it is noted that pricing for apartments is now nearly 70% above previous peak levels from late 2007. The average price per unit (PPU) has also increased, averaging $154,192 in 2018 compared to $141,845 in the first three quarters of the prior year, per RCA.

As presented in Exhibit 4-K, average cap rates for the apartment sector have remained relatively stable over the last year, decreasing slightly to an average of 5.5% in the first three quarters of 2018 from an average of 5.6% over the same period in the prior year.

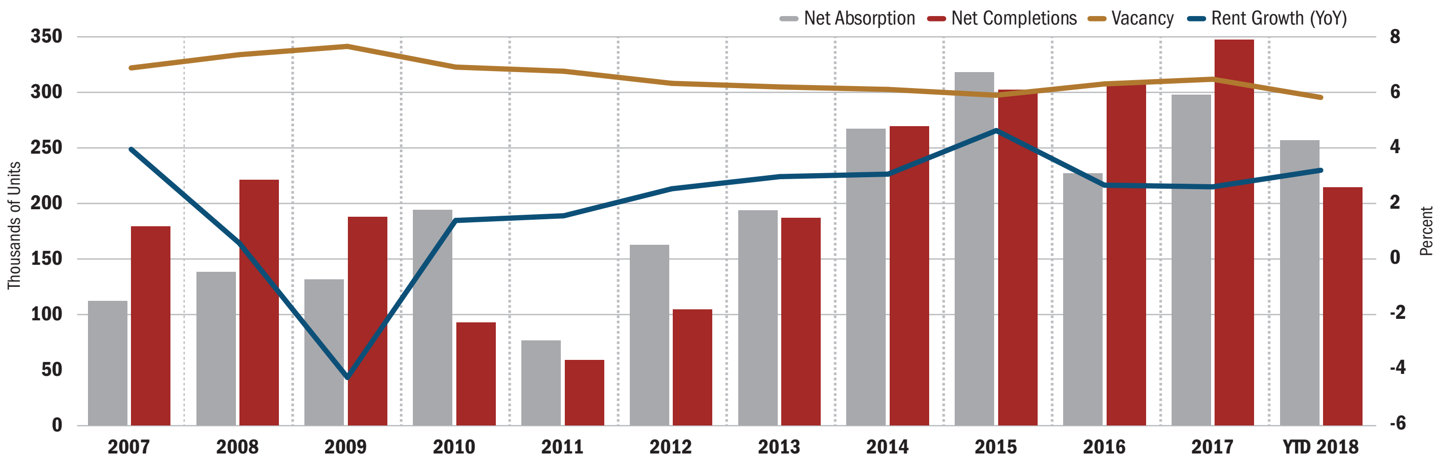
As of 3Q 2018, the average cap rate for mid/high-rise properties dipped into sub-5 territory (at 4.8%), while the average capitalization rate for garden-style properties dropped to 5.5%. In both cases, the rates are well below historical levels, reflecting the availability of capital, low mortgage rates and the high demand for this property type.

With interest rates on the rise and a greater proportion of transactions occurring in secondary and tertiary markets from investors seeking opportunities for higher yields, it appears that overall average cap rates may continue to stabilize or possibly increase in 2019.

INVESTOR COMPOSITION

Private investors have overwhelmingly dominated the market in the first half of 2018, representing 67% of all transaction activity based on RCA data. This is an increase from 62% in 2017. The second largest group of buyers was institutions/funds at 22%, a decrease from 24 % in 2016. Notably, REITs acquired approximately 21% less in terms of volume in the first half of 2018 compared to the first half of 2017.

EXHIBIT 4-L. APARTMENT PROPERTY TYPE FUNDAMENTALS



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Source CoStar Market Analytics, 3Q 2018.

Greystar Real Estate Partners (Greystar), which acquired student housing REIT EdR in the third quarter of 2018 for approximately $4.6 billion, was the most active buyer (in terms of investment volume), according to RCA. Other notable buyers were BREIT (a Blackstone entity that was also involved in the joint venture for EdR properties), Brookfield Asset Management, Goldman Sachs, and TIAA. After EdR, Starwood Capital, Greystar and Caisse de Depot were the top sellers during the period.

Through the first three quarters of 2018, the geographic areas leading in terms of transaction sales volume for apartment properties include Los Angeles, Dallas, Houston and Atlanta, according to RCA. However, markets exhibiting the biggest YoY increases include Houston, East Bay, Manhattan, other New York City boroughs, Phoenix and Raleigh/Durham.

A diminishing supply of apartment properties, strong sector fundamentals and intense competition have led to a significant pipeline of new apartment projects, as developers look to capitalize on the tight market conditions. According to RealPage data, 301,397 apartment units are expected to be delivered in 2018, followed by 314,747 and 260,979 more units in 2019 and 2020, respectively. The new supply of apartment units has increased in every year since 2011, when just 79,268 new units were completed. Based on the projection data, this trend is expected to culminate at a peak in 2019, thereafter declining to 207,151 units in 2022. The total apartment stock as of 3Q 2018 was approximately 17.6 million units.

FUNDAMENTALS

Continuing upon a trend that started in 2016, property fundamentals in the apartment sector have weakened through 2018. According to RealPage, annual effective rent growth was 2.7% in 3Q 2018, a decline from 2.9% in the prior year and approximately half of the rate of growth of 5.1% at the end of 2015. Annual effective rent growth is forecast to inch up slightly to 3.1% in the second quarter of 2019, thereafter declining down to 2.1% by the second quarter of 2021 according to RealPage.

Since the apartment recovery began in late 2009, the vacancy rate fell in 26 consecutive quarters from 7.8% to 4.8% in 2Q 2016 (see Exhibit 4-L). Since then, the vacancy rate has held relatively steady and was at 4.7% in the third quarter of 2018. The vacancy rate is expected to remain in the 5% territory over the next several years, per RealPage.

According to forecast information from RealPage for the top 20 markets, Las Vegas, Phoenix, San Francisco and Orlando are expected to have the highest cumulative potential rental revenue growth from 2018 to 2022 (potential rental revenue growth is the combined change in effective rental rates and occupancy). Of the top 20 markets, the lowest performing markets are expected to be Chicago, Dallas and the New York metro.

THE HOTEL MARKET

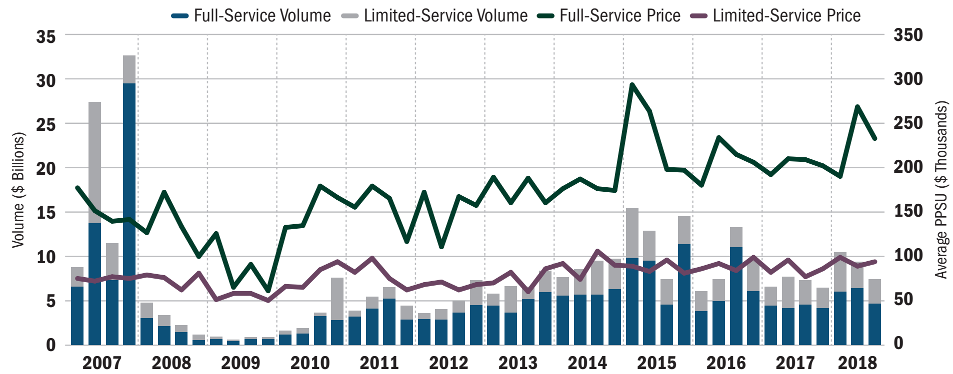
TRANSACTION TRENDS (VOLUME, PRICING, CAP RATES)

Hotel performance held steady in 3Q 2018 as fears of oversupply of new construction faded. With supply and demand at near equilibrium, investor confidence has improved to the extent that the hotel sector was one of two sectors posting transaction volume growth in October (See Exhibit 4-M). Over the last four quarters, there has been a consistent improvement in transaction volume led by primarily single-asset deals in non-major metro markets. Investor confidence has returned to this sector, further supported by cap rate compression over the last four quarters after a 70 bps ascent from Q1 2015 to Q3 2017.[15] In the long run, occupancy is expected to hold steady or slightly decrease; however, average daily rate (ADR) is expected to barely cover expense increases.[16]

The current market cycle for hotel investment has been improving in breadth and depth. As of 3Q 2018, the trailing 12-month average (TTM) transaction volume for all hotels was $33.8 billion, according to Real Capital Analytics. In comparison, the same TTM transaction volume recorded for 3Q 2016 and 3Q 2017 was 23% higher and 9% lower, respectively, supporting an accelerating trend to 3Q 2018. 2018 transaction highlights include the Mass Mutual transaction, consisting of seven full-service hotels and resorts at approximately $392,000 per key, the GIC Iconic transaction, consisting of three full-service hotels and resorts at approximately $703,000 per key, and the Pebblebrook/LaSalle merger, consisting of three full-service hotels at approximately $400K per key.[17] In 2018, investors rebalanced their risk and return sensitivities as access to capital remains abundant and new supply risks fade. Although there is continued uncertainty about future performance, investors appear confident that market conditions will support greater transaction volume in this sector.

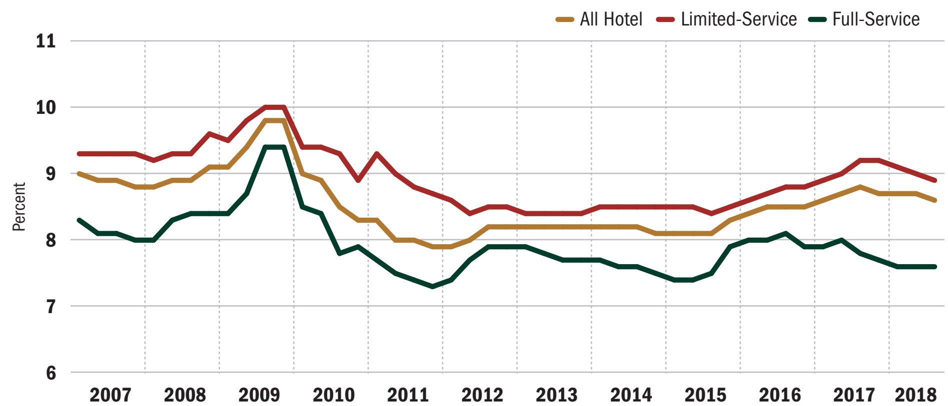
The sales volume shift in the current cycle marks a change in geographic preference. Hotel transaction volume in the six top major markets[18] has slowed by approximately 10%.

EXHIBIT 4-M. HOTEL VOLUME AND PRICING



Source RCA, 3Q 2018.

EXHIBIT 4-N. AVERAGE HOTEL CAP RATES



Source RCA, 3Q 2018.

As of the 3Q 2018, only Boston (78%) and Manhattan (15%) recorded positive TTM sale volume change compared to the same trailing period last year. San Francisco slowed by 3%, Chicago 26%, Washington, DC, by 43% and Los Angeles by 61% compared to the same trailing period last year.[19]

So, while transaction volume continues to increase, investors are focusing their attention on non-major metro markets and the full-service service segment areas compared to the previous cycle. All service categories in major and non-major markets reported an increase in price per unit (PPU) by approximately 10% to an average of $153,00 per key, YoY TTM 3Q 2018.

These data are well reflected in RCA's transaction-based cap rate trends, as shown in Exhibit 4-N. In 2016 and through 2017, hotel fundamentals were generally stable but near historical records. The industry, at that time, continued to absorb new hotel construction primarily impacting luxury and upper upscale segments in major metros. Risk was reflected in cap rates as they rose during that period. As the prospects for new construction faded, hotel cap rates began to decrease after 3Q 2017.

Despite fluctuations in the financial

[15] TrendTracker, RCA, data as of November 25, 2018.

[16] Hotel Horizons, Volume XII – Issue IV, CBRE Hotels.

[17] Transactions, RCA, data as of November 25, 2018.

[18] Boston, Chicago, Manhattan, Los Angeles, San Francisco, Washington, DC.

[19] TrendTracker, RCA, data as of November 25, 2018.

markets, cap rates for hotel properties were unchanged in recent months but were down 10 bps from 3Q 2017. Cap rates for limited-service hotels came in at 8.9% vs. a 7.7% average for full-service hotels.[20]

Foreign capital investment in the hotel sector continued to slow after record investment in 2016 (See Exhibit 4-O). With approximately $60.4 billion in acquisitions on a TTM basis, 3Q 2018 data from RCA shows that hotels representing approximately $4.7 billion or approximately 7.8% of all cross-border transactions. Cross-border investors completed 17% of total hotel acquisitions, down from approximately 20% for the same period last year. Cross-border hotel volume is down 64% compared to the record 2016 totals. Cross-border dispositions are increasing compared to cross-border acquisitions. As of TTM 3Q 2018, cross-border dispositions are 88% of total cross-border acquisitions, the highest since 2013.

FUNDAMENTALS

Occupancy continues to deliver in the mid- to high 60s and above the long run average of approximately 62.3% (See Exhibit 4-P). Through 3Q 2018, Smith Travel Research (STR) reports YTD occupancy at approximately 67.7%. While ADR did respond with growth, the recorded growth in 2018 was rather dismal — near 2.5% at $130. Both occupancy and ADR provided a 3.1% lift in revenue per available room (RevPAR) to approximately $88. According to Smith travel, RevPAR has grown at least 3.0% for each year since 2010. Despite measured growth, room supply, room demand, occupancy, ADR, RevPAR and room revenue are at all-time highs .[21]

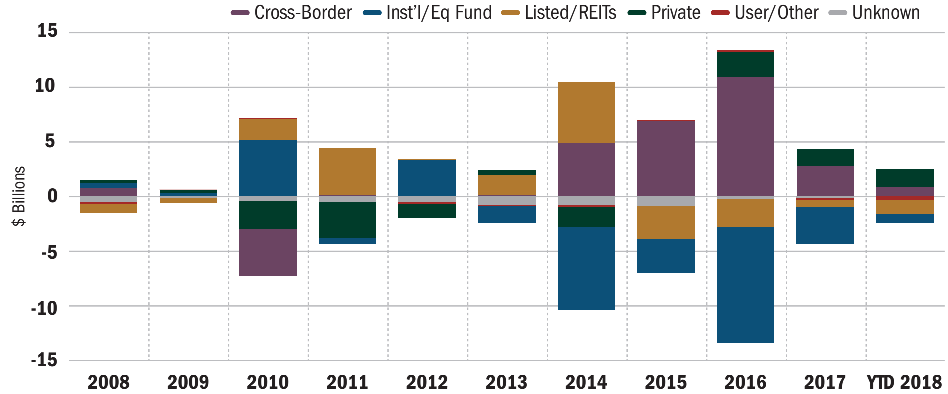
The luxury chain scale segment is likely to report the largest increases in occupancy (0.9%), ADR (3.0%) and RevPAR (3.9%). While all segments should report RevPAR increases for 2018, the lowest rate of RevPAR growth is projected in the upscale segment (2.0%).[22]

[20]US Capital Trends-Hotels, RCA, October 2018.

[21]STR, Trends for 2018 and Beyond, Ryan Lynch, November 2018.

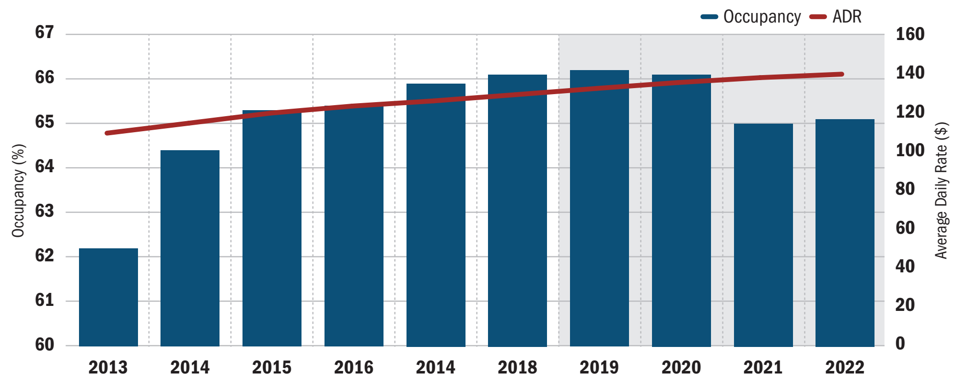
[22]STR, Performance, August 2018.

EXHIBIT 4-O. HOTEL NET ACQUISTIONS BY INVESTOR TYPE



Source RCA, 3Q 2018.

EXHIBIT 4-P. HOTEL ADR AND OCCUPANCY

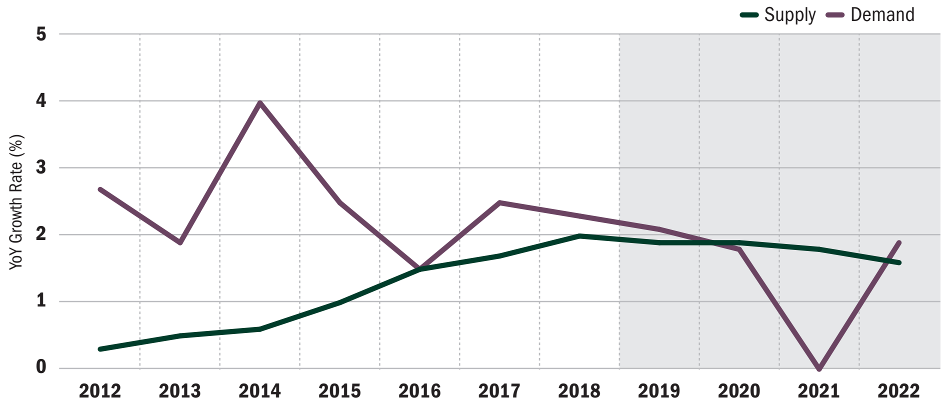


Note Shaded area reflects forecast rates.
Source CBRE Hotels' Americas Research, STR, 3Q 2018.

Twenty-two of the top 25 markets are projected to report RevPAR growth for the year. While most markets are projected in the 0% to 5.0% range, Minneapolis/St. Paul, Minnesota-Wisconsin, and Miami/Hialeah, Florida, are expected to see growth in the range of 5% and 10%. The three markets expected to show a decrease in RevPAR, all between 0% and 5%, are Houston, Texas; St. Louis, Missouri-Illinois; and Washington, DC-Maryland-Virginia.[23]

As of October 2018, the US reported 194,591 rooms in construction, a 6.2% YOY increase[24] (See Exhibit 4-Q). During the last four quarters, CBRE Hotels' Americas Research reported that hotel supply increased by a soft 2.0% of the existing hotel room base, while demand increased by 2.8% of the existing hotel room base. In previous years, demand growth dominated, reflecting net supply/demand differentials in excess of 3.5% in some years. In 2018 and into 2019, the supply and demand are expected to be in near-equilibrium and very much in line with long-term averages. New supply is projected to be tepid and below 2.0% in in the near term.

EXHIBIT 4-Q. HOTEL SUPPLY VS. DEMAND GROWTH



Note Shaded area reflects forecast rates.
Source CBRE Hotels' Americas Research, STR, 3Q 2018.

[23]STR, Performance, August 2018.

[24]STR, US Hotel Supply Development Update, November 2018.

CHAPTER 5: OUTLOOK

OUTLOOK[25]

ECONOMY

The US economy is generally humming along as we enter 2019, although there are some concerns. Unemployment and consumer confidence are near record lows and inflation and wages are finally starting to pick up. However, several central banks and organizations have tempered their economic outlooks for 2019 and beyond.

The IMF projected in its October 2018 World Economic Outlook that global economic growth would notch a 3.7% annual gain in 2018-2019. The figure represented a 20 bps downgrade from its April 2018 estimate and placed the pace of growth on par with that of 2017. The ECB remained committed to its plan to scale back its bond-buying program, which it initiated in January of 2018, announcing at its October meeting that it would cease purchases by December.

The Fed has lowered its growth and inflation forecasts for 2019, from 2.5% to 2.3%. Expectations are for two more rate hikes in 2019 — originally, three hikes were projected. In addition, on January 4, 2019, Fed Chairman Jerome Powell said that the Fed would be "flexible on policy and in no hurry to raise interest rates" in 2019, as reported by CNBC. The statement resulted in a surge in stock and bond yields.

In 2019 Deloitte, NAR and Situs RERC expect that the US economy should enter into the longest expansion period in history with moderate growth. We also expect that unemployment will likely continue to be near historically low levels and wage growth will outpace inflation. The greatest job gains will likely be found in education and health care. Job gains are also likely in the leisure and hospitality sector (as consumer spending increases) and business and professional services. Over the next year, we expect that the strong labor market, moderate wage growth and a modest tax cut for consumers will result in increased consumer optimism and higher spending.

Rising consumer spending is expected to lead to an increase in exports. Many existing tariffs (and retaliatory tariffs) are likely to remain in place in 2019, but we expect that corporate and investor uncertainty surrounding international trade tensions will ease as formal trade agreements are signed into law and the trade deficit, which reached a 10-year high in October of 2018, will decline modestly throughout 2019.

As the US population continues growing and demand for housing remains on an upward trend, the undersupply of new homes will likely continue to weigh on markets into 2019. Rising labor and materials costs are expected to continue to hamper new construction. However, rising mortgage rates and tight inventory will likely lead to a decline in housing sales, resulting in a slower rate of price appreciation compared to 2018.

CAPITAL MARKETS OUTLOOK

FINANCIAL MARKETS

It is nearly impossible to predict what will happen in the financial markets, as evidenced by the rocky events of 2018. Therefore, it is with some trepidation that we offer our outlook for the stock and bond markets.

We anticipate that volatility in the stock market will continue, at least through the early part of 2019. Corporate earnings are expected to moderate as the initial boost from the tax cuts begins to fizzle out. We may see stocks rally later in 2019 if investors can separate the news from the noise. This outlook, however, assumes that the economy remains as strong as is currently expected.

On the bond side, investors will likely focus on investment-grade bonds. Companies will likely continue to be profitable, but we have seen shareholder-friendly activities such as share buybacks and increase in dividends compared to capital spending, so bondholders should keep a close eye on these


OMAHA

[25]The viewpoints represented in this entire chapter represent the collective perspectives and outlooks of the authors of this report (except where otherwise noted) and may not represent the viewpoints of the sponsoring firms as a whole.

 |

activities as we move further in the cycle.

SITUS RERC 10-YEAR TREASURY FORECAST[26]

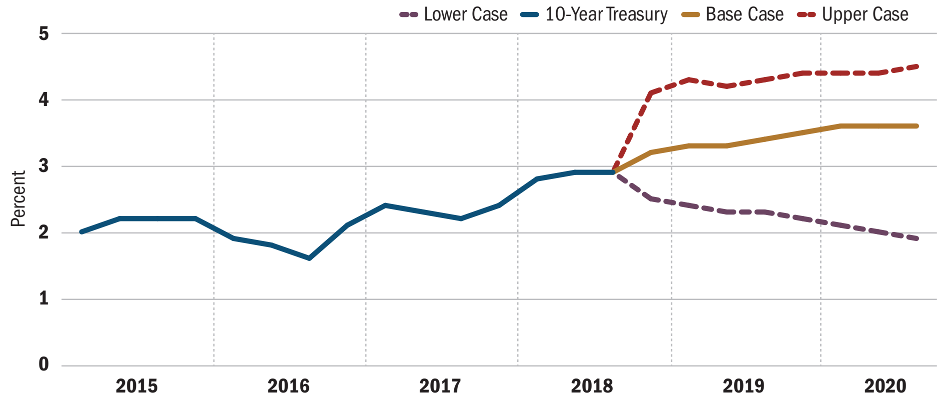
Situs RERC forecasts the 10-year Treasury under three different scenarios. Historical and forecast rates are found in Exhibit 5-A. We expect that bond yields will likely increase, albeit not at as quick of a pace as the first half of 2018.

The base case scenario assumes the most probable economic situation over the next two years, with a slow but steady rise in the Treasury rates throughout 2019 and 2020. This assumes the Fed will maintain a gradual pace of monetary tightening, keeping inflation in check and the economy balanced with a tight labor market and relatively healthy fundamentals. The base case scenario sees the 10-year Treasury rate inching up to 3.4% by 3Q 2019 and 3.6% by 3Q 2020.

The higher case scenario reflects stronger economic growth but has a lower probability of occurrence compared to the base case. The higher case scenario assumes that the tight labor market, higher oil prices and stronger dollar forces the Fed to hike short-term rates, putting upward pressure on the 10-year Treasury. This scenario predicts the 10-year Treasury to increase to 4.3% in 3Q 2019 and to 4.5% in 3Q 2020.

The lower case scenario reflects a more pessimistic economic situation and is also less likely than the base case scenario. This scenario predicts the 10-year Treasury rate to drop to 2.3% by 3Q 2019 and 1.9% by 3Q 2020. The lower case scenario assumes the trade war escalates and the boost from the tax reform cools down sooner than expected, dragging down the economy.

EXHIBIT 5-A. SITUS RERC'S 10-YEAR TREASURY FORECAST



Note Data based on quarterly average. Shaded area indicates forecast.
Source Federal Reserve, compiled and forecast by Situs RERC, 3Q 2018.

CRE DEBT MARKET OUTLOOK

Based on 3Q 2018 survey data from Situs RERC, we anticipate that debt capital will continue to be readily available and that the competitiveness of debt funds in the market will cause a slight erosion of overall underwriting standards. Debt yield ratios will likely increase in the coming quarters. The market is likely to remain rational, however, as stricter requirements that have been in place since the beginning of the recovery remain and keep lending in check. In general, we expect that strong fundamentals and historically low interest rates will support the CRE lending environment. We also believe that non-traditional lenders, such as shadow banking, will continue to take more market share from traditional lenders.

An NREI article titled *Moody's Analyst Kevin Fagan Explains the Current State of CMBS Underwriting* reported a gradual decline in CMBS loan quality in 2018, largely driven by the deterioration in single tenancy and interest-only loans. Our view is that the CMBS market will face some challenges as we near the end of this real estate cycle; however, some of these challenges should be mitigated by increased credit enhancements and a DSCR level that is higher than it was before the crisis.

CRE EQUITY MARKET OUTLOOK

Data from Situs RERC suggest that equity capital will likely be readily available in 2019. However, uncertainty about the direction of the economic cycle, combined with pricing that feels like it is at a peak, is expected to make equity capital cautious. We anticipate that this caution may cause

[26]Predicting rates is a difficult endeavor under any circumstance. The above scenarios are Situs RERC's best estimates of inflection points for expected rates. The Situs RERC's 10-Year Treasury Forecast produces similar results to other third-party consensus forecasts and models, including analyses from Moody's, Kiplinger and The Wall Street Journal.

LAS VEGAS

underwriting standards to become more disciplined throughout the year.

The outlook for foreign investment into US CRE is encouraging, but will be impacted by trepidation about a potential trade war between the US and China. Also, rising interest rates will increase the costs for foreign buyers seeking to acquire assets in the US. However, property fundamentals remain sturdy, and the US economy is on the cusp of its longest expansion in history. That, coupled with a more diverse group of investors into the market, should account for a continued flow of foreign capital into the US in spite of the higher cost.

According to research by Situs RERC, solid property fundamentals are underlying strong valuations, and these valuations are supporting high prices. Favorable economic conditions, including historic employment gains, are expected to allow further room for rent growth. Though capital is readily available, the rising interest rates, combined with high prices and lack of quality product, will likely edge transaction volumes slightly downward.

However, CRE returns are expected to gradually regress from their previous peaks. With capital appreciation generally on the decline, and cash flow hitting a steady but slow level of growth, CRE will most likely rely on income to drive total returns moving forward. Real estate yields vis-à-vis capital market returns are expected to remain at competitive and acceptable levels.

While CRE total returns are declining, they are not subject to much volatility. Cap rates are flattening or reversing course, and CRE returns are relying more heavily on the income component and less on appreciation. However, markets with strong fundamentals that can support income growth preserve value for investors.

It would be unwise to think that the market is not fully priced, but most institutional investors understand the current risk in the market. There may be a potential weakness in future net income growth due to rising expenses and potential capital expenditures that could be exaggerated by any rise in cap rates. Investors in search of alpha are clearly pursuing core-plus or opportunistic

investments, and in some cases, buying empty newly constructed assets or newer assets struggling to find occupants. There are opportunities, but you have to pick your spots carefully and with an eye to what can help your portfolio grow.

SITUS RERC TOTAL RETURN FORECASTS

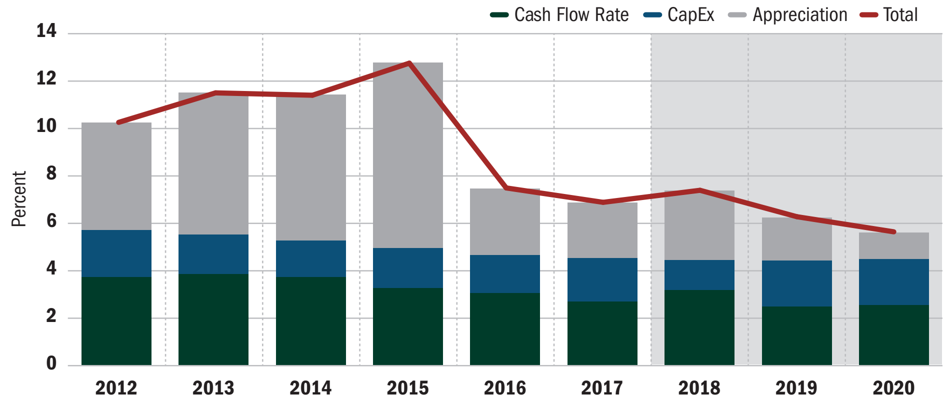
Situs RERC forecasts total returns for NPI-ODCE as well as the income components (i.e., free cash flow yield and cap rates) and the capital component of total returns (see Exhibit 5-B). All of Situs RERC's forecasts incorporate data from NPI-ODCE and are for leveraged, institutional-grade properties.

Although we provide individual forecasts for each of these components, it is important to note that Situs RERC's forecast for NPI-ODCE returns assumes interdependency among these (and other) metrics. Therefore, any changes in one metric would affect the other forecasts as well.

In addition, all the returns are projected out in three possible scenarios – base case, lower case and higher case. The base case is the most probable scenario. The higher case scenario assumes stronger fundamentals and capital appreciation, but is less likely to occur than the base case scenario. The lower case scenario assumes weaker fundamentals and capital appreciation and is also less likely to occur than the base case scenario.

Per NCREIF, the free cash flow yield (FCFY) is the quarterly net operating income (NOI) minus ordinary or routine capital expenses, divided by the beginning market value in the quarter. It focuses on quarterly net cash flow from operations, which accounts for ordinary or routine capital expenditures. This measure represents additional income beyond rent that investors can expect to receive from investing in the properties at a particular time and is comparable to stock dividend yield after capital expenditures have been paid. Our base case scenario calls for FCFY to increase through the end of 2018, reaching approximately 3.2%, but then stabilizing around 2.5% by 2020.

EXHIBIT 5-B. SITUS RERC TOTAL RETURN FORECAST (BASE CASE SCENARIO)



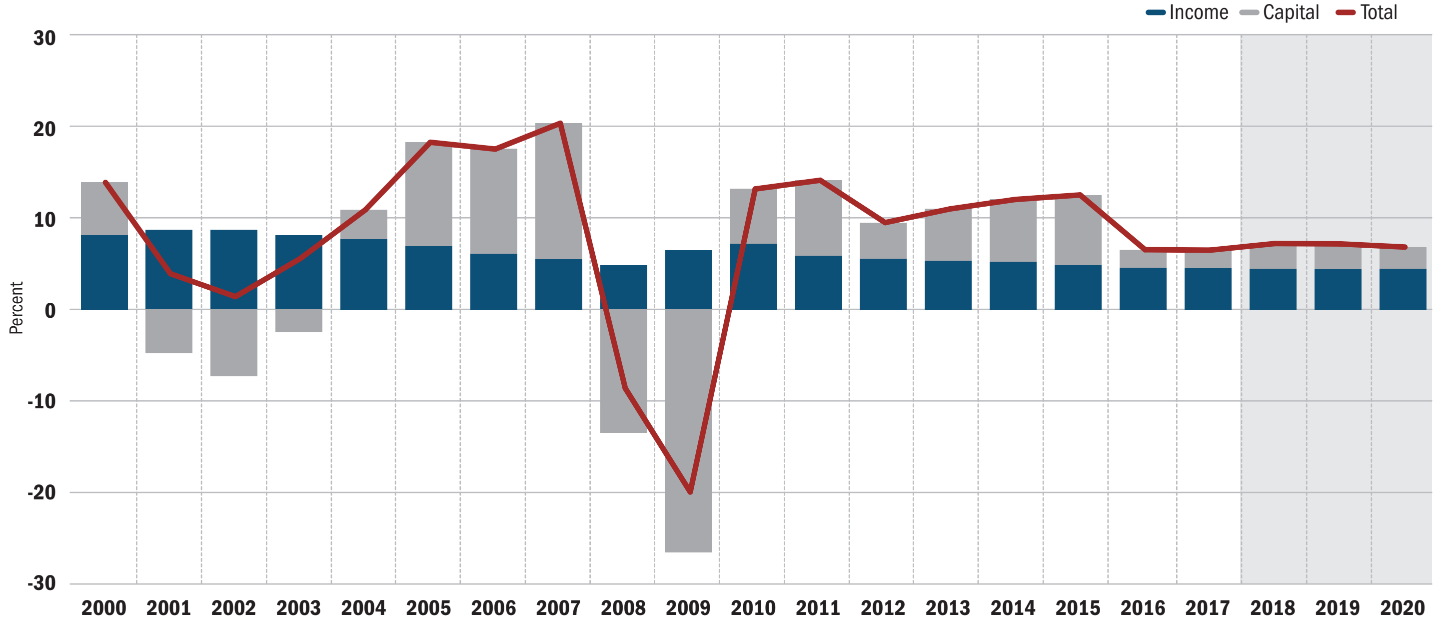
The total return forecast is Situs RERC's proprietary model based on Situs RERC data and data from the NCREIF Property Index (NPI-ODCE) and is for leveraged, institutional-grade properties. Total returns are derived from an income component and a capital appreciation/depreciation component. Shaded area reflects Situs RERC's outlook for the base case scenario for 2018, 2019 and 2020.
Sources Situs RERC, NPI-ODCE, 3Q 2018.

NCREIF implied cap rates can be interpreted as the current quarter NOI divided by the current quarter-ending market value. This result is then multiplied by 4 to get an annual rate. After falling to a historic low of 4.30% in 4Q 2017, it increased in the first half of 2018. Situs RERC's base case scenario predicts the NCREIF implied cap rate will decline again, sliding to a new historic low of approximately 4.27% by the end of 2018.

CRE value can be described in terms of a price change, which combines capital expenditures and capital returns, or capital appreciation only. Situs RERC's capital appreciation forecast provides an alternative way to examine prices, because a significant portion of the run-up in CRE prices is due to capital improvement projects (including leasing activity). Capital returns have been on the decline since 2015. While Situs RERC's base case scenario has capital appreciation increasing from 2.3% in 2017 to approximately 2.9% by the end of 2018, we expect capital appreciation to resume its downward trend over the forecast, falling to 1.1% by 2020.

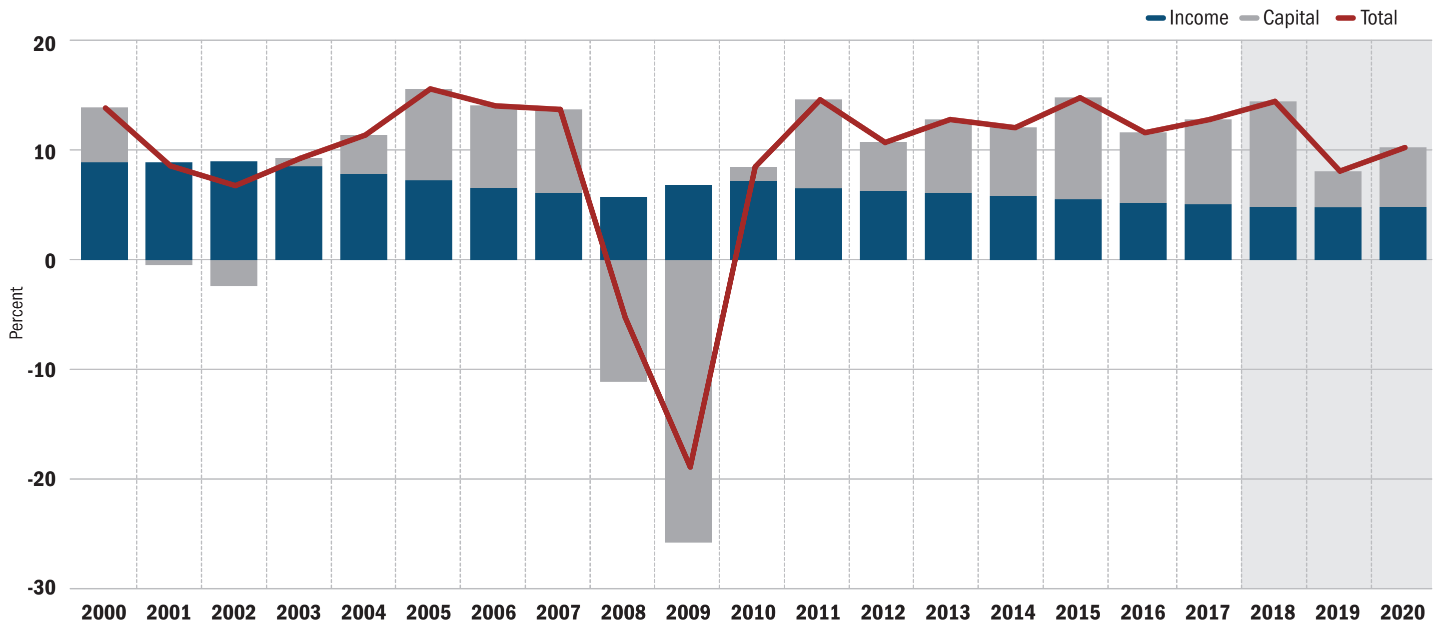
Although NPI-ODCE total returns have been strong over recent years, it is important to note that annual returns have been decreasing since 2015. After a steeper decline from 2015 to 2016, the NPI-ODCE total return fell to 6.9% in 2017 from 7.5% in 2016. Situs RERC's base case scenario predicts the NPI-ODCE annual total return will increase in 2018, reaching approximately 7.4% in 2018 before declining again to roughly 6.2% in 2019. Income returns will continue to drive the majority of total returns. For Situs RERC's total return forecast by property type, please refer to Exhibits 5-C through 5-F.

EXHIBIT 5-C. SITUS RERC TOTAL RETURN FORECAST — OFFICE (BASE CASE SCENARIO)



Sources Situs RERC, NPI-ODCE, 3Q 2018.

EXHIBIT 5-D. SITUS RERC TOTAL RETURN FORECAST — INDUSTRIAL (BASE CASE SCENARIO)



Sources Situs RERC, NPI-ODCE, 3Q 2018.

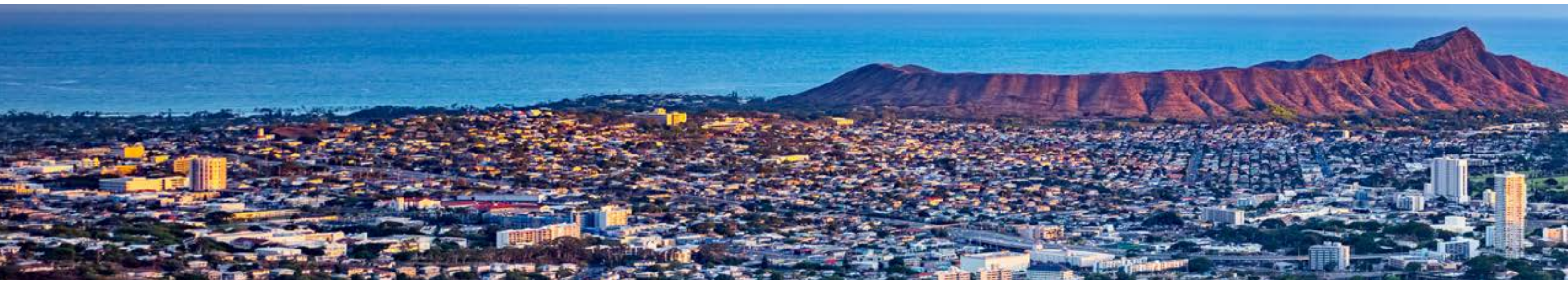


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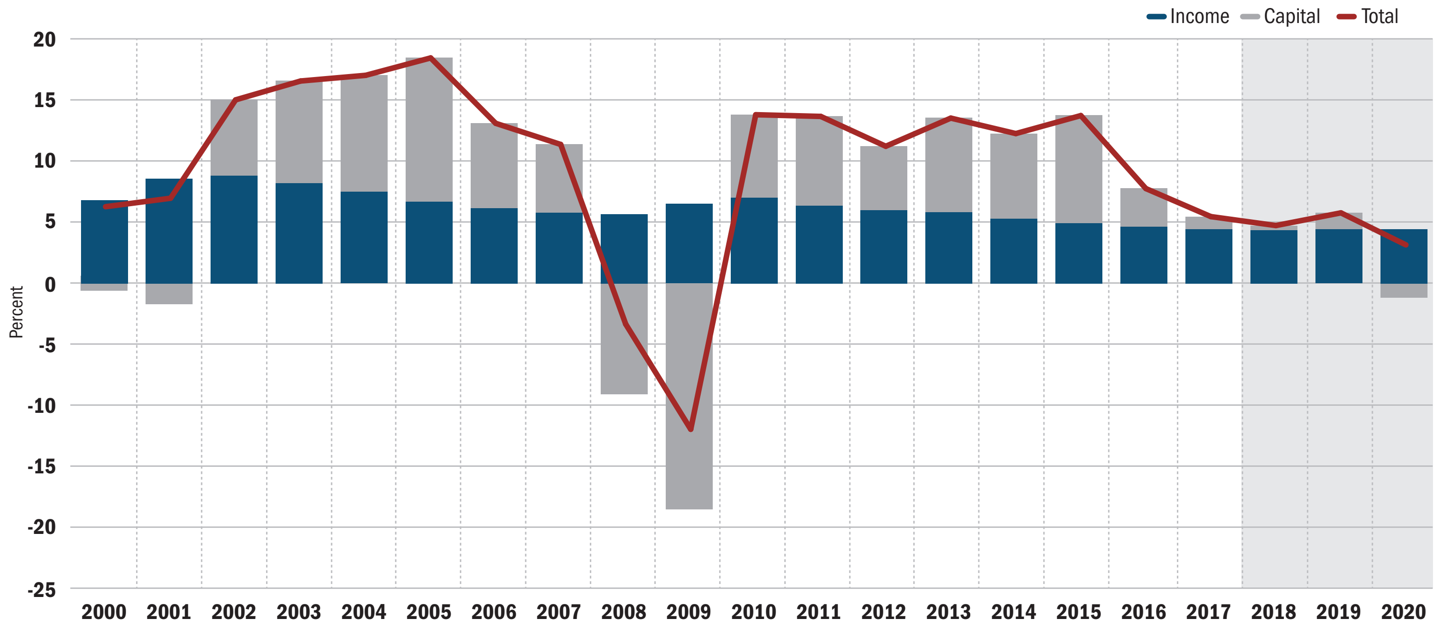
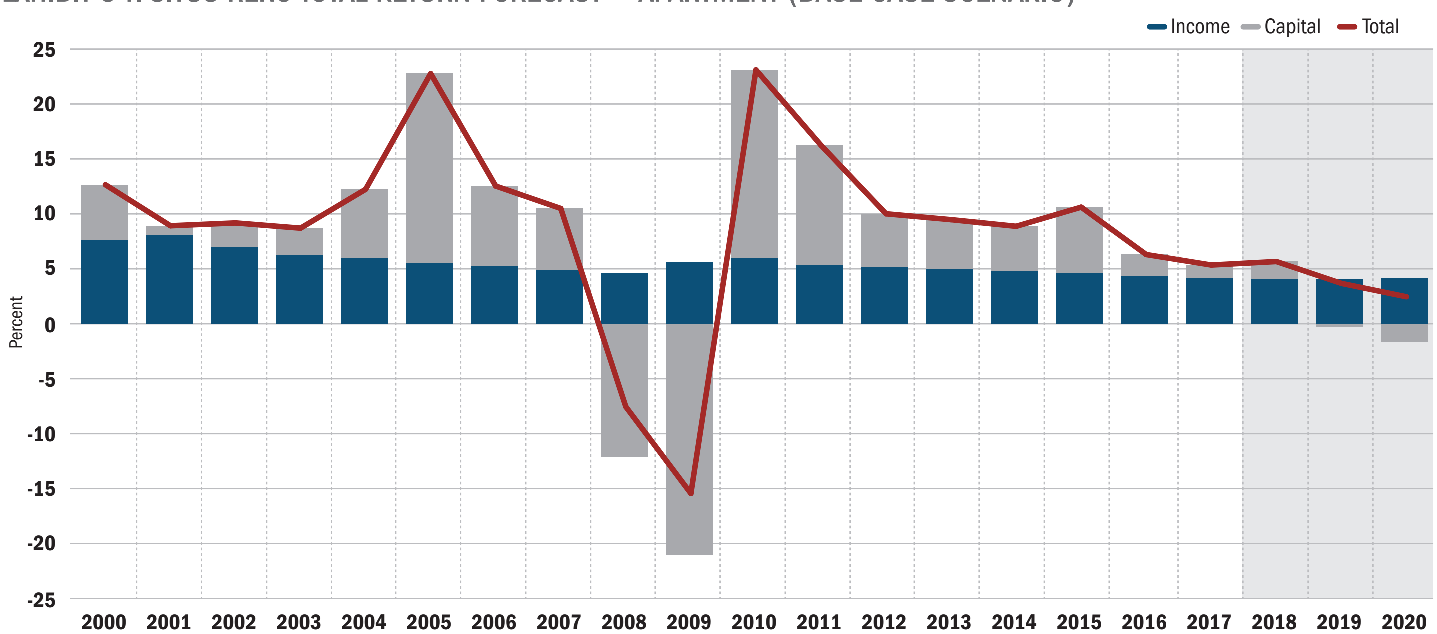
EXHIBIT 5-E. SITUS RERC TOTAL RETURN FORECAST — RETAIL (BASE CASE SCENARIO)



Sources Situs RERC, NPI-ODCE, 3Q 2018.

EXHIBIT 5-F. SITUS RERC TOTAL RETURN FORECAST — APARTMENT (BASE CASE SCENARIO)



Sources Situs RERC, NPI-ODCE, 3Q 2018.

PROPERTY TYPE OUTLOOK

OFFICE

In 2019, we expect that the office sector will be a bright spot in the CRE market. The already-low vacancy rate is expected to decline further in 2019 to approximately 9.5%, according to a 3Q 2018 forecast from CoStar[27]. Further, offices in core markets tend to provide stable income during times of uncertainty. With solid job growth and low unemployment likely to continue in 2019, we expect that office will continue to see strong demand and tempered supply. Since the office sector has lagged behind the other property types in the recovery because of the lack of newer, first-tier properties and nominal new construction, we may see slightly increasing rents in desired submarkets.

However, we anticipate that it will be more challenging to find the best-valued office markets in the coming year. Some top-tier markets are overpriced, and this will likely push investors further into secondary markets. Additionally, ongoing technological advances for space optimization, coupled with an economy operating at nearly full employment, raise the question of whether vacancy will rise. The obsolescence of some office space is also a major challenge to the sector that will likely require enormous amounts of capital to address.

INDUSTRIAL

The industrial sector will likely continue to have the most favorable near-term fundamentals of all the main property types. In 2019, we expect vacancy rates to remain near record lows and increased demand for warehouse distribution space and data centers, while a rise in new business formation of small manufacturing companies that sell their goods via e-commerce will likely increase demand in the flex sector. Rising construction costs and lack of developable land are expected to add to undersupply.

Some caution is warranted due to the implementation of tariffs, the possibility of a trade war and the age of the current expansion. In addition, we have concerns that fundamentals may not live up to expectations, or that pricing will be inflated due to the strong demand; however, we believe that industrial will continue to be the best performing sector in 2019.

RETAIL

Retail PPSF, which is the highest it has been in five years, is anticipated to increase by 1.4% by 3Q 2019, according to a forecast by CoStar[*]. Rents have been slowly improving since decreases in net asking rent were observed in 2010 and 2011, pointing to the stable state of the retail real estate market.

Modest retail industry growth, but growth nonetheless, has been observed over the course of 2018, and we expect the trend to continue in 2019. The overall attitude within the retail real estate industry is less a feeling of panic, and more a feeling of understanding as the industry learns how to adapt to the changing market. Many retailers are working to perfect their omni-channel shopping experiences to utilize both their online portals and their brick-and-mortar stores to their fullest potential.

Despite pessimism swirling around malls, we expect continuing capital coming back to this subsector as pricing comes down — but it is dependent on the selectivity of the best assets. Nonetheless, a lack of quality tenants — particularly in second- and third-tier tenants for community centers – and oversupply of space in power centers, which are especially vulnerable to e-commerce, will likely continue to present major headwinds for the sector.

While the market appears to be inching toward an equilibrium, some possible shifts in consumer shopping patterns could potentially cause trouble for the retail real estate industry once again. For example, grocery delivery services are gaining marginal popularity, making up between 2% and 4.3% of the grocery retail market today but it is forecasted to increase to approximately 20% of the grocery retail market by 2025, according to a May 2018 Forbes article, *The Race Is On For Grocery Delivery, But Most Customers Still Want To Shop In Stores*. Grocery

[27,*] Data provided by CoStar Market Analytics (www.costar.com), 3Q 2018. The information is provided "As Is" and without any representations, warranties or guarantees.

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stores are one of the more stable tenants at retail centers thus far, but a decline in their business may hurt occupancy and rent growth rates, sending property owners to the drawing board to figure out their ideal tenant mix. In the meantime, the outlook of the market is positive, with modest growth expected during the coming year.

APARTMENT

The outlook for the apartment market appears to be steady in the short term, with continued investor appetite in this sector and increasing property values. With interest rates on the rise and a greater proportion of transactions occurring in secondary and tertiary markets from investors seeking opportunities for higher yields, it appears that overall average cap rates may continue to stabilize or possibly increase in 2019.

According to RealPage, 301,397 apartment units are expected to be delivered in 2018, followed by 314,747 and 260,979 more units in 2019 and 2020, respectively. The new supply of apartment units has increased in every year since 2011, when just 79,268 new units were completed. Based on the projection data, this trend is expected to culminate at a peak in 2019, thereafter declining to 207,151 units in 2022. Annual effective rent growth is forecast to inch up slightly to 3.1% in the second quarter of 2019, thereafter declining to 2.1% by 2Q 2021, according to RealPage.

According to forecast information from RealPage for the top 20 markets, Las Vegas, Phoenix, San Francisco and Orlando are expected to have the highest cumulative potential rental revenue growth from 2018 to 2022 (potential rental revenue growth is the combined change in effective rental rates and occupancy). Of the top 20 markets, the lowest performing markets are expected to be Chicago, Dallas and the New York metro.

Given the transaction volume and pricing, apartments continue to be a preferred property type for investors. However, trends in apartment fundamentals (most notably the effective annual rent growth), coupled with significant continued increases in the supply of new units, especially true of Class A properties in major markets, suggest the apartment sector is moderating as it achieves equilibrium. With the supply of apartment units projected to remain at a high level over the next several years, a shift on the demand side with renters turning into homebuyers could have a major impact on this sector.

HOTEL

CBRE forecasts a 1.9% increase in the number of available US hotel rooms from 2018 to 2019. This is slightly less than 2018's growth rate of 2.0%. With the slowing growth rate, it appears that supply growth has peaked. This should provide some relief for hotel owners and operators in 2019 and beyond. That said, CBRE expects 50 of the 60 markets covered by CBRE to have supply growth greater than 2.0% in 2019, which is up from the 39 markets that realized growth greater than 2.0% in 2018. Nashville, Denver, Savannah, New York and Seattle are a few of the markets that are expected to have the greatest rates of new hotel supply growth next year. Fortunately for owners and operators, a robust economy

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continues to support even greater increases in the demand for these new accommodations.

For 2019, CBRE is forecasting a 2.1% rise in the number of occupied rooms. This will mark the 10th consecutive year of occupancy growth for the US. With occupancy levels at record highs, one would expect outsized increases in ADR, but this has not occurred during this cycle. ADR growth is forecast to grow by 2.5% in 2019, which is just above CBRE's forecast of inflation. US. Hotel RevPAR is expected to grow by just 2.7% in 2019. This is the lowest rate of growth since the recovery began in 2010. While operating margins are at the highest levels since 1960, CBRE does not expect any more growth in the margin during this cycle, primarily because of rising labor costs. Given CBRE's modest forecasts of RevPAR change over the next few years, operators will need to keep expense growth to under 3.0% for hotels to achieve real gains in profits[28].

The hotel sector has stabilized recently and continues to operate at historic highs in terms of occupancy and gross revenue; however, supply, demand and ADR growth have slowed. This slowdown has provided a needed break for hotel owners to evaluate their investments and high price points in some markets. Historically, hotel investors have looked to GDP growth, consumer confidence and disposable income levels to predict market growth fundamentals. These indicators, and others, are providing strength and stability to the hotel sector. Some hotel owners may consider a sale, taking advantage of market fundamentals and pricing to the extent that buy-sell assumptions converge.

CONCLUSIONS

The real estate industry is entering **uncharted territory** as the business cycle completes its 10th year of expansion. While we are watching and waiting for the next correction to occur, it is important to remember that the timing of the cycle is not set in stone. The economy will likely continue on solid footing in the immediate future and CRE remains an attractive investment alternative, given the wildly fluctuating stock and bond markets. The attractiveness of a particular asset class is relative to the desirability of alternative asset classes, which can vary depending on the risk appetite of the market. Although concerns over the economic and current real estate cycle's duration and rising interest rates are putting some pressure on values, CRE is expected to remain the best investment option compared to stocks, cash and bonds. As we know and have come to expect, private CRE gives investors a bond-like return plus an equity upside like that of a stock investment. Institutional CRE is currently positioned well to achieve reasonable returns in an otherwise shaky investment environment.

Please refer to Exhibit 5-G for our outlooks under three different economic scenarios.

[28]**Source** CBRE Hotels, Hotel Horizons, December 2018- February 2019.


DES MOINES

EXHIBIT 5-G. ALTERNATIVE ECONOMIC SCENARIOS

	LOWER CASE SCENARIO	BASE CASE SCENARIO	HIGHER CASE SCENARIO
Probability	Reasonable Probability	Highest Probability	Lowest Probability
US GDP Real Growth	· US GDP growth averages less than 1.5% in 2019. · Tariffs and government shutdown depress economic growth.	· Growth continues between 1.8% and 2.3%[29]. · Rate slows slightly but not enough to prevent the economy in 3Q 2019 from entering longest expansion period in US history.	· US GDP growth averages greater than 2.5% in 2019. · Government shutdown's impact is minimal and short-lived. · US trade policy supports globalization.
Employment	· Unemployment rate rises to over 4.5%. · Labor-force participate rate declines. · With declining economic growth, business investment decreases. · Wage growth and consumer spending stagnate. · Tariffs hurt construction and manufacturing industries. · Low oil prices have negative impact on workers in energy sector.	· Unemployment rate remains in 3.8% to 4.2% range in 2019[29]. · Wage growth ticks up and outpaces inflation. · Increasing wages attract discouraged workers from the sidelines, bumping up overall unemployment rate slightly. · Education and health care, leisure and hospitality and business and professional services sectors see greatest increase in employment.	· Unemployment rate falls below 3.8%. · Economic growth supports continued strong hiring in the private sector. · Wage growth gains momentum. · More deregulation boosts job gains in financial, professional and business services sectors. · Job growth occurs in nearly all other sectors.
Housing Market	· Weak economy and low wage growth cause home prices to fall and new construction to slow down. · Already high home prices, rising mortgage rates and tightened lending standards force more people out of the housing market.	· Solid demand for housing is propelled by accelerating household formation, population growth and increasing incomes. · Rising labor and materials costs continue to hamper new construction. · Rising mortgage rates and tight inventory slow sales and rate of price appreciation. · Affordability continues to be a concern in most major metropolitan areas.	· The number of housing starts increase as prices rise. · Stronger job market and increasing wage growth drive more renters to enter the housing market, supporting high prices in many major markets. · Lack of existing homes and strong price appreciation spur new construction, despite rising labor and material costs.
Consumer Spending	· Weak employment situation leads to declining wage growth and less disposable income for consumers. · Falling consumer sentiment causes decrease in consumer spending, especially for durable goods. · International tariffs increase the price of consumables, further inhibiting spending.	· Strong labor market, moderate wage growth and modest tax cut for consumers result in increased consumer optimism, higher spending. · Structural trends, such as wealth inequality and the declining retirement savings of baby boomers, present longer-term challenges.	· Consumer spending gets boost from strong wage growth, low unemployment. · Increasing home prices make households feel more secure in their wealth and increase spending. · Trade policy that favors globalization keeps price of durable goods reasonable so consumers can purchase more.
Business Spending	· New hiring and wage growth stall. · Positive impact of corporate tax cuts fades. · Tariffs (and retaliatory tariffs) remain in place, resulting in a decrease in profits and a decline in business investment. · Stock market continues to experience volatility and sharp losses, making investors nervous.	· Business investment growth moderates as volatility in the stock markets and rising uncertainty regarding international trade offset lower corporate tax rates. · Investments in intellectual property and information processing comprise the largest increases in business spending. · Commercial and residential real estate investments soften.	· Stock market recovers from losses of 2018 as US adopts trade policy that supports global growth. · Deregulation continues, boosting business confidence and expanding access to capital. · Hiring continues at a rapid pace. · Wage growth returns to pre-GFC rates.
Government Spending	· Tax revenues are substantially lower than expected. · Brief stimulus from tax cuts fades and GDP growth slows. · Increasing political gridlock leads to less government spending.	· Federal spending increases modestly, particularly for Social Security and Medicare, as the population ages. · Proposed infrastructure spending plan fails to gain traction in Congress. · State and local governments continue to increase spending modestly, particularly for education.	· Government spending increases as Congress passes infrastructure spending plan with bipartisan support. · Economic stimulus generated by tax cuts boosts GDP. · Additional revenue leads to moderate increased spending across all levels of government.

EXHIBIT 5-G. ALTERNATIVE ECONOMIC SCENARIOS (CONTINUED)

	LOWER CASE SCENARIO	BASE CASE SCENARIO	HIGHER CASE SCENARIO
Trade Balance	· Trade deficit changes little as other countries retaliate against US tariffs. · Protectionist US trade policy damages global confidence and weakens international trade. · The strong dollar, caused in part by a "hard Brexit," limits exports amid a global economic slowdown.	· Trade deficit, which reached 10-year high in October 2018, declines modestly throughout 2019. · Rising consumer spending contributes to increase in exports, but international trade tensions ease and formal trade agreements are signed into law.	· Trade deficit falls nearly 20% from 2018 as the "trade war" diminishes. · Policies favoring globalization replace protectionist policies in the US and around the globe.
Inflation	· Inflation falls below the Fed's 2% target rate as wage growth and business investment declines. · Price of oil and gas continues to decline. · Price of agricultural goods drops as agricultural exports stemming from tariffs keep prices low.	· Inflation remains steady in the mid-2% range as the Fed closely monitors the economy for signs of overheating and adjusts monetary policy accordingly. · Increasing shelter and health care costs offset by declining energy and oil prices. · Food prices remain steady.	· Inflation rate rises to nearly 3%. · Prices increase for goods because businesses forced to raise wages in tight labor market. · US removes most protectionist tariffs, keeping the cost of goods from rising even more.
Interest Rate[30]	· 10-year Treasury rate to drops to the mid-2% range by the end of 2019. · Administration and federal government fail to reach agreement on policies. · Trade war escalates and the boost from tax reform cools down sooner than expected, dragging down the economy.	· Long-term interest rates, as measured by the 10-year Treasury yield, gradually increase, reaching the mid-3% range by the end of 2019. · Short-term rates experience a slow but steady rise throughout 2019 and 2020. The Fed maintains a gradual pace of monetary tightening, keeping inflation in check and the economy balanced.	· 10-year Treasury increases to the mid-4% range. · Tight labor market, higher oil prices and stronger dollar forces the Fed to hike short-term rates, putting upward pressure on the 10-year Treasury.
Commercial Real Estate[30]	· Total CRE returns fall to about 2% by the end of 2019, as capital appreciation turns negative. · Amid a slowing global economy and uncertainty over the length of the real estate cycle, sales volume and property prices decline significantly, and cap rates increase at a faster pace. · Availability of capital declines as a greater proportion of tenants default. · Vacancy rates start to increase across most property types.	· CRE total returns continue to gradually regress from previous peaks, reaching about 6%; income returns drive total returns. · Favorable economic conditions, including historic employment gains, expected to allow further room for rent growth. · Solid property fundamentals underlie strong valuations and support prices. · Capital is readily available, but rising interest rates, elevated prices and lack of quality product edge transaction volumes slightly downward.	· CRE total returns jump to over 8% due to a surge in capital appreciation. · Economy performs very well, which buoys demand for CRE. · CRE prices increase (and cap rates compress), tied to the strong fundamentals. · Boost in prices spurs redevelopment and new construction. · Space market fundamentals improve for all property types.

Note These are not the only scenarios that are possible, and there will usually be differences between the forecast and actual results because events and circumstances frequently do not occur as expected, and those differences may be material.

[29]GDP and unemployment rate forecasts are provided by the NATIONAL ASSOCIATION OF REALTORS® and do not necessarily reflect the viewpoints of the other sponsoring firms of this report.

[30]Interest rate and total return forecasts are provided by Situs RERC and do not necessarily reflect the viewpoints of the other sponsoring firms of this report.

Source NAR, Situs RERC, Deloitte, BLS, BEA, The Conference Board, RCA, NCREIF, The Wall Street Journal, January 2019.

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- 8 of the top 10 largest money managers ranked by US institutional, tax-exempt assets

Sources Builder Online 2017, NAREIT (5/17), P&I (May-December 2017), PERE Fifty (2017), Fortune 500 (2017), NREI (2017)

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NATIONAL ASSOCIATION of REALTORS®

The Mission of the NATIONAL ASSOCIATION OF REALTORS® Research Group is to produce timely, data-driven market analysis and authoritative business intelligence to serve members and inform consumers, policymakers and the media in a professional and accessible manner.

The Research Group monitors and analyzes economic indicators, including gross domestic product, retail sales, industrial production, producer price index and employment data that impact commercial markets over time. Additionally, NAR Research examines how changes in the economy affect the commercial real estate business and evaluates regulatory and legislative policy proposals for their impact on REALTORS®, their clients and America's property owners.

The Research Group publishes information and reports covering macroeconomic activity, housing, consumer preferences, financing, as well as commercial real estate

- **Commercial Real Estate Outlook:** The Research Division's quarterly assessment of market fundamentals, the report covers macroeconomic conditions underpinning commercial core property sectors, while providing a forward-looking outlook of supply and demand.
- **Commercial Real Estate Quarterly Market Trends:** Based on NAR's national commercial members' activity, the report covers trends in commercial markets. Each report provides an analysis of market performance, sales and rental transactions, cap rates and business challenges.
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