Park Madison Perspectives

Outlook 2018

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About Park Madison Partners

Park Madison Partners is a New York-based real assets placement and advisory firm focused on the global alternatives and private funds industry. To date, the firm has participated in the placement of over $11 billion of private equity capital globally.

Park Madison Partners was founded to offer clients capital raising and strategic consulting services with a high degree of customization, integrity and accountability. The firm provides a relationship-driven approach to structuring and marketing assignments and offers its clients access to global institutional investors. Our team comprises professionals with backgrounds across the buy-side and sell-side, and we leverage this experience to provide a thoughtful approach to global real estate markets.

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One of the most paradoxical blessings to offer a person is “May you live in interesting times.” The irony of course is that times of peace and prosperity are relatively boring, while times of shock and turmoil are more noteworthy and therefore more “interesting.” From this perspective, 2017 was a truly special year, as it appeared to contain elements of both. Synchronized growth and historically low volatility carried the global economy to new heights, and yet there was no shortage of “interesting” moments. While we could not have predicted all of them, we still did pretty well, and you can see a full analysis of last year’s results under the section titled “2017 Scorecard” at the end of this piece. But first, we expect more interesting times in 2018, and hope you enjoy our top 10 predictions for the year ahead:

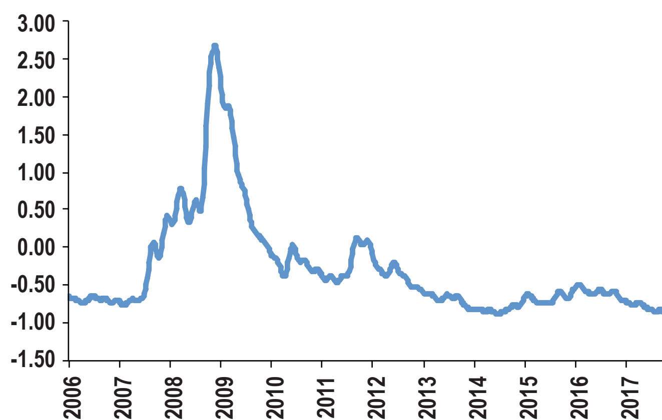
1.	**The Fed will continue to raise interest rates gradually**	2
2.	**US tax reform will impact real estate prices across geographies and property types**	4
3.	**US commercial real estate performance will be widely mixed**	6
4.	**Generation Z’s impact will become more important to commercial real estate strategies**	10
5.	**New technology will continue to transform the real estate and construction businesses**	11
6.	**Europe’s economic recovery will gain momentum**	13
7.	**Sustainability will factor more prominently in real estate investment decisions**	16
8.	**Farmland investment will gain wider appeal among institutional investors**	17
9.	**Real estate private equity fundraising will remain competitive**	19
10.	**Republicans will experience significant losses in the 2018 midterm elections**	20

Outlook 2018

1. The Fed will continue to raise interest rates gradually

As we enter 2018, the US economy is performing stronger than any time since the late 1990s. US GDP likely grew by approximately 2.5 percent in 2017, a slight acceleration over the post-Global Financial Crisis ("GFC") average of 2.2 percent. Consumer confidence is at its highest level since 2000. Labor markets are exceptionally tight, with at least one job opening for every unemployed American. The current economic expansion is already the third-longest in US history, and barring an unexpected economic shock or policy mistake we expect the winning streak to continue in 2018.

Easy Like Sunday Morning – National Financial Conditions Index, 2006-2017



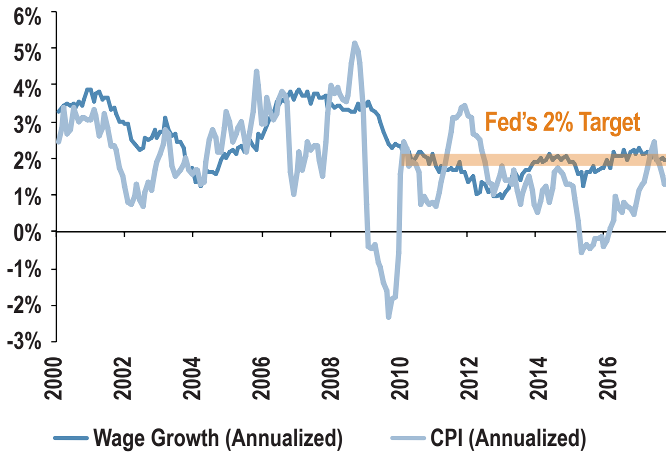
Source: FRED Economic Data

Against such a strong economic backdrop, the Federal Reserve ("the Fed") should have plenty of room to continue its current program of gradual rate hikes and balance sheet reduction. Despite the Fed's more hawkish stance in recent years, financial conditions in the US are easier than at any point since the GFC. So the Fed has not only reason to be hawkish, but also presumably the ability to restrict monetary conditions further without damaging the economy.

We believe the Fed will also become more hawkish in 2018 due to building inflationary pressures. US CPI growth is already hovering close to the Fed's target rate of 2 percent. The unemployment rate is now well below the long-term natural rate, which in theory should lead to higher inflation as wage growth accelerates. Low unemployment has thus far not stoked the same levels of inflation and wage growth as it has in past periods of similar economic strength, which has caused the Fed to maintain a moderately dovish stance throughout 2017. But a recent spike in the PPI reading may serve as a harbinger for consumer prices in the months ahead. As such, we expect at least three 25 basis point rate hikes in 2018.

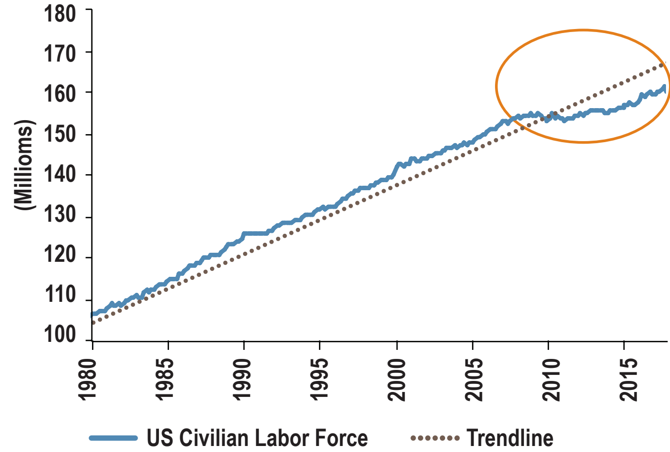
Despite all these justifications for the Fed to be hawkish, we believe there is still reason for the Fed to proceed cautiously with monetary tightening. After unprecedented monetary stimulus, including the creation of $4.5 trillion through quantitative easing ("QE"), both inflation and GDP growth have remained relatively tepid post-GFC compared to historical averages. Most economists believe that this is not transitory, and that the long-term growth outlook has shifted permanently lower. Indeed, despite the Fed's forecast of 2.7 percent GDP growth in 2018, the Fed continues to maintain a longer-term growth projection of just 1.8 percent annually. Structural impediments such as declining labor force growth rate are likely to keep long-term growth subdued. We expect Fed policy in 2018 to reflect a delicate balance between short-term inflationary pressures and longer-term growth headwinds.

Inflation on Target - Wage Growth vs CPI, 2000-2017



Source: FRED Economic Data

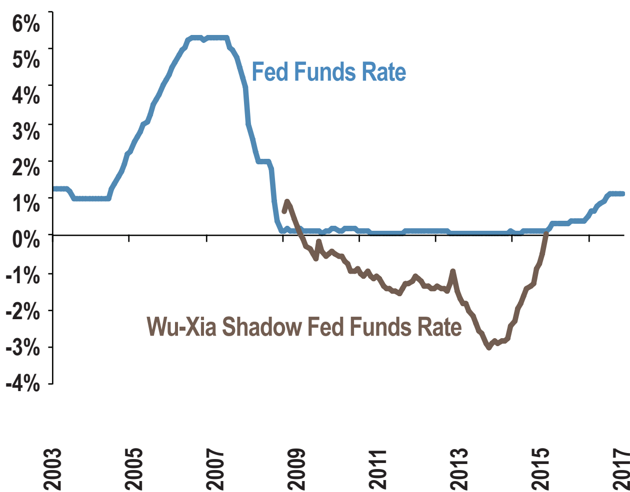
The Trend is No Longer Your Friend -US Civilian Labor Force, 1980-2017



Source: FRED Economic Data

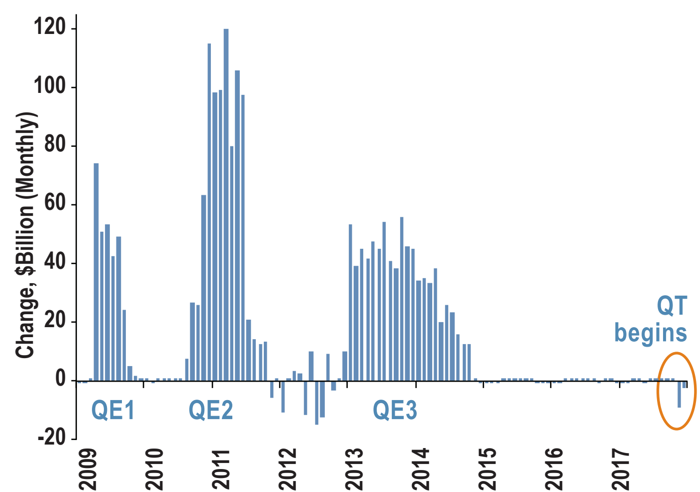
Another factor that will affect the Fed's rate hike decisions in 2018 is the start of balance sheet reduction, or quantitative tightening ("QT"), whereby the Fed allows securities it purchased through QE to mature. The Fed is forecasting $50 billion per month of maturities by the end of 2018. As the US Treasury refinances these maturing bonds, the monetary proceeds will be sent to the Fed and will ultimately disappear from the money supply. This operation is likely to impact liquidity conditions and market interest rates across the financial system. Researchers Jing Cynthia Wu and Fan Dora Xia of Chicago Booth previously demonstrated how QE allowed the Fed to effectively take rates below zero without actually introducing negative rates (as the ECB has done). By the same logic, we believe that QT risks doing the opposite and effectively restricting monetary conditions more than the Fed's stated policy rate implies. The process of balance sheet reduction was just beginning as 2017 ended, and any impact of QT on monetary conditions and private investment will not become evident until later in 2018. Whatever the ultimate impact, these are uncharted policy waters and the impact on markets is difficult to predict.

Quantitative Shadows - Fed Funds Rate vs Wu-Xia Shadow Fed Funds Rate, 2004-2017



Source: FRED Economic Data, Wu and Xia 2015

The Fed's Next Experiment - Monthly Change in US Treasuries Held by the Fed, 2009-2017



Source: FRED Economic Data

In light of the uncertainty on Fed policy direction, there is one indicator that we intend to watch very carefully in 2018: treasury yields. As 2017 wound to a close and equity markets cheered the passage of tax reform, long-term treasuries mostly stayed flat: as of December 31 the 10-year and 30-year treasuries yielded 2.41 percent and 2.74 percent, respectively – both slightly lower than where they started the year. The Fed's rate hikes in 2017 have mostly moved rates higher on the shorter end of the maturity curve, resulting in the yield curve flattening significantly in recent months. The result has been a compression in "term premium," as long-term bond markets continue to price in a low growth, low inflation future. As of December 31, the 10 year – 2 year treasury yield spread was only 52 basis points. Unless long term inflation or growth expectations increase, then further rate hikes by the Fed would risk flattening and ultimately inverting the yield curve.

We believe treasury markets will therefore offer the strongest clue about the US's long-term growth and inflation outlook in 2018. If long-term treasury rates remain stable and the term premium compresses further as the Fed hikes rates, it would likely signal that growth and inflation expectations – as well as the Fed's "neutral rate" which neither stimulates nor restricts economic growth – have all shifted permanently lower. Such expectations would be reflected through a flatter yield curve. If, however, initiatives such as tax reform, deregulation, and infrastructure spending lead markets to believe that an era of higher growth and inflation lies ahead, then long-term treasury rates should move considerably higher as the market adjusts to the new outlook. We expect the Fed would tighten policy much more aggressively in this scenario. Real estate investors should therefore watch long-term treasury markets closely in 2018 for clues to future Fed policy and US economic growth.

2. US tax reform will impact real estate prices across geographies and property types

We wrote in our 2017 Outlook that tax reform would fundamentally change the way real estate is priced. In the final bill, real estate was exempted from many of the provisions that had potential to distort real estate values, such as immediate expensing of a property's full purchase price. But other changes to the tax code are still likely to have wide-ranging and unpredictable effects on real estate prices across different regions and property types.

From a capital markets perspective, tax reform's effects on US commercial real estate should be immensely positive. Reduced tax rates for pass-through entities such as LLCs and partnerships will largely benefit the multitude of real estate entities which currently employ these structures. The reduction in the corporate tax rate from 35 percent to 21 percent will lessen the impact of FIRPTA, which requires certain classes of foreign investors to pay the corporate tax rate on capital gains. Reducing this tax burden may lead to increased foreign capital flows into US real estate. Reduced depreciation timeframes on commercial properties from 39 years to 25 years should improve commercial property cash flows and potentially encourage more investment in sectors such as office, industrial, and retail.

Summary of Changes Resulting from the Tax Cuts and Jobs Act*

Corporations/Partnerships	Prior Law	Tax Cuts and Jobs Act
Domestic Corporation Depreciation & Expensing	New business capital investments can either be expensed immediately or depreciated over a certain number of years	Allows for immediate expensing of 100% of the cost of new and used investments for five years, then reduces by 20% each year until 2026; retroactively applied to property purchased on or after 9/27/2017
Domestic Corporation Interest Deduction	Generally unlimited deductions available for business interest as incurred	Caps deduction for business interest at 30% of adjusted taxable income, but firms with less than $25 million of average gross receipts are exempt from the cap; this would allow real property businesses using straight line depreciation to avoid the interest deduction limitation
Domestic Corporation Max Rate	35%	21%, and corporate Alternative Minimum Tax (AMT) repealed
Pass-Through Entities	Generally pass-through entities are taxed at the individual or partner's individual tax rate and not at the entity level	20% deduction for domestic qualified business income (subject to special provisions and exceptions in the bill); trusts, estates, publicly traded partnerships are eligible for the deduction
Individuals	**Prior Law**	**Tax Cuts and Jobs Act**
Carried Interest	Generally treated as capital gains income, and taxed at a lower effective rate than ordinary income tax	Extends required holding period from one to three years for fund assets to be treated as long-term capital gains
Investment Interest Expense Deductions	Available at various levels	Preserved
Investment Management Expense Deductions	Available at various levels	Eliminates a provision that reduced the value of itemized deductions for high income taxpayers; repeals any miscellanous itemized deductions subject to 2% AGI floor
Like-Kind (1031) Exchanges	No gain or loss incurred on private property for business or investment when exchanged for a like-kind property	Limits like-kind exchanges to real property not held primarily for sale
Ordinary Income	Maximum rate of 39.6% for single filers earning more than $418,400 and married couples filing jointly earning more than $470,700	Maximum rate of 37% for single filers earning more than $500,000 and married couples filing jointly earning more than $600,000
Mortgage Interest	$1 million cap on mortgage interest deduction	$750,000 cap on mortgage interest deduction
State & Local Income & Property Tax Itemized Deductions	Available at various levels	Caps deduction for aggregate state and local income and property taxes (or sales taxes in lieu of income taxes) at $10,000 for joint filers
Sunset	None	All individual provisions are subject to "sunset" after 2025 (with the exception of slowing the measure of inflation on tax brackets) in order to comply with Senate budget rules and fund long-term corporate tax reform
Transfer Taxes	**Prior Law**	**Tax Cuts and Jobs Act**
Generation-Skipping Transfer Tax, Gift Tax, and Estate Tax	Maximum tax rate = 40%; exclusion amount = $5.49 million	Tax rate remains in place; increases exclusion on 1/1/18 from $5.49 million to $11.2 million

Source: Park Madison Partners, US Government Publishing Office

*Note: Park Madison Partners does not provide tax, legal, or accounting advice. This material has been prepared for informational purposes only and is not intended to provide, and should not be relied on for, tax, legal or accounting advice.

There are other reasons to believe that the office, retail, and industrial sectors will benefit from tax reform. The tax cut for corporations and pass-throughs should make businesses more profitable and competitive, potentially stimulating investment and job growth. Pass-through businesses, for example, have accounted for more than 60 percent of US job growth over the last 25 years. The office and industrial markets therefore stand to benefit as companies potentially expand and hire more workers. Middle class tax cuts should also benefit retail properties in many parts of the country as consumers have more discretionary spending power.

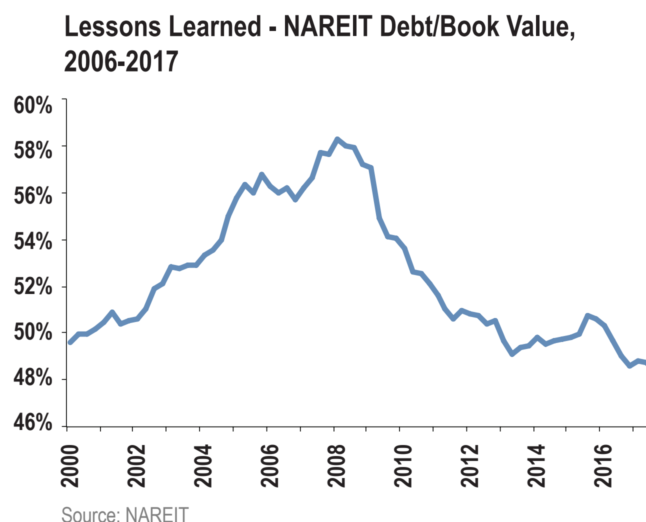
The residential market, however, is more of a mixed bag. Tax reform's doubling of the standard deduction will significantly reduce the number of homeowners using the mortgage interest deduction ("MID"). Several realtors have voiced concerns about how removing this important economic incentive to homeownership could negatively impact housing prices. We doubt any serious impact on housing prices from the diminished use of MID, as homeownership remains a culturally important staple of the American Dream. However, we do believe that multifamily rentals will marginally benefit from potential homebuyers staying in the rental market longer. The lower corporate tax rate may also benefit the multifamily sector indirectly by reducing the expected tax savings of low income housing tax credits ("LIHTCs"). The diminished allure of LIHTCs will likely lead to less capital available for affordable multifamily construction and development. While this reduction in future supply may not bode well for developers or for US housing affordability, it may lead to higher rent growth for multifamily owners.

From a purely geographic perspective, we expect tax reform to disproportionately benefit low tax, low income states while the impact on high tax, high income states will be more mixed. In particular, the repeal of state and local income tax deductions ("SALT") appears likely to increase the tax burden on many upper-middle class earners in states such as New York, New Jersey, Connecticut, Oregon, and California. An increase to the already high cost of living in these states, particularly in urban centers such as New York City and the San Francisco Bay Area, may reduce the attraction of living and working there. Ultimately, major coastal cities will retain their status as irreplaceable commercial and knowledge centers, and so we do not expect a mass exodus. However, over the long-term we certainly expect lower tax regions to become more competitive as companies expand and new businesses form.

We remain hopeful that tax reform will spur job creation, business expansion, and economic growth, which should ultimately result in better fundamentals for all sectors of US commercial real estate. However, we also recognize that tax reform has significantly altered real estate market dynamics. The implications for real estate values are impossible to predict, but there will almost certainly be winners and losers. As such, investors would take care to diversify their portfolios across US cities and regions until the long-term impact of tax reform on commercial real estate values becomes clearer.

3. US commercial real estate performance will be widely mixed

The length of the current US economic expansion has kept real estate fundamentals relatively healthy on an aggregate basis, with a long-anticipated correction so far failing to materialize in all but a few markets. Interest rates have risen modestly, but cap rates have largely held steady. Real estate's "soft landing" to date is largely attributable to increased discipline across the industry following the GFC and low interest rates allowing sellers to refinance rather than accept prices below their expectations. While there has been a significant increase in the availability of private credit, overall market leverage remains prudent as lenders underwrite conservatively.



Source: NAREIT

Outside of major markets, lack of development financing has kept new supply growth in relative balance with demand. Unlike prior cycles, we are not seeing a late-cycle slip of underwriting standards or a surge in investor optimism. The current market environment is characterized by moderation – both in terms of sentiment and fundamentals – and suggests that any correction would be relatively mild.

Though reassuring, investors should anticipate a downward leg to the real estate cycle. Data from a variety of brokerage firms has shown investment sales volumes declining year over year in every major asset class except industrial, which may serve as a leading indicator for valuations. A more hawkish Fed may lead to less liquidity and higher borrowing costs as rates increase. However, we believe certain market- and property-specific themes that are less dependent on market timing will continue to provide attractive investment opportunities in this late-cycle environment.

From a market selection perspective, we believe that tech-focused secondary markets and high density suburban nodes will provide interesting investment opportunities. This would mark a dramatic shift in the post-GFC recovery, which has accrued primarily to the benefit of high density urban centers. Indeed, nearly 80 percent of the US population now lives in urban areas, up from approximately 66 percent in the 1960s. While we do not expect this trend to reverse any time soon, space constraints and a high cost of living have become more of a concern to Millennials starting families.

Real estate assets in secondary markets are currently benefiting from a confluence of positive fundamental drivers. New supply has been more limited versus major markets due to higher constraints on development financing. Economic activity in secondary markets is picking up as the US economic expansion broadens beyond major cities. This is especially notable within the technology sector. Though still heavily concentrated in large coastal cities, smaller inland cities such as Austin, Charlotte, Dallas, Raleigh, Nashville, and Denver are increasingly emerging as centers of tech-driven innovation, spurring real estate demand growth. A comparatively lower cost of living is also fueling positive net migration. We believe all of these factors will lead to increased investment in select secondary markets in the years ahead.

Several suburban areas, long out of favor following the GFC, are also exhibiting signs of growth driven by migrating Millennials. Specifically, we believe some of the most attractive value-add and development opportunities in the years ahead will focus on the theme of suburb densification. High density suburban nodes offer many of the same “live, work, play” amenities as urban centers, such as restaurants, retail, and access to public transit, but at a more affordable price and a pace more suitable for young families. These suburban neighborhoods appear to be attracting Millennial migrants across a variety of city sizes from New York to Nashville, and we expect this trend to intensify over time. In the longer-term, the advent of self-driving cars is also likely to increase the appeal of suburban lifestyles as commuting becomes less painful.

Multifamily

While rent growth has slowed recently, the multifamily sector continues to benefit from favorable demographic trends and steady demand drivers. New supply deliveries peaked in 2017 and though 2018 deliveries remain elevated, so far supply and demand remain in relative balance nationally. Performance, however, has varied widely across markets. Luxury urban high-rise product continues to look overbuilt in several markets, while

more affordable options targeting middle-class renters continue to benefit from steady demand and limited new supply. We expect continued investment opportunities for value-add strategies and selective ground-up development oriented towards middle-income tenants, with high density suburbs and secondary markets outperforming in terms of rent growth.

Office

The office sector enters 2018 supported by a strong economy, but looking vulnerable to a correction as new supply outpaces demand in several markets. Current macro fundamentals would also suggest that office should be nearing a cyclical peak. With unemployment already at 4.1 percent and labor force growth slowing, a key underlying demand driver for office space – number of workers – should experience less robust growth in the coming quarters. Certain secondary markets, however, may be earlier in their respective cycles as technology-oriented companies expand outside of major cities: tech sector jobs have been growing at approximately twice the rate of overall job growth. Nevertheless, we expect a mild consolidation period ahead for US office.

Retail

Based on the steady drip of apocalyptic headlines, one could be fooled into thinking that retail was dead and Amazon was all that remained. While e-commerce has certainly changed retail, it does not spell doom for brick and mortar stores. Omni-channel retailing, where retailers rely on a mix of online and in-store sales, is the new norm. Even previously pure e-commerce firms are opening or acquiring physical stores, as Amazon did in 2017 with the opening of an Amazon Books store and its acquisition of Whole Foods. Omni-channel is therefore blurring the line between the retail and industrial sectors, as certain stores start doubling as warehouses.

In this environment, we believe two of the most important differentiating factors affecting retail performance will be tenant curation and technological integration. For retail landlords, filling space with tenants that integrate technology into the shopping experience will be key. Tenants will need to learn about their customers, in part, by installing cameras that track when customers arrive and leave, how long they stay, what they look at, where they pause or look hesitant, etc. Artificial intelligence applications can scan such information to determine if, for example, a shopper is close to making a purchase, and alert store staffers who can then facilitate the sale. Successful retailers will also be aggressively mining information from online sales records and loyalty programs to learn everything they can about their customers: where they are from, their hobbies, their education, how often they shop online versus in-store, etc.

Retail is currently in the throes of a painful transition period which will see old incumbents displaced as new segment leaders emerge. Throughout this process, Americans will no doubt continue shopping. We expect that retail real estate operators with strong sector insights and expertise will find ways to profit from any interim disruptions. We also expect, given the distress in this sector, some creative acquisition strategies and change of use redevelopments will present opportunities for investors in 2018 and beyond.

Industrial

The industrial sector continues to outperform all other assets classes, with low vacancy and rents consistently setting new all-time highs. According to CBRE, the sector has enjoyed 30 consecutive quarters of positive net absorption and 24 consecutive quarters of rent growth despite a wave of new supply. In addition to increased economic activity generally, industrial has benefited immensely from the growth of e-commerce, which now accounts for over 9 percent of US retail sales or $435 billion annually as of Q3 2017. Each $1 billion increase in online sales is estimated to translate to an incremental 1.25 million square feet of industrial warehouse demand according to CBRE, so growth in e-commerce should continue to provide tailwinds for industrial real estate in the years ahead.

Investor demand for industrial real estate exposure has pushed up pricing and compressed yields across most US markets. High-quality acquisition opportunities have become rare, with ground-up development increasingly viewed as the most feasible way to earn outsized returns in this space currently. We believe current fundamentals support additional new supply, especially the expansion of last-mile facilities in urban centers. For investors wary of taking development risk, forward purchases and lease-up strategies also offer attractive returns. However, as the pace of technological change accelerates and supply chains become more fluid, investors should be mindful that the industrial sector is historically a commodity asset class and prone to volatility.

Student Housing

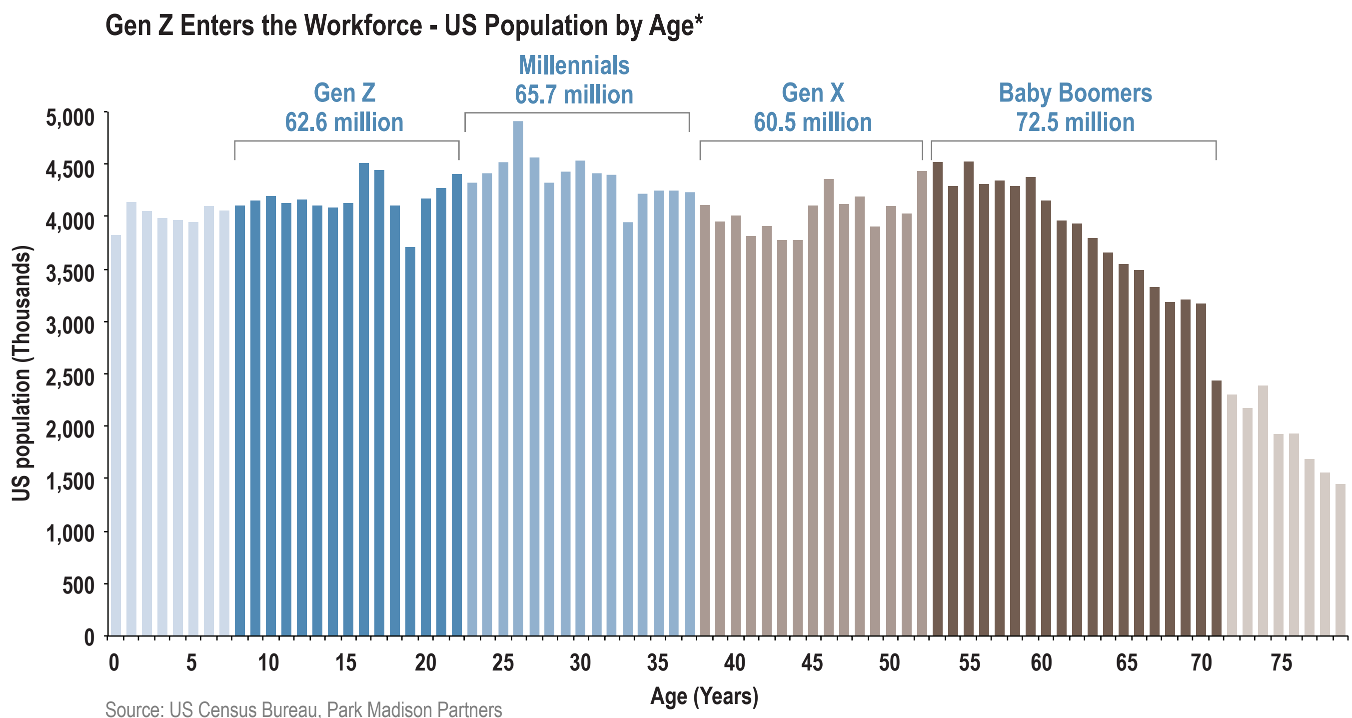
Student housing is a niche sector and not one of the four major real estate food groups, but given the sector's rapid institutionalization in recent years it deserves an honorable mention. US student housing is still highly fragmented, with most markets dominated by "mom and pop" local outfits. Axiometrics estimates that at the 175 top US universities, the largest 25 owners control only 8 percent of the student housing stock. This creates an opportunity for institutional sector specialists to consolidate portfolios and compete more effectively through scale and diversification.

Student housing's recession-resistant and counter-cyclical nature also makes it attractive in the current environment. Enrollment at US universities has remained stable and tends to increase during recessions due to the reduced opportunity cost of education versus work. The sector also tends to provide a steady flow of value-add opportunities, as the nature of the tenant base causes heavy wear on the assets. Many of the assets constructed during the current cycle will already be due for upgrades soon. As such, we believe this is an interesting time for student housing managers with strong operating capabilities and deep experience across a variety of markets.

4. Generation Z's impact will become more important to commercial real estate strategies

Just when you thought you had Millennials completely figured out, it's time to say hello to the next US demographic cohort: Generation Z. Demographers typically define Gen Z as the generation born between 1995 and sometime in the mid- to late-2000s. Composing roughly 20 percent of the US population, Gen Z is already a close rival to the Millennial generation in terms of size. Determining their prevailing characteristics, preferences, and perspectives will take time; read a dozen studies about Gen Z today and you will find a dozen different conclusions. But one thing is already apparent: they may resemble Millennials in many respects, but Gen Z is different, and their matriculation into the workforce will have profound consequences on commercial real estate in the decades ahead.

Gen Z Enters the Workforce - US Population by Age*



Source: US Census Bureau, Park Madison Partners
*Note: Excludes ages 80+, which at the time of this writing totals approximately 11.5 million people. Generational definitions vary by source.

Like the generations preceding them, Gen Z's defining characteristics have been heavily influenced by the world in which they came of age. Most Gen Z-ers were born either shortly before or just after the September 11 terror attacks, and therefore cannot remember a time in their lives when the United States was not at war. They were young children during the Global Financial Crisis, and many watched as their parents or friends lost jobs, lost homes, and generally struggled during these years. Gen Z is also the most technologically savvy generation in history. They have never known a world without internet. As such, they place a high value on connectivity and expect to be able to freely access the internet nearly everywhere they go.

These influences have helped shape Gen Z's attitudes on education, financial planning, recreation, and work. They have tended to start thinking about their careers at a much younger age than prior generations. In school, they appear to be more driven and studious than their Millennial predecessors, seeking internships and relevant work experience at an early age. Student housing is perhaps the first commercial real estate sector to have to adapt to Gen Z by including more dedicated study space in common areas.

Formative memories from the GFC have also caused Gen Z to be more financially responsible and risk-averse than prior generations. Many of them started saving at a young age, aided by improved access to banking relationships through ATMs and mobile apps. Having watched their Millennial elders struggle under the burden of student debt, Gen Z-ers tend to avoid student loans like toxic waste. This financial consciousness carries implications for the housing market, as Gen Z-ers may be able to purchase homes at an earlier age compared to Millennials. A recent study by Zillow Group showed that 57 percent of Gen Z-ers already considered buying a home during their last move.

As the oldest Gen Z-ers turn 23 this year and continue to graduate from university, their impact is also likely to become more pronounced in the office market. Unlike Millennials, Gen Z students have tended to prefer working independently as opposed to in groups. However, similar to Millennials, they are gregarious and enjoy working near others. Whether this combination leads to further demand for “co-working” space or a return to a more traditional office setting with individual work stations is yet to be determined, though we expect continued demand for both. Unusual given their Internet Age upbringing, Gen Z-ers tend to prefer person-to-person interaction versus online or by phone, suggesting that telecommuting will not threaten the traditional office environment for the foreseeable future.

The office market will also be indirectly impacted by the types of companies Gen Z-ers decide to join when they enter the workforce. Despite being generally risk-averse, Gen Z-ers are fairly entrepreneurial and tend to be more open to working at start-ups and small companies. They view large corporations and “structured” career paths with a healthy skepticism after witnessing waves of layoffs during the GFC. They also accept globalization and technological disruption as facts of life, and therefore do not expect a linear climb up the corporate ladder. This attitude will have lasting implications on where Gen Z-ers choose to work and live.

Gen Z is still young and their impact on commercial real estate is still far outweighed by Millennials. But we expect Gen Z’s influence on real estate preferences (and conference agendas) to become more pronounced in the years ahead. Long-term real estate investors would be wise to keep an eye on them.

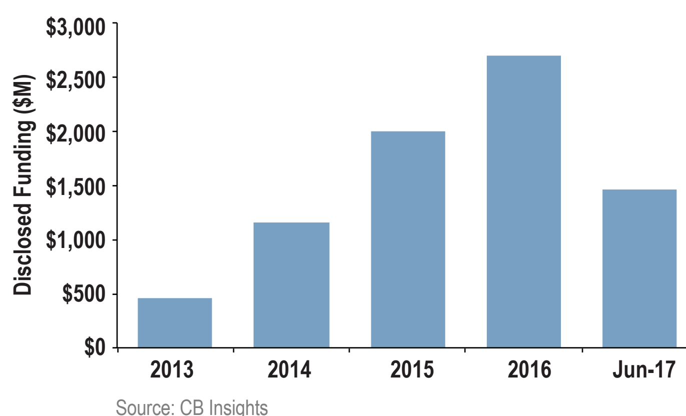
5. New technology will continue to transform the real estate and construction businesses

The real estate industry is hardly known for its embrace of new technology and innovation. As the Digital Age has transformed almost every industry from media to medicine, many real estate and construction processes still look roughly the same as they have since the 1950s. Despite a plethora of real estate technology startups in recent years, most real estate firms are leanly staffed and simply lack the resources to explore new applications and processes. This creates sizeable barriers to entry for startups, most of which have not been able to achieve the scale or support needed to disrupt the status quo. No surprise then that various surveys have shown that commercial real estate professionals today are generally skeptical about the long-term impact of technology on real estate. While such skepticism is understandable, we believe the real estate and construction industries are approaching a technological inflection point which will lead to significant disruption and transformation in the years ahead.

The sheer volume of capital flowing into real estate tech ventures should be enough to give naysayers pause. In the last 5 years, the number of real estate tech startups has grown seven-fold, attracting more than $7 billion in investment as of June 2017 according to research firm CB Insights. Furthermore, much of this capital is flowing into "insider" ventures, whereby real estate players pool together to provide venture capital to emerging tech platforms. These insider ventures may help tech platforms scale faster, as the underlying investors have a financial incentive to adopt the new technology being developed. As more real estate insiders become invested with effecting technological change, we believe such change becomes increasingly inevitable.

Real estate technology platforms are typically grouped in one of two buckets: financial technology ("fintech") and property technology ("proptech"). Fintech tends to attract the most sensational headlines. These platforms focus primarily on real estate lending, equity financing, and banking services with an emphasis on cutting out middlemen and lowering transaction costs. Some of the most successful real estate fintech companies to date have focused on real estate brokerage activities, from home buying to commercial leases. Lending platforms have streamlined the process for getting certain types of loans. On the equity side, crowdfunding platforms offer individual investors the ability to invest in commercial real estate directly, whereas previously such investors may have been confined to funds or REITs for such exposure.

Real Estate Technology Venture Capital, Jan 2013-2017



Source: CB Insights

Such fintech innovations have made real estate capital markets deeper and more efficient, especially in terms of informational transparency. But real estate fintech has so far not been disruptive or transformational to the real estate industry. Most capital market transactions still rely on some element of human interaction; even the best algorithm cannot comprehensively underwrite all the risks and merits in a real estate loan or acquisition. As such, most fintech platforms have so far simply enhanced or improved existing real estate processes.

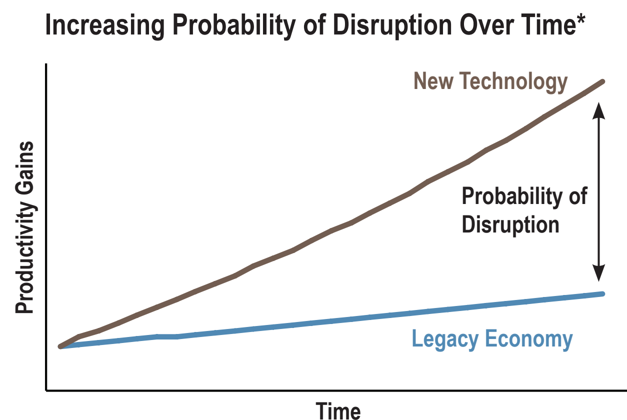
Proptech, on the other hand, appears to have potential to disrupt several areas of the real estate industry in the near term. As opposed to fintech which focuses mostly on capital formation, proptech is focused on improving real estate operations and construction, mostly through automation and integration. The opportunity set for proptech spans myriad real estate verticals from accounting to asset management. The most successful proptech platforms to date tend to specialize in one vertical with the goal of becoming that vertical's market share leader. In the construction industry for instance, technology firms such as Katerra are using robotic automation at factories to move a significant amount of construction assemblage work offsite, thereby reducing labor inputs while also improving delivery times. Other companies are using cognitive automation, including through artificial intelligence, to reduce the number of employee hours spent on repetitive tasks in areas such as accounting, research, and reporting. We expect a series of incremental proptech changes across different real estate verticals to steadily accumulate and modernize the real estate and construction industries.

Somewhere at the intersection of both fintech and proptech is blockchain, a category unto its own. Real estate as an asset class is often characterized by its information asymmetry, and one of the key advantages of blockchain technology is the increased transparency and informational integrity it brings to transactions. Smart contracts through blockchain, including purchase, sale, lease, financing, and insurance agreements, are therefore highly likely to gain widespread adoption by the commercial real estate industry in the next several years. The increased transparency of information through blockchain may also enable buyers and sellers to cut out many of the lawyers, brokers, and advisors required to transfer legal title of a real estate asset. Such informational transparency also has the potential to ease cross-border real estate transactions and enhance liquidity.

The "digitization" of real estate assets through blockchain tokens has also been the subject of much speculation recently. This "tokenizing" process would allow owners of real estate to essentially securitize an individual asset and sell it to individual investors. Smart contracts could then be integrated to pay dividends to token holders. While this is interesting in theory, we remain skeptical of the merits of tokenization. For instance, fragmenting the ownership of a single building often leads to lower quality asset management and performance due to more disjointed decision-making, so this could present an obstacle to widespread adoption. Regulatory bodies such as the SEC have also sounded alarms about crypto-assets and hinted that new rules are coming. Given these uncertainties, we believe that smart contracts are the most likely application of blockchain technology to commercial real estate in the near-term, while large scale tokenization remains a more distant possibility.

The widening gap between innovations to real estate processes and overall technological advancement leads us to believe that a "disruption event" is imminent. The digital world is evolving at a much faster rate than the physical world, or "legacy economy." Regardless of industry or sector, eventually as the gap widens between new tech and antiquated processes, the probability of a new technology disruptor entering increases. We believe the real estate industry is approaching such an inflection point, and real estate firms that resist new technology risk becoming less competitive over time.

Increasing Probability of Disruption Over Time*



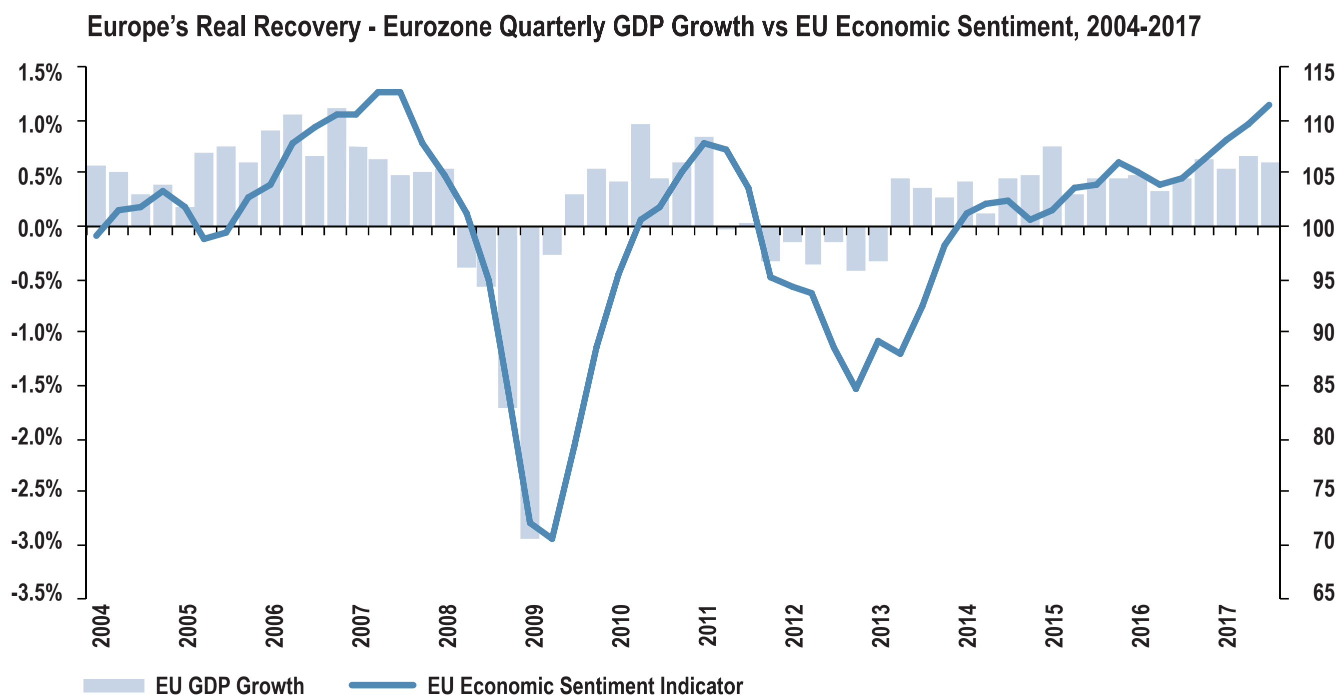
Source: Park Madison Partners
*Note: For illustrative purposes only. Not based on a statistical study.

6. Europe's economic recovery will gain momentum

After several years of drama culminating with the Brexit vote, Europe has experienced a relatively smooth ride of late. Eurozone GDP has posted steady gains for 18 straight quarters, with annual growth accelerating to 2.5 percent as of Q3 2017. ECB policy remains extraordinarily accommodative. Economic sentiment is also at multi-year highs, which appears to be feeding through to consumer spending and business investment. Despite the occasional tremor, such as the Catalan independence movement, Europe has also become much more stable politically. On a positive note, France's economic engine is rumbling back to life following the election of Emmanuel Macron. Combine all these factors, and Europe's "real recovery" appears to be gaining momentum.

Europe's recovery following the GFC and sovereign debt crisis has largely been underwritten by accommodative central bank policies. Throughout 2017, central banks across Europe, most notably the ECB, kept rates low or negative even as growth and inflation ticked higher. Much of this dovish sentiment is the result of past mistakes. The ECB, for instance, hiked rates prematurely in both 2008 and 2011 and was forced to reverse course when Europe's economy faltered. However, the ECB and others have been sending gentle signals that easy monetary policy has an expiration date. In October 2017, the ECB announced that it was reducing its QE bond purchases from €60 billion to €30 billion after December. An ECB interest rate hike, particularly the deposit rate which is still at -0.4 percent, is widely expected in 2018.

Europe's Real Recovery - Eurozone Quarterly GDP Growth vs EU Economic Sentiment, 2004-2017



Source: FRED Economic Data, European Commission

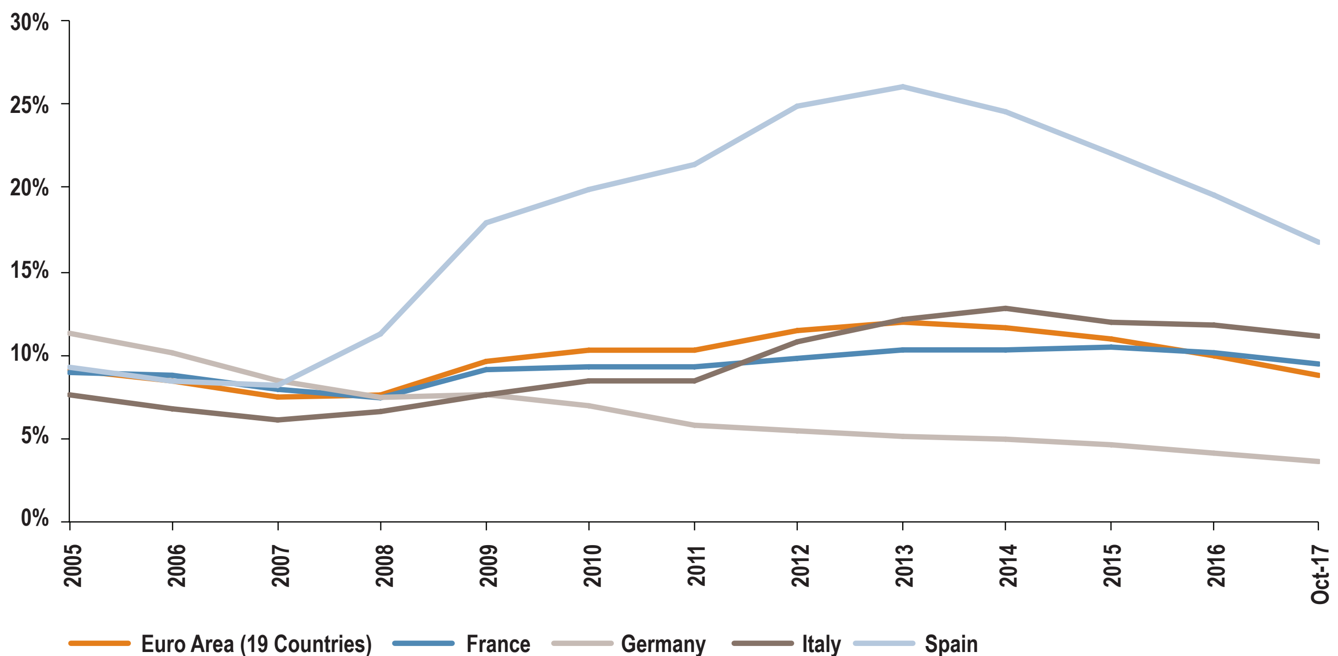
For real estate investors, this combination of strong growth and potentially rising interest rates presents a conundrum for investment allocations going forward. Real estate fundamentals in Europe are quite positive, with strong economic growth leading to steady absorption and low vacancy, while restrictions on bank lending have limited the new development pipeline. In many respects, one can see parallels between Europe's real estate recovery following the sovereign debt crisis and the US's post-GFC recovery. Prime gateway markets such as Berlin, London, and Amsterdam have recovered fastest, with more peripheral and secondary markets now starting to pick up.

A broadening of Europe's real estate recovery to outlying areas should present interesting opportunities for investors, especially in the value-add space. But elevated valuations in gateway cities, especially among core assets, are fueling a sentiment that European real estate is approaching late cycle and due for a correction. Years of historically low interest rates have pushed fixed income investors into alternative asset classes. Core real estate has therefore become a popular substitute for low and negative yielding bonds, pushing cap rates as low as 3 percent in places like London and Berlin. Many properties therefore appear fully priced at this stage in the cycle.

Political risk has also been an integral piece of the European investment fabric, and we expect this to continue in 2018. Italy holds general elections in March, and recent polls suggest that a mere 39 percent of Italians think Eurozone membership has been good for them. Unrest in Spain's Catalonia region has potential to negatively impact the Eurozone's fourth-largest economy. German Chancellor Angela Merkel's grip on power looks tenuous following weak performance in the September 2017 elections, raising the prospect that she will preside over Germany's first minority government since 1932. Brexit will also shake up European politics. Britain has historically provided a useful counterbalance to France and Germany within the EU, especially for the more Euro-skeptic "Eastern bloc" countries. Britain's removal is therefore likely to shift alliances, power structures, and local politics within the EU going forward.

In addition to these near-term events, we believe Europe's ongoing recovery will bring renewed focus to longer-term structural problems within the EU and Eurozone in 2018. For example, the uneven pace of growth across regions presents a particular challenge for the ECB as it looks to normalize monetary policy. At the root of the ECB's dilemma going forward is the old debate about whether the Eurozone is an "optimal currency area." Should Germany, which has 3.6 percent unemployment, operate under the same exchange rate and monetary policy as Italy, which has 11.1 percent unemployment? Mario Draghi's Italian heritage may offer clues as to where the ECB's sympathies are strongest, but such disparities will continue to be an obstacle to long-term economic and political integration across the Eurozone.

One Size Fits All? - Eurozone Unemployment Rates (Select Countries), 2005-2017



Source: Eurostat

Despite these concerns, we still believe there will be attractive opportunities for real estate investors in Europe over the coming years. Industrial and logistics properties continue to benefit from strong demand as e-commerce growth in Europe outpaces many other developed countries. For-rent residential is perhaps one of the deepest opportunity sets for real estate investors in Europe today. In nearly every European market from France to Finland, mass migration has exacerbated an already acute shortage of affordable housing. We believe the favorable supply and demand dynamics of the residential sector should support a variety of higher-returning strategies, such as development and adaptive re-use.

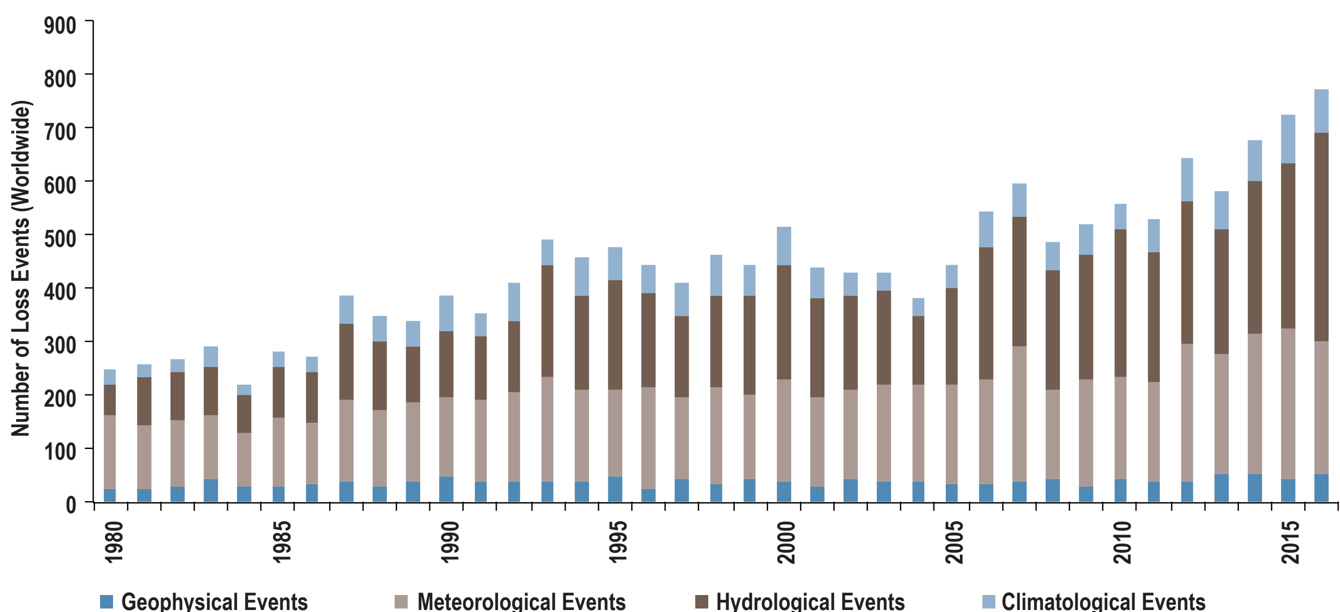
Political concerns, rising interest rates, and elevated valuations will make Europe's market environment difficult to navigate in the years ahead. However, the wide economic disparities and varying fundamentals between different regions should create relative value opportunities within select property sectors. We therefore believe the current environment favors nimble real estate managers who can selectively enter and exit markets and asset classes across the continent.

7. Sustainability will factor more prominently in real estate investment decisions

Some of the most notable occurrences of 2017 were unfortunately natural disasters. North America and the Caribbean suffered the costliest hurricane seasons on record. In a span of just 44 days, Hurricanes Harvey, Irma, and Maria caused more than $350 billion worth of damage. As of this writing, half of Puerto Rico is still without electricity due to damage from Hurricane Maria. California got pummeled by one disaster after another in 2017. After suffering one of its worst droughts on record, Northern California then saw its wettest winter in more than a century, causing mass flooding. Later in the year, California experienced its most destructive wildfire season on record, inflicting an estimated $180 billion in damage.

Global warming and climate change are making extreme weather events more common. With the Arctic warming faster than the mid-latitude regions, the resulting reduction in temperature differentials is weakening the push-pull relationship between colder Arctic air and warmer air to the south. This in turn causes weather systems to move more slowly with more extreme effects: longer droughts, heavier precipitation, and more powerful storms. As the earth continues warming, these events are likely to increase in both incidence and intensity.

It's Not Your Imagination - Natural Disaster Occurrences, 1980-2017



Source: Munich Re

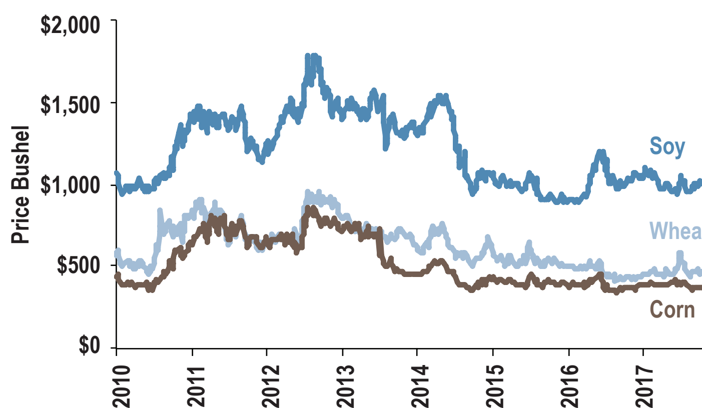
The real estate industry has discussed the implications of climate change on investment strategy for several years, but without any discernible action. However, the damage figures from recent natural disasters may be staggering enough to finally impact investment decisions. From a demand perspective, there are only so many natural disasters that people and businesses are willing to endure before they relocate elsewhere. Insurance companies may also become less willing to underwrite policies in more disaster-prone regions. As such, we believe 2017 marked a turning point in how real estate investors think about climate risks, and we expect this to become more apparent through capital flows in the years ahead.

8. Farmland investment will gain wider appeal among institutional investors

As asset prices around the world remain elevated and yields compressed, we believe one asset class will begin to garner increased investor interest in the years ahead: farmland. Long overlooked by many institutional investors, farmland offers several diversification benefits that would make it an attractive addition to existing portfolios. Like traditional real estate, farmland returns are driven by a combination of current income and capital appreciation, which leads to low correlation versus other asset classes. Furthermore, farmland's link to land and commodity prices as performance drivers makes it a useful potential hedge to inflation. Though farmland's investment characteristics have been well known to investors for several decades, there are several reasons why we believe the asset class is at a historical inflection point which will lead to greater institutional investment and professional management in the years ahead.

Farmland investments have historically performed quite well. In the 10-year period ending Q3 2017 the NCREIF Farmland index registered average annual gains of 12.6 percent, with approximately 7 percent being generated from current income. The asset class has also performed well in times of high financial market volatility such as the GFC. Correlation with other asset classes – including real estate, equities, and commodities – is exceptionally low. Today's market conditions may offer investors an attractive entry point, as prices for the row crops grown on many commercial farms (e.g. wheat, corn, soy, rice, etc) have suffered in recent years. USDA estimates that US net farm income has declined more than 50 percent since its last cyclical peak in 2013.

Cyclical Lows - Price per Bushel of Wheat, Corn, and Soy, 2010-2017



Source: Bloomberg

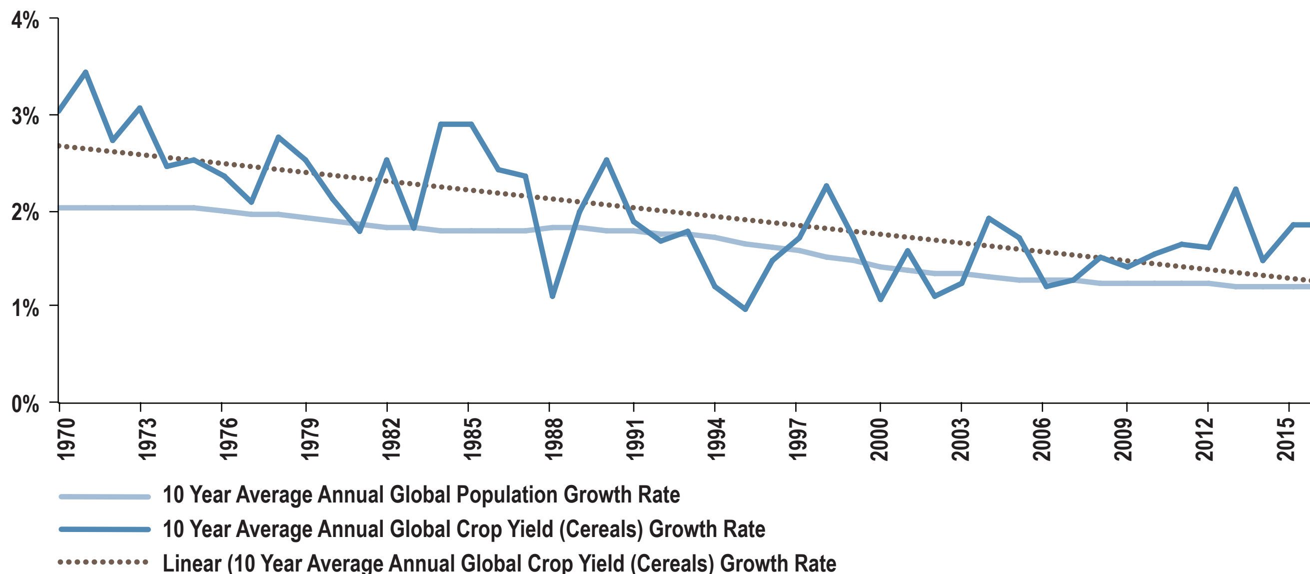
While low crop prices have impacted farmland performance in recent years, we believe the long-term supply and demand fundamentals surrounding farmland are exceptionally strong. Because only 37 percent of the world's land is considered cultivable, the supply of farmland is limited. Global climate change imposes further limits on available farmland. Desertification has reduced the cultivable land supply in many parts of the world. Additionally, efforts

to recapture atmospheric carbon have led to reforestation initiatives in the developed world, while also slowing agriculturally-driven deforestation in places such as the Amazon. As the earth's temperature warms, commercially viable farmland will become an increasingly valuable commodity.

While the supply of farmland is under pressure from climate change, demand for agricultural products is expected to grow significantly as the world's population steadily rises. The United Nations estimates that the global population will increase from 7.5 billion in 2017 to 9.7 billion by 2050. The world's population is also becoming more affluent as more people in developing markets escape poverty to join a burgeoning middle class. This in turn leads to increased demand for protein products such as meat and milk. This creates what is called a "grain multiplier effect," as more grain is needed to feed livestock. The UN FAO estimates that global food production would need to rise 60 percent by 2050 to accommodate both the higher population and the increased demand for protein.

We believe the technology and economies of scale required to propel the productivity gains needed to meet rising global food demand creates a strong case for institutional investment in farmland. The trend of a rising, more affluent global population is not new and farmland productivity has been improving for decades thanks to widespread use of fertilizers and pesticides, better irrigation techniques, and engineering plant genetics to increase crop yields. But the incremental productivity gains from these strategies have largely been realized, and growth in crop yields is no longer outpacing global population growth. This suggests future opportunities for capital providers to invest in technological upgrades and improve operations.

Struggling to Keep Up - Global Crop Yields vs Population, 1970-2017



Source: Food and Agriculture Organization of the United Nations ("UN FAO")

The opportunity set for institutional investment appears vast. The farmland investment industry is one of the least penetrated and most underdeveloped sectors in the real assets space. Today, for instance, only one percent of the approximately $2.7 trillion US farmland is institutionally owned. The public REIT market for farmland is also still in its infancy, with only two US farmland REITs publicly listed for a combined market capitalization of less than $500 million. This suggests ample room for industry and capital market growth as farmland becomes a more mainstream alternative asset class.

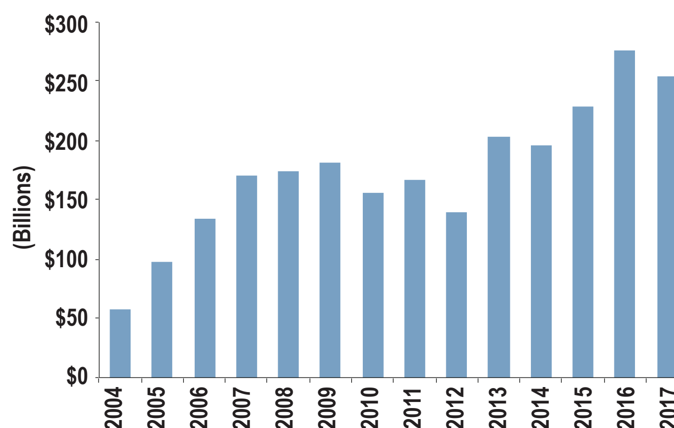
Farmland investing is more than a bet on land or commodity prices. With supply and demand fundamentals closely linked to global population growth, economic development, and technological advancement, a bet on farmland is also a bet on overall human progress. Given its positive outlook and diversification benefits, we expect increasing investor interest in this asset class in the years ahead.

9. Real estate private equity fundraising will remain competitive

Institutional investors continue to be attracted to real estate's diversification benefits and strong historical performance, and the average reported target allocation to real estate surpassed 10 percent in 2017 for the first time. Investors appear to be overwhelmingly satisfied with the performance of their real estate portfolios, with 95 percent of investors surveyed by Preqin saying that performance has met or exceeded their expectations. As low yields and elevated asset prices continue to vex institutional investors' actuarial assumptions, we believe real estate's combination of income and growth potential will continue to attract healthy amounts of investor capital.

Real estate private equity fundraising, however, remains competitive. With valuations looking elevated in several markets, more managers are slowing their pace of capital deployment. As a result, the real estate private equity industry is sitting on record amounts of dry powder – approximately $254 billion as of YE 2017. We can think of several examples over the past year where investors have told us that their uncalled capital commitments account for over 50 percent of their private real estate allocations. This not only slows the pace of new allocations by investors, but also extends the time between fundraising periods for managers as they wait to call capital. We believe this is ultimately good news for the real estate industry, as it means managers and investors are remaining disciplined and not rushing to deploy capital. But it does make fundraising more difficult and more competitive, and we expect this to continue into 2018. For managers looking to raise capital, a thoughtful and strategic approach to marketing will be paramount.

A High-Class Problem - Private Equity Real Estate Dry Powder, 2004-2017

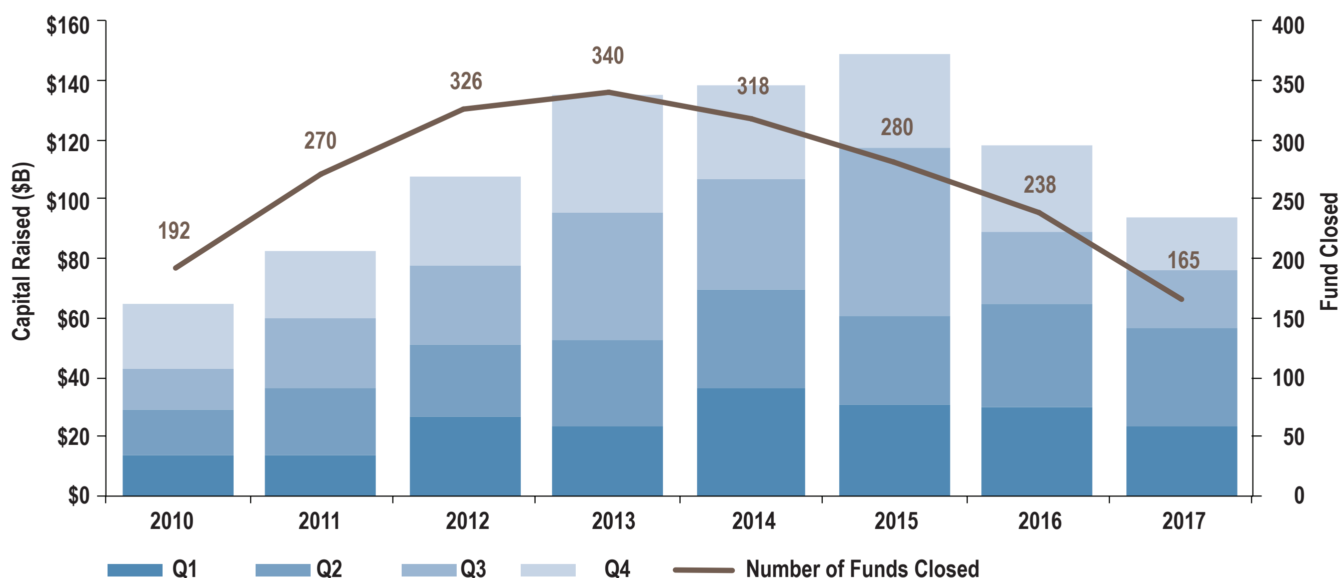


Source: Preqin

As private equity remains challenged, we expect more investors to pursue more niche property sectors and investment strategies in 2018. We expect student housing, senior housing, self-storage, medical office, and data centers to see increased investor appetite, as well as other real assets sectors with defensive characteristics such as timber and farmland. With real estate deal sourcing becoming more competitive, we also expect portfolio recapitalizations to increase, as more managers look for ways to avoid parting with irreplaceable assets. We already saw this trend becoming more apparent in 2017, with JLL estimating that recapitalization volume rose nearly 80 percent over 2016 levels.

One continued bright spot for private equity fundraising is debt funds. The sector continues to attract record amounts of capital, and is now second only to value-add funds in terms of investor preference. Interestingly, much of the demand for private debt funds is coming from overseas, as investors from Europe to East Asia contend with low or negative interest rates at home. While the increasing availability of private debt capital has compressed returns in the space and caused a general decline in target returns, market consensus suggests that private investors can still earn a healthy spread of 150-200 basis points over comparable, more traditional mortgage products. For lower-yielding debt strategies such as senior whole loans, this return compression is causing lines to be blurred between real estate and fixed income, with many institutions still determining the best place to house private real estate debt allocations.

The Pie Gets Smaller - Private Equity Real Estate Fundrasing, 2010-2017



Source: PERE

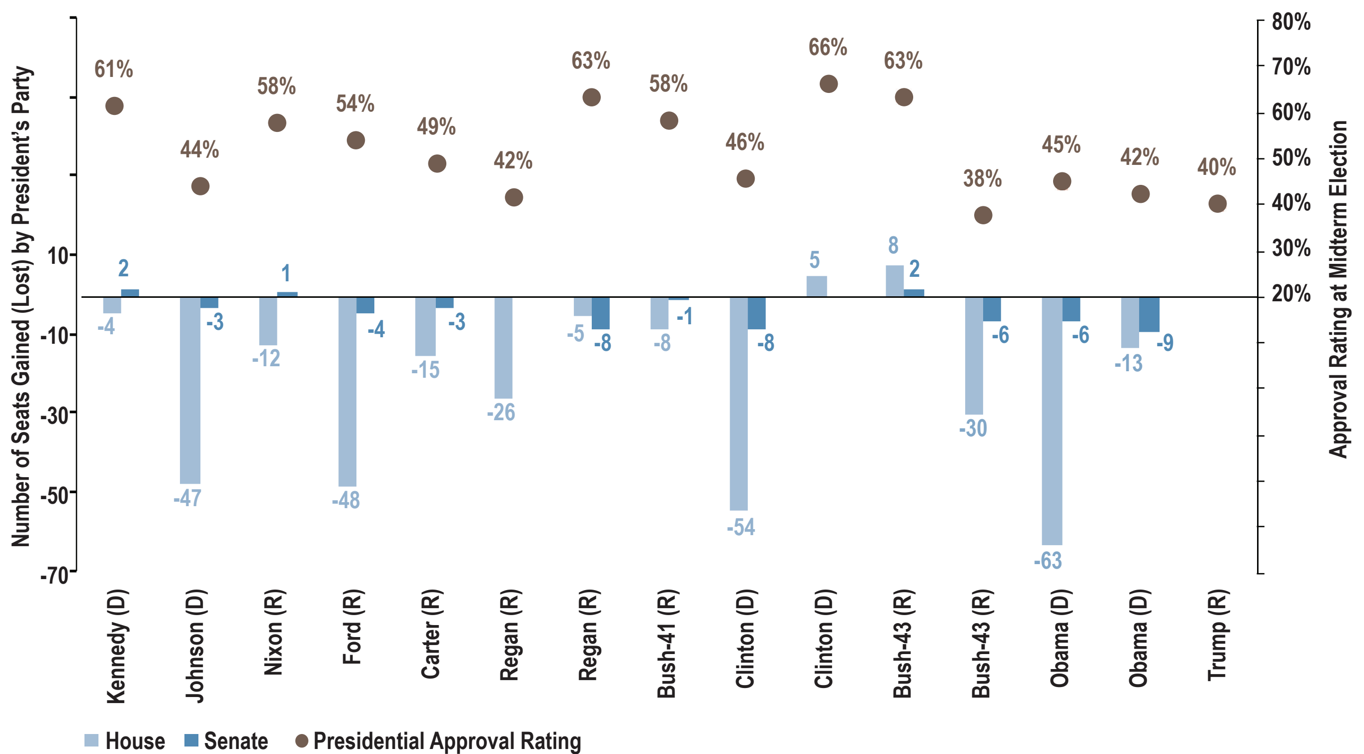
The real estate private investment industry has experienced impressive growth over several decades. Investors have committed capital to a variety of products across strategy and structure types. As the industry matures and enters “middle age,” barriers to entry are likely to increase as the incumbency effect becomes more pronounced. Existing managers appear poised to grow larger, and in some cases expand into new products and strategies in order to grow AUM. We believe this could lead to more M&A among small and mid-size managers as they try to gain operating efficiencies and as key personnel retire. Diversified asset managers looking to enter the real estate space may also elect to acquire existing platforms rather than build their own. We expect to see more M&A transactions resulting from these themes in the coming years.

10. Republicans will experience significant losses in the 2018 midterm elections

Park Madison Partners has a lot of friends and we like to keep it that way, which means we tend to avoid political predictions that favor one side over the other. But politics defines policy and policy affects markets, so we think it’s important to know which way the wind is blowing. As we enter the 2018 midterm election cycle, we believe all signs are pointing to a Democratic wave in November.

The Republicans already begin this midterm cycle with political history against them. The incumbent President's party has lost seats in Congress in all but five US midterm elections, the most recent being in 2002 when President George W. Bush had a 68 percent approval rating in the wake of the 9/11 attacks. For the most part, however, even popular presidents tend to lose seats during the midterms, and unpopular presidents fare much worse. At the time of this writing, President Trump's approval rating stands at just 40 percent in an average of polls. To make this situation worse, according to Gallup the percentage of Americans identifying themselves as Republican has steadily eroded since November 2016, from 42 percent to 37 percent, and is now at its lowest level since 2009. This does not bode well for any Republican candidate – federal, state, or local – as November approaches.

What's Past is Prologue - Midterm Election Results vs Presidential Approval Rating, 1962-2014



Source: Gallup, U.S. Government Publishing Office

We believe the past year's special elections also bode poorly for Republican prospects in 2018. There were seven US House and Senate special elections in 2017, and only one resulted in the Democrats flipping a Republican seat. Media coverage of these elections would suggest that Republicans have simply extended their 2016 victories, with Democrats increasingly powerless to stop them. Beneath the headlines, however, the signs are more ominous for Republicans: Democrats have outperformed historical expectations in all seven special election contests, by an average of 16 points. At the state and local level, where more than 60 contests have been held in the same period, Democrats have experienced a similar shift in their favor. So this is clearly a national trend, and it means the Democrats have a viable path to flipping the 24 seats needed to capture the House of Representatives.

The Senate map, however, looks harder for Democrats. Unlike the House where all 435 members are up for re-election every two years, only 33 of the 100 US Senate seats are up this year. Thanks to the Democrats' success in both 2006 and 2012, fully 26 of the 33 seats up for re-election are either held by Democrats or by independents who caucus with them. Ten of these seats are in states that President Trump won in 2016. So Democrats have a much tougher, much

larger map to defend than the Republicans. Given these odds, it would not be surprising to see the Republicans hold on to their thin majority in the Senate, or even add to it.

What this will mean for US policy and for real estate investors is difficult to predict. However, regardless of the election outcome, it appears certain that the destructive tribalism that has taken hold of US politics in recent decades will continue for the foreseeable future. This is unfortunate, as the country has many issues it needs to address to remain competitive in a 21st century global economy. Waiting for a short window of unified government – as the Democrats enjoyed from 2009-2011 and which Republicans enjoy today – to enact sweeping legislation on thin party line votes is no way to govern a great nation. But the US economy is a remarkable engine and has confidently sprinted past a dysfunctional Washington many times before. We remain hopefully optimistic that no matter the outcome of any single election, America's brightest days are still ahead.

2017 Scorecard

In the spirit of staying honest with our readers, below we have provided a short "scorecard" on our 2017 Outlook ("Outlook") and our 2017 Halftime Report ("Halftime"). Each of our market calls is scored on a scale of 1 to 10, with 10 meaning "nailed it" and 1 meaning "not even close." We also include some brief commentary to explain why we scored ourselves the way we did. We admit that this is a highly subjective exercise, and that's absolutely the intention.

Outlook: US interest rates will rise modestly

Score: 7/10 We were fairly confident going into 2017 that rising inflationary pressures would force the Fed to hike rates. However, even as labor markets tightened and unemployment fell well below the natural rate ("NAIRU"), wage growth remained tepid. Still, the Fed was concerned enough about inflation to follow through on its forecast of three rate hikes in 2017. We are only scoring ourselves 7/10 however because we doubted the Fed's resolve and ability to hike three times, and believed that market volatility would stay their hand at least once.

Halftime: The Fed will slow its pace of rate hikes

Score: TBD Going into the second half, we predicted that tepid wage growth and the commencement of QT would cause the Fed to slow its pace of rate hikes. We felt vindicated when the Fed did not hike rates in September. However, the real test will come in 2018 when QT moves into full swing. As such, it's still too early to score ourselves on this one.

Outlook: US commercial real estate will continue its bull market cycle

Score: 10/10 We predicted that the economy would remain healthy and ultimately benefit real estate markets. We also predicted that cap rates would stay relatively stable. Both of these calls have largely played out as we expected. Additionally, our sector calls on office, retail, industrial, and multifamily were mostly on point. As such, we give ourselves 10/10 on this one.

Halftime: US commercial real estate performance will be widely mixed

Score: 10/10 In our Halftime Report, we said that real estate performance would become increasingly localized and sector-dependent as the cycle matured. Indeed, several markets appear to be undergoing mild corrections in values while others continue their upward momentum. Retail has struggled, industrial has surged, and multifamily and office have largely held steady – all in line with our predictions. While these were not necessarily bold calls, a win is a win and we'll gladly take our 10/10 here.

Outlook: Tax reform will fundamentally alter how real estate investments are priced

Score: 8/10 We correctly anticipated that tax reform would have sizeable implications for the real estate industry. However, early drafts of tax reform contemplated a replacement of depreciation rules with immediate upfront expensing, including for real estate. This would have drastically affected how real estate is priced by changing the economic incentives for buyers. While certain elements of tax reform are certainly likely to impact real estate prices in various ways, the real estate industry successfully lobbied against new rules that may have unintentially distorted buyer behavior. Otherwise, there are several provisions in the tax bill which will impact real estate prices. We give ourselves 8/10 as the impact will not be as drastic as we previously thought.

Halftime: US tax reform will get pushed to 2018

Score: 0/10 Oops. After Republicans' failure to pass healthcare reform, we were understandably skeptical about their ability to deliver on tax reform before the year was out. They must have gotten a few phone calls from their donors, who likely disagreed with our timeframe.

Outlook: European markets will continue to be volatile

Score: 8/10 We predicted that a busy political calendar would lead to a volatile year in Europe. While Europe emerged from 2017 with most potential disasters averted, there were certainly some close calls that rattled markets. At one point during French elections, Jean-Luc Mélenchon started surging in the polls, raising the prospect that an avowed communist would compete in the run-off election with the National Front's Marine Le Pen (the ultimate disaster scenario). Ultimately Emmanuel Macron edged out Mélenchon and went on to win the general election, but not before some intense nail-biting. Similarly, we predicted that Angela Merkel faced a tougher path to re-election as German chancellor than markets appreciated. Merkel's CDU/CSU party only won 33 percent of the vote in September, and breakdowns in coalition talks have raised the prospect of Merkel presiding over a minority government for the first time in the post-war era. However, despite the political drama, Europe's recovery continued to gain momentum and volatility has since declined. As such, we only give ourselves an 8/10.

Halftime: Europe will continue its upward momentum

Score: 10/10 As business and consumer confidence hit multi-year highs and the ECB remained accommodative, we correctly predicted that Europe's recovery would gain further momentum going into the second half. 10/10.

Outlook: Emerging markets performance will be mixed, but Latin America will be a bright spot

Score: 8/10 We believed that emerging markets were poised for a recovery in 2017 after struggling for several years. Indeed, as commodity prices firmed after falling for years, several commodity exporting countries such as Russia and Brazil returned to economic growth. In particular, we said that Latin America would be a bright spot due to its reliance on commodity exports and market-friendly regimes, and strong economic performance in countries like Brazil, Colombia, Chile, Peru, and even Argentina has proven us correct. However, we underestimated the impact that NAFTA fears would have on Mexico, which at the time of this writing looks to be slipping into recession. (We do not consider Venezuela an investable country, and therefore exclude it from this analysis entirely.) Were it not for the miss on Mexico we would probably give ourselves a perfect score here, but given the miss there, we'll settle for 8/10.

Outlook: Capital flows to real estate will remain healthy

Score: 7/10 While we did not predict a surge in investment in real estate, we did believe that 2017 capital flows to real estate would remain healthy. Given the stability of cap rates and low asset price volatility over the last year, real estate capital markets do appear to be in relative balance. Even though private equity real estate fundraising was challenging, high quality managers with strong track records were able to raise capital. However, there is no denying that 2017 saw lower investment volume in real estate overall, which some might argue is less "healthy." As such, we'll settle for a 7/10 here, even though we feel like the results were in line with our expectations for the year.

Outlook: Private credit will continue to offer attractive investment opportunities

Score: 10/10 We predicted that despite risks of banking deregulation, private credit would continue to provide attractive investment opportunities due to its established advantages on speed, structure, and execution. Throughout the year, the private credit markets never showed any signs of slowing down even as credit spreads contracted. Investors continued to favor the space due to its defensive nature and current income potential. 10/10

Outlook: New technology will continue to modernize the construction industry

Score: TBD We predicted that new technology platforms would revolutionize the construction industry by introducing robotics, automation, and mobile applications to make work sites more efficient. In the past year, we have already seen one company demonstrate how to reduce the construction time on an apartment building from 36 months to 15 months. While this is promising, we believe it is still too early to determine what the effects will be on the industry as a whole. As such, we choose to punt now and save our endzone dance for another time.

Outlook: Artificial intelligence will start to transform real estate investment processes

Score: TBD Similar to our construction call, this one is still too early to tell. Over the last year several AI platforms have targeted the commercial real estate industry in an attempt to enhance human decision-making. However, we see little signs so far of wide-spread industry adoption outside of the brokerage community. We still remain confident in AI's potential to transform the industry over time, and will refrain from scoring ourselves until a later date.

Outlook: Political risk will play a larger role in investment decisions

Score: 10/10 We predicted that political risk would gain increased attention from investors due to heightened geopolitical tensions. Unlike country risk generally which can be reduced through diversification, political risk is country-specific and not diversifiable. Over the last year, we have seen markets that were previous investment darlings, such as Turkey and South Africa turn into virtual no-go zones due domestic political risk. Russia has suffered reduced foreign investment due to its aggression in Eastern Europe and generally adversarial posture with the West. Turmoil in the Middle East, such as the blockade of Qatar, have forced investors to consider the security of capital commitments from certain sovereign wealth funds. We have witnessed firsthand how investors are re-evaluating these risks in light of current geopolitics, and as such we score ourselves 10/10 here.

Halftime: Geopolitical tensions will rise in East Asia

Score: 10/10 As the second half started, we were very worried about North Korea's pursuit of nuclear-armed ICBMs and what that would mean for regional stability in East Asia. The US had repeatedly warned that it would "not tolerate" a nuclear-armed North Korea, and once the North had a viable delivery system it might be too late to intervene. As such, the closer the North Koreans got to the finish line, the higher the probability of an accidental or intentional conflagration. Since our Halftime Report was released, North Korea has conducted six missile tests and stepped up its rhetoric against the US. In response to Kim's saber-rattling, President Trump responded with his now infamous "fire and fury" remark, followed by a threat to "totally destroy North Korea" in his first speech to the United Nations. The situation has only become more tenuous over time with no end in sight despite punishing sanctions.

There is a scene in "Jurassic Park" when Dr. Malcom watches helplessly as the T-Rex breaks out of its fence and exclaims "Boy, do I hate being right all the time." On this particular prediction, we certainly share that sentiment.

About Park Madison Partners

Park Madison Partners is a New York-based real assets placement and advisory firm focused on the global real estate and private funds industry. To date, the firm has participated in the placement of over $11 billion of real estate capital globally. Park Madison Partners was founded to offer clients capital raising and strategic consulting services with a high degree of customization, integrity and accountability. The firm provides a relationship-driven approach to structuring and marketing assignments and offers its clients access to global institutional investors. Park Madison Partners is a member of SIPC-FINRA and is certified with the Women's Business Enterprise National Council.

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