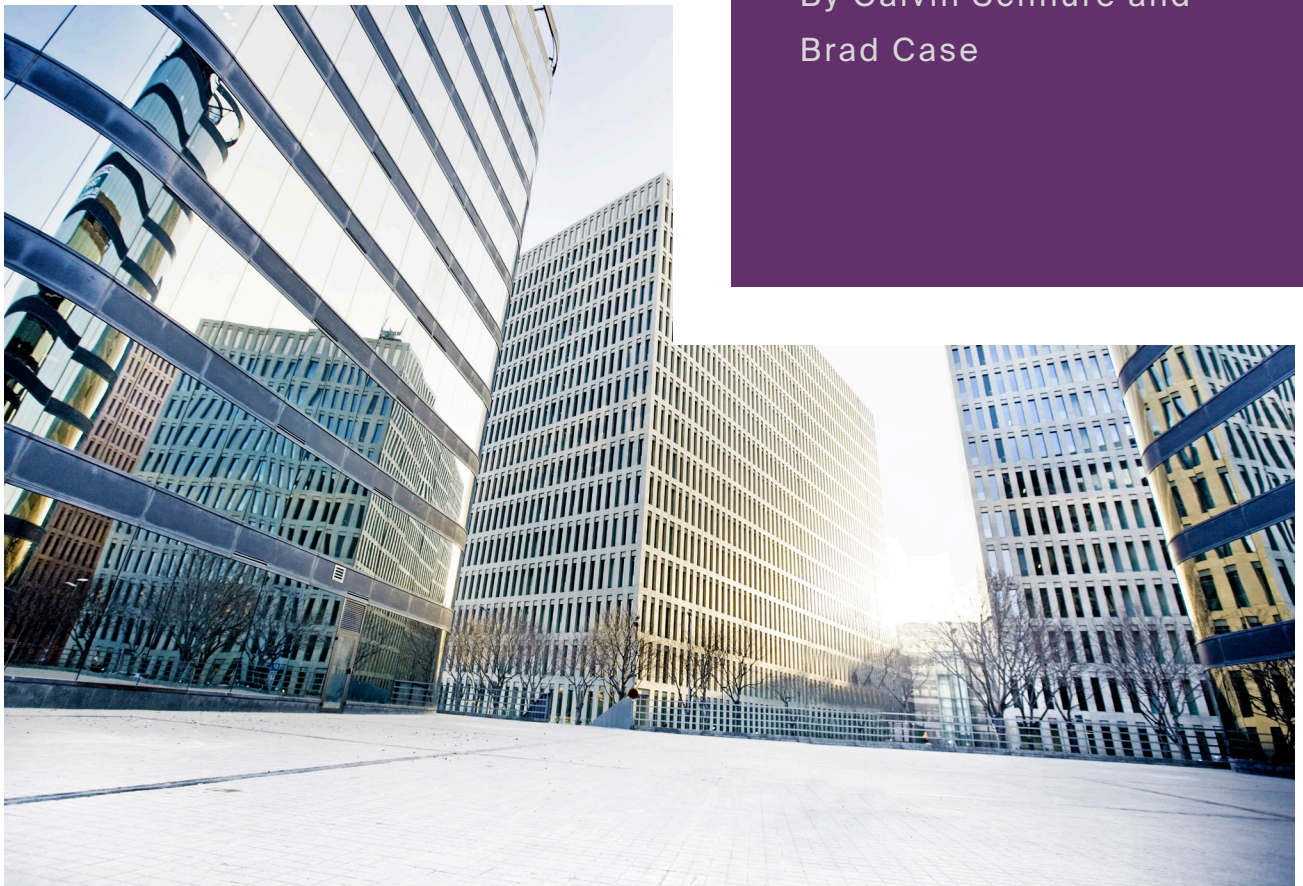


REIT Economic Outlook

A look back at 2018
and a look forward
to 2019

By Calvin Schnure and
Brad Case



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Top Issues to Watch for Real Estate and REITs in 2019

Calvin Schnure
SVP, Research & Economic Analysis

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Top Issues to Watch for Real Estate and REITs in 2019



By Calvin Schnure, SVP, Research & Economic Analysis, Nareit

Will the economy maintain momentum in 2019, boosting demand for commercial real estate and keeping property prices on their upward path? Or are there signs of weakening in the foundation that could lead to a downturn? Will the Fed keep raising interest rates, or are they likely to pause after one or two more increases? These are some of the top issues that real estate investors will face in 2019.

The next year is likely to be a good but not great one for real estate, with solid job growth, consumer spending

“ **The next year is likely to be a good but not great one for real estate, with solid job growth, consumer spending and business activity driving demand for nearly all types of commercial real estate.**

– Calvin Schnure



and business activity driving demand for nearly all types of commercial real estate. There are several potential clouds on the horizon, though, that could darken the outlook.

Before we look at the top issues for next year, here's a partial scorecard of the predictions I made in December 2017 for the performance in 2018. We won't have full data on 2018 for a few more months, and will look at all the results at that time. Some areas where I was more optimistic than consensus turned out to be even better than I had expected—GDP growth

through the third quarter has accelerated to 3 percent growth over year ago, and wages have risen faster than anticipated. Also, inflation has remained tame, slowing to 1.5 percent pace over the past six months after a short-lived surge earlier in the year.

There are other areas where my forecasts missed the mark—this is the occupational hazard for any forecaster. The Fed has been more hawkish than I had anticipated a year ago, and remains on track for at least a few more rate increases, even as inflation stays under control. And one surprise from real estate markets is that demand for industrial space through the first three quarters of 2018 moderated from the 2017 pace.

“ There has been a downshift in global growth patterns that will help keep interest rates from rising rapidly. Even with modest increases, these financing rates are still low and are favorable for real estate.

– Calvin Schnure

Here are the top ten developments in the economy and real estate markets to watch in 2019. For each issue, I lay out several possible scenarios for what might take place, as well as my own assessment, in **bold italics**, of the odds of each possible outcome, and a brief discussion of why.

Macroeconomic Outlook

GDP: GDP growth picked up speed in 2018, bringing the four-quarter change to 3.0 percent through 2018:Q3 from the 2.5 percent pace in 2017.

Will GDP growth in 2019:Q4 compared to a year earlier (a) slow to less than 2.5 percent (I estimate a **20**

percent probability of this scenario occurring); (b) ease just a bit, to between 2.5 percent and 3.0 percent (**60 percent** probability); (c) accelerate further to above 3.0 percent growth (**20 percent**)?

It's most likely that GDP growth will slow, as the boost from last year's tax cuts fades and higher interest rates cause housing markets, construction activity and business investment to cool. But a sharp slowdown isn't in the cards, as healthy business activity and consumer demand can handle moderately higher interest rates. Two wildcards, however, are energy prices and trade wars.

Labor markets: Job growth has been robust so far in 2018, with nonfarm payrolls increasing an average of 206,000 per month, which is pretty close to the 210,000 average over the prior five years. With the unemployment rate at its lowest point since 1969, though, will there be enough new workers to meet employers' needs?

Average monthly job growth in 2019 will (a) slow to 180,000 or less, as the pool of potential workers dries up (**20 percent** odds); (b) be on the low side of the past five years, with job gains between 180,000 and 200,000 (**40 percent**); or (c) continue at 200,000 or more per month (**40 percent**)?

My forecast on job growth tilts toward the high side. The unemployment rate, despite being at a 49-year low, is a misleading indicator in the current economy, as there are still millions of potential workers who are not seeking jobs—and thus not counted in the unemployment rate. Some of the decline in the labor force participation rate is due to retiring Baby Boomers, but even among the 25-55 age groups, there are as many as 2 million potential workers who are not working or seeking employment, relative to pre-crisis norms. The recent acceleration in

wage growth will make it more worthwhile for those who are currently out of the labor force—whether in school, caring for children or parents, or other—to go to work.

Inflation: Will we see warning signs of the economy overheating? The Federal Reserve had kept interest rates ultra-low in large part to get inflation back near its 2 percent target. After moving above 2 percent early in 2018, however, inflation has cooled in the second half of the year, and the core PCE deflator—the Fed’s preferred inflation measure—rose 1.5 percent (annualized) in the six months through October.

In 2019, will inflation (a) stay slightly below the Fed’s target, with the core PCE deflator rising 1.7 percent or less (my odds of this outcome are **30 percent**); (b) move in line with the target, rising between 1.7 percent and 2.2

“There are limits to how many workers can be squeezed into a given amount of space, and at some point net absorption will realign with job growth—though probably not in 2019.”

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percent (**60 percent**); or (c) overshoot the target, rising more than 2.2 percent (**10 percent**)?

It’s not unusual for inflation to run a half-percent above or below its medium-term trend for months at a time due to one-off factors or simply high-frequency noise.

The low readings in the second half of 2018 indicate that, despite a

few “hot” readings earlier in the year, we are still in a low-inflation, low-yield economy.

There are many factors that contribute to this low inflation environment. For example, wage growth has been muted and corporate profit margins are wide enough to absorb some increases in employment expenses. Also, there is ample manufacturing capacity

worldwide, which keeps goods prices from rising rapidly. In addition, global competition and consumer and business expectations of low inflation are a powerful reinforcement mechanism. These forces are likely to keep inflation relatively low not just in 2019, but also for several more years into the future.

Financial Markets

Federal Reserve: The Fed policy target for short-term rates provides an anchor for the whole yield curve, as well as indicating whether monetary policy will stimulate the economy, is neutral or acts as a brake. Several Fed officials have indicated that the rate increases through 2018 have brought rates close to their neutral level; the key issue is whether they will see a need to tighten further.

At the end of 2019, will the Federal Funds rate be (a) 2.75 percent or less (i.e. the Fed pauses after one rate increase, most likely in the first half of the year; I see a **70 percent** chance of a pause); (b) 2.75 to 3.25 percent (two or three hikes in 2019; **25 percent**); or (c) higher than 3.25 percent (**5 percent**)?

When the Fed says the interest rate outlook is “data dependent”, they focus on the news about inflation. There has been little sign that inflation will accelerate beyond the Fed’s 2 percent target, and there is enough slack in the labor market to keep wages from spiraling higher. The inflation data are more likely to cause the Fed to pause than to step up their interest rate increases, especially with recent comments by Fed Chairman Powell that rates are “just below” neutral. (Note: this outlook was finalized on December 17, 2018, in advance of the FOMC meeting on December 18-19.)

Long-term interest rates: While the Fed has more direct control over short-term rates, it’s the long-term rates that have greater influence on the economy and

commercial real estate markets. Yields on the 10-year Treasury note recently moved above 3.0 percent for the first time in five years. A longer-term view, however, shows that yields are still at the low end of their historical range.

At the end of 2019, will the yield on the 10-year Treasury note be (a) below 3.25 percent (**40 percent odds**); (b) between 3.25 percent and 3.75 percent (**50 percent**); or (c) higher than 3.75 percent (**10 percent**)?

Rates will most likely be higher, but not too much higher. Heavy issuance of Treasury securities will be a factor in rising rates. Growth in the rest of the world also influences U.S. interest rates, however, and there has been a downshift in global growth patterns that will help keep interest rates from rising rapidly. Even with modest increases, these financing rates are still low and are favorable for real estate.

Commercial real estate markets and REITs

Multifamily properties: Apartment rents accelerated from 2010 through 2015, with growth of effective rents peaking at around 5 percent, according to CoStar, as the lingering effects of the housing crisis fueled demand for rentals. Rent increases slowed in 2016 and 2017, however, prompting concerns that heavy construction activity could oversupply the market. Rent growth turned up again in 2018, rising nearly 3.5 percent over the four quarters ending in 2018:Q3.

Will rent growth in 2019 (a) stall again, with effective rents in 2019:Q4 less than 2.5 percent above one year



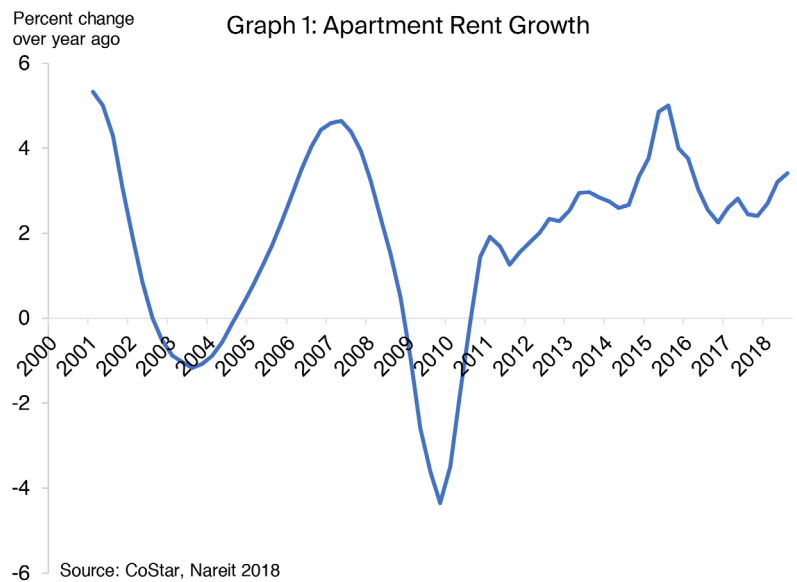
Retail has seen a rebound in 2018, as tenant sales have picked up and retailers have learned the importance of having a physical location as well as Internet sales. This sector is likely to firm in 2019.

– Calvin Schnure



earlier (**10 percent odds**); (b) rise in line with recent trends, increasing between 2.5 percent and 3.5 percent (**50 percent odds**); return to above-trend growth in excess of 3.5 percent (**40 percent odds**)?

There are shortages of both homes for sale and apartments for rent in nearly every major city, as there is pent-up demand from the housing crisis great enough to meet even the recent high levels of construction. New construction is being absorbed fairly rapidly in the months after projects are completed. The main barrier to stronger rent growth in such a tight market has been lack of affordability of current rents, as household incomes have barely kept



pace with rents. A robust job market that boosts wages will be an important ingredient in future rent growth.

Office markets: Demand for office space has been

weak relative to employment trends. Total leased office space has risen about 1 percent per year since 2012, according to data from CoStar, while employment in office-using sectors (finance, professional and business services, information services) has grown 2 percent per year. Changes in the office work environment, with more shared work space and cubicles instead of individual offices, account for some of the weakness in demand, as well as the spread of WeWork and other office sharing arrangements. Will these trends continue in 2019?

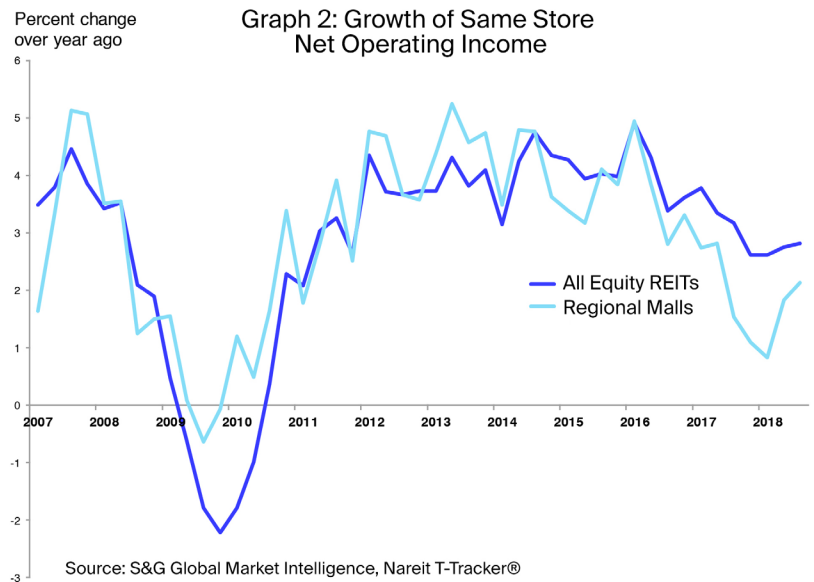
Office net absorption will total (a) less than 60 million square feet (0.85 percent of occupied stock) in 2019, a slowing from the pace in 2017-2018 (**20 percent odds**); (b) between 60 million and 70 million square feet, or up to 1 percent of occupied stock (**45 percent**); or (c) more than 70 million square feet (**35 percent**)?

There are limits to how many workers can be squeezed into a given amount of space, and at some point net absorption will realign with job growth—though probably not in 2019. Some of the weakness in demand, however, has been a lingering effect of the financial crisis, when firms let workers go but did not reduce the amount of office space they leased. It took several years for these “hidden vacancies” to be absorbed; now that process has been completed, and more and tenants will need to lease additional space as they hire new workers.

Retail property markets: During 2018, many retail property owners were hard at work re-leasing space following a spate of retailer bankruptcies in 2017. Many have made good progress, including the REITs that own regional malls, as these higher-quality properties are much in demand. Still, the store closures left their mark on same store net operating income (SS NOI).

SS NOI growth (on a 4-quarter change basis) slowed from 3.3 percent growth in 2016:Q4, to 1.1 percent growth in 2017:Q4, but has picked up to 2.1 percent increase through 2018:Q3. (The Nareit T-Tracker® has comprehensive data on the operating performance of REITs, including SS NOI <https://www.reit.com/data-research/reit-market-data/nareit-t-tracker-quarterly-operating-performance-series>).

In 2019:Q4, will SS NOI of the Regional Mall REITs (a) rise less than 2 percent (**20 percent odds**); (b) rise between 2 percent and 3 percent (**50 percent**); or (c) rise by more than 3 percent (**30 percent**)?



Retail has seen a rebound in 2018, as tenant sales have picked up and retailers have learned the importance of having a physical location as well as Internet sales. This sector is likely to firm in 2019.

Industrial markets: Rent growth in the industrial sector has been the strongest among the main property groups, averaging 6 percent or more for the past four years.

While demand shows few signs of slowing, construction has caught up to demand. Vacancy rates, which had been dropping as much as one percent or more a few years ago, are now edging down slowly. Will this pace of construction cause rent growth to cool?

Will rent growth in 2019 (a) slow to less than 4 percent, a pace last seen in 2014 (**10 percent odds**); (b) rise between 4 percent and 5 percent (**40 percent**); or (c) continue to grow 5 percent or faster (**50 percent**)?

The industrial boom is far from over, as demand for logistics space rises with online sales. Furthermore, there is less scope for new construction, as most of the large open spaces near population centers and transportation hubs have been developed. New facilities will rely on infill locations, including multistory warehouse and logistics facilities. These constraints on supply will keep rents on an upward path.

Property prices: Commercial property prices continued to rise this year, despite some concerns about valuations and the fundamentals that underpin the sector. The

CoStar Commercial Repeat Sales Index (CCRSI) was up 5.0 percent in the 12 months through October, 2018. Do rising prices confirm that the market is on solid footing, or suggest that valuations have gotten further out of line?

In 2019, will the CCRSI (a) decline (**10 percent odds**); rise by less than 5 percent (**70 percent**); or (rise by more than 5 percent (**20 percent odds**)?

Recent price increases have been fully supported by growth of net operating income (NOI), and the fundamentals for commercial real estate are sound. New construction has been moderate and in line with demand, keeping vacancy rates stable or on a slight downtrend, and rents are rising. Rising interest rates will pose a challenge to pricing, though. Cap rate spreads to Treasury yields are a bit wide, but that margin has narrowed significantly. The large price increases over the past five years certainly suggest it is prudent to keep an eye on pricing, as excessive valuations are one of the potential dangers of real estate investment—but we aren't there yet.



A Look Back at 2018 and a Look Forward to 2019



By Brad Case, SVP, Research & Industry Information, Nareit

At the beginning of 2018 REITs were undervalued and poised for outperformance. At the end of the year both statements were still true—but less so, because the outperformance has begun.

Investors can be excused if they forget about 2018 entirely: through mid-December total returns in the broad U.S. stock market were slightly negative at -1.7 percent, while REIT returns were positive but equally forgettable at +2.6 percent. That tepid summary of the year, though, masks what I consider to be two important developments: the end of a tech stock “bubble” and the beginning of a rediscovery of companies with more favorable valuations, including REITs.

I haven’t mentioned the role of interest rates precisely because, contrary to the market consensus, I don’t believe they played a very important role. My view

is that the fact that REITs were underperforming the broad stock market, during a period when interest rates were generally rising, led REIT-focused investors to an incorrect diagnosis of market dynamics. In my opinion, the underperformance of REITs over the past two years has not been about the effect of interest rates on real estate values, but about “irrational exuberance” regarding future earnings growth for already-overvalued companies, especially tech companies.

My review and outlook focuses on three themes:

1. The tech stock bubble that had begun in late 2016 seems to have ended early in 2018.
2. REITs held their own during most of 2018 as investors came to terms with fundamental market conditions and started to shift from a bubble mentality toward a value-seeking mentality.

3. Current valuations and underlying operating fundamentals have REITs set up for strong ongoing performance as that shift toward a value-seeking mentality continues to play out.

Early 2018: The End of the Tech Stock Bubblet

During 2017 the top-performing sector of the market, by far, was info tech stocks: the S&P 500 Information Technology sector index returned a whopping 38.8 percent, beating the runner-up sector by 15 percentage points. The beginning of 2018 extended that streak: by the middle of March the Info Tech sector index had returned 53.4 percent over 14½ months, as shown in Graph 1.

“ Investors don’t ignore favorable opportunities forever, and the long-delayed reversion in relative valuations finally began in mid-October. ”

– Brad Case

Attention locked particularly on to the FAANG stocks (Facebook, Apple, Amazon, Netflix and Google, owned by Alphabet), all of which are popularly thought of as tech stocks although Amazon and Netflix were officially classified in the S&P Consumer Discretionary sector. In fact, 2017 and early 2018 could be thought of more generally as a large-cap growth stock bubblet: the Russell 1000 Growth index of large-cap growth stocks—including all of the FAANGs—returned 38.6 percent and outperformed the Russell 2000 Value index of small-cap value stocks by more than 30 percentage points.

Two long-term truths are worth keeping in mind. First, growth stocks are essentially defined as overvalued companies that should generally be expected to underperform going forward. Second, large-cap growth stocks have typically underperformed small-cap value stocks—a segment that includes many REITs and

historically has been the part of the stock market most similar to the REIT market—by a large margin: in fact, data published by the economist Kenneth French (half of the famed Fama-French team of stock market researchers) shows that total returns for small-cap value stocks have averaged 25.1 percent per year over the past 92¼ years, nearly double the average for large-cap growth stocks.

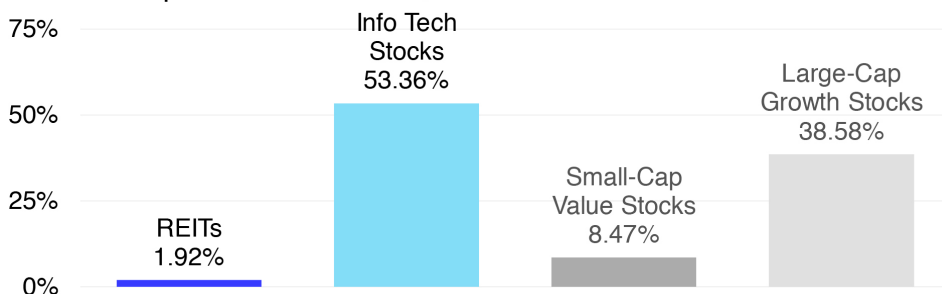
Most of 2018: The Pause That Reboots

I published a market commentary at the end of April noting an interesting recent development: stock market volatility had spiked in March and remained elevated during April, which I suggested might be a signal that stock market investors were becoming less certain that their aggressive expectations for future earnings growth among FAANG and other large-cap growth stocks were still realistic.

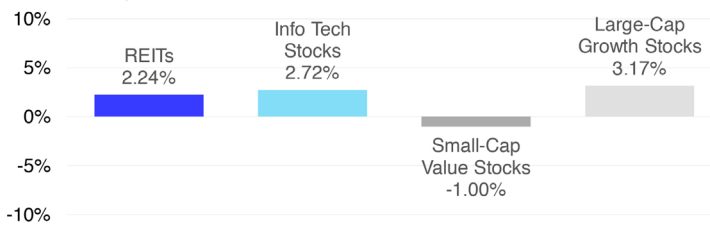
To be sure, some investors pushed ahead, with a new bubble-mentality slogan (“buy on the dips!”) that would

have been worthy of the Light Brigade. The exuberance of those investors, though, was countered by others who adopted a more thoughtful approach—with the result that returns in the different segments of the market were remarkably balanced during the seven months from mid-March to mid-October, as shown in Graph 2.

Graph 1: Total Returns, End of 2016 - Mid-March 2018



Graph 2: Total Returns, Mid-March - Mid-October



As you can see, investors didn't become pessimistic—just more circumspect. I would say that was the sensible posture: the outlook for macroeconomic growth continues to be favorable, but also continues to be more sober than the gung-ho investors of 2017 and early 2018 hoped. In such an environment—when the most important uncertainty is not whether the macro expansion is likely to continue but rather whether it will be headlong or more sustainably paced—it makes sense for investors to pause to take more careful stock of prospects and relative valuations.

Late 2018: The Long-Delayed REIT Reversion

What investors seem to have found during that pause for circumspection is the opportunity that their earlier inattention had created: while investors had been preoccupied not merely with tech stocks but also with private equity (including tech stocks' illiquid cousins, venture capital) and even private-equity real estate, REITs had become one of the most undervalued segments of the investment market. Investors don't ignore favorable opportunities forever, and the long-delayed reversion in relative valuations finally began in mid-October.

As Graph 3 shows, over the nine weeks ended December 14 the Info Tech sector lost nearly nine percent of its inflated value, while large-cap growth stocks more generally lost 7.23 percent. Even small-cap value stocks lost 8.27 percent over the same period. REITs, on the other hand, returned 6.60 percent, topping the Info Tech sector by 15.4 percentage points and

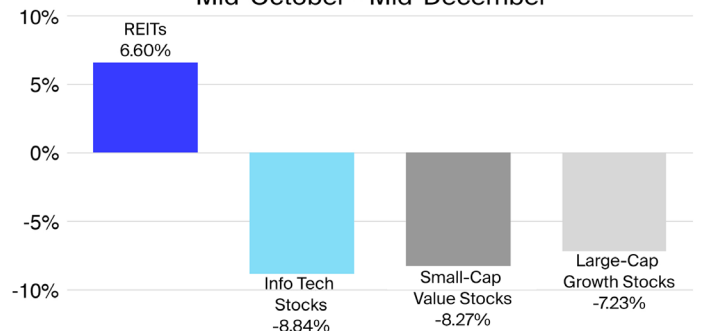
outperforming every other sector of the S&P 500 except Utilities.

REIT Operating Environment: Still Solid and Still Promising

In my "2017 Review and 2018 Outlook" published at the beginning of 2018 I concluded that, "in short, the operating environment for REITs has been solid, both demand and supply drivers have been favorable, and I expect—most importantly—that a strong operating environment will persist through 2018, if not indeed for several more years to come." One year later I would be comfortable writing exactly the same sentence, merely substituting 2019 for last year. In fact, very little has changed in terms of the favorable operating conditions that led me to the conclusion one year ago:

- Net operating income (NOI) from REIT-owned properties has continued to grow at a pace that is both strong and sustainable: according to Nareit's T-Tracker®, same-store NOI has grown 2.82 percent over the past four quarters, still in what I called then a "sweet spot" of between 2.5 percent and 4 percent per year.
- The pace of new construction remains below the level of just over 1½ percent of GDP that was normal prior to the construction collapse that began in 2008: in fact, it hasn't budged at all from where it was a year ago—at just 1.34 percent of GDP, down from a recent high of just 1.39 percent at the end of 2016.

Graph 3: Total Returns, Mid-October - Mid-December



- The average occupancy rate at REIT-owned properties has actually increased from 93.97 percent a year ago to 94.29 percent—literally the highest average that has ever been recorded, in a data series going back to the first quarter of 2000. And the occupancy rate for REIT-owned retail properties is even higher at 95.43 percent.

At the same time REITs have managed their balance sheets prudently, ensuring that they will be able to access the capital markets on favorable terms when they identify opportunities to create value. In particular, according to the T-Tracker, equity REITs use less debt now than they have at any time since the 2000Q1 start of the historical data series, regardless of whether debt is measured relative to the implied market value of their assets (32.68 percent) or relative to book value (47.9 percent). Their weighted average interest rate on long-term debt (4.06 percent) has never been lower, nor has interest expense relative to NOI (20.8 percent). Clearly the REIT capital environment, like the REIT operating environment, remains both solid and promising.

2019 Outlook: Continued REIT Outperformance

As I noted last year, historically the spread between REIT dividend yields and the yields on other income-oriented investments has remained remarkably consistent, and those spreads have proved equally remarkable as a signal of future REIT returns. Daily data since the beginning of 1999 shows that the yield on Baa-rated U.S. corporate bonds has usually remained between 100 and 200 basis points higher than the dividend yield on U.S. REITs. When the yield spread has been within that normal range, REIT total returns have averaged 13.1 percent over the next 12 months and 8.6 percent per year over the next five years.

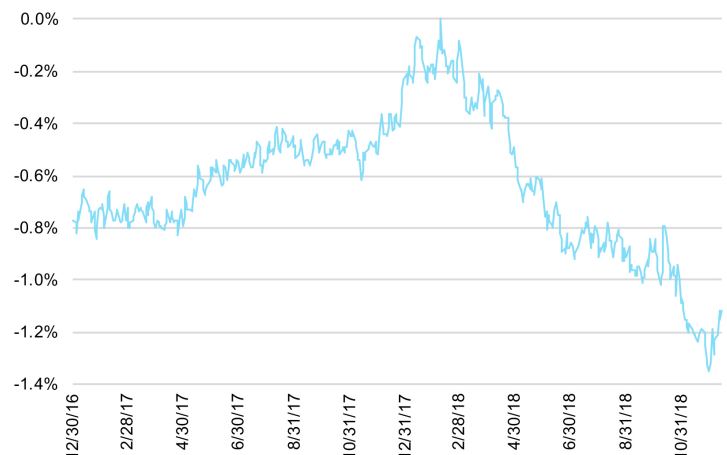
Over the same historical period, when the spread was uncommonly large—greater than 200 basis points—REIT total returns have been uncommonly low with an

average of just 1.7 percent over the next 12 months and 5.7 percent per year over the next five years. In contrast, uncommonly small yield spreads—less than 100 basis points, including those rare situations in which REIT yields have been higher than Baa-rated bond yields—have generally signaled especially strong future REIT total returns: historically they've averaged 18.4 percent over the next 12 months and 17.4 percent per year over the next five years.

At the beginning of 2018 the spread was uncommonly narrow at just 0.23 percent, hinting that REIT returns were likely to be very strong over the next few years. Over the first few weeks of the year the spread became even narrower: in fact, on February 8 the yield spread closed to zero, an extreme signal of REIT undervaluation that we hadn't seen since April 1, 2009. (REIT returns following that date were indeed strong at +110% over the next year!)

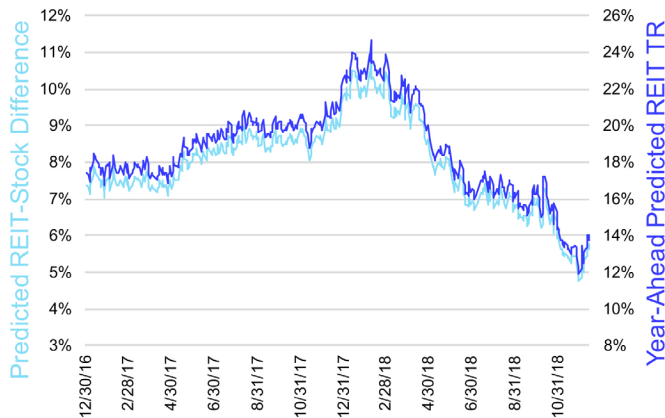
As Graph 4 shows, however, the REIT dividend yield spread to Baa-rated corporate bonds has widened (become more negative) since those radically undervalued days in February and early March. Part of the reason is that corporate bond prices have declined, increasing the Baa yield from 4.48 percent on February 8 to 5.14 percent as of December 14. The other part of it, though, is that REIT stock prices have increased,

Graph 4: REIT-to-Baa Yield Spread



causing the REIT dividend yield to decline from the same 4.48 percent on February 8 to 4.02 percent on December 14.

Graph 5: Predictions based on Yield Spread



As I noted, historically the yield spread has most frequently been between 100 and 200 basis points, with a median of 125 basis points—which means that, if the signal isn’t as bullish now as it was early in the year, at least it’s still on the bullish side of its normal range. In fact, regressing historical daily yield spreads on total returns over the next year suggests that, if the historical relationship continues to hold and given the yield spread of 1.12 percent on December 14, REIT investors can still anticipate total returns of close to 14 percent during 2019 and can still anticipate outperforming the broad stock market by something like 5.8 percentage points, as shown in Graph 5.

Of course there are no guarantees in investing, so the point estimates shown in Graph 5 are not the important takeaway of this outlook. Instead, what investors should take away is simply this:

- First, the tech-stock bubble that was drawing attention away from investment opportunities in REIT space seems to have ended early in 2018.
- Second, REIT operating fundamentals have been favorable, continue to be favorable, and will likely remain favorable not merely through 2019 but probably for several more years thereafter.
- Third, investors seem to have rediscovered REITs during late 2018—that is, the inevitable reversion of the market away from overvalued segments and back into undervalued segments has begun.
- Fourth, although REITs are no longer the screaming bargains that they were in February, valuation metrics still place them firmly on the bullish side, suggesting that they are likely to outperform the broad stock market over the next few years.

May 2019 be a successful year for you.