

U.S. REITS during a Fed tightening cycle

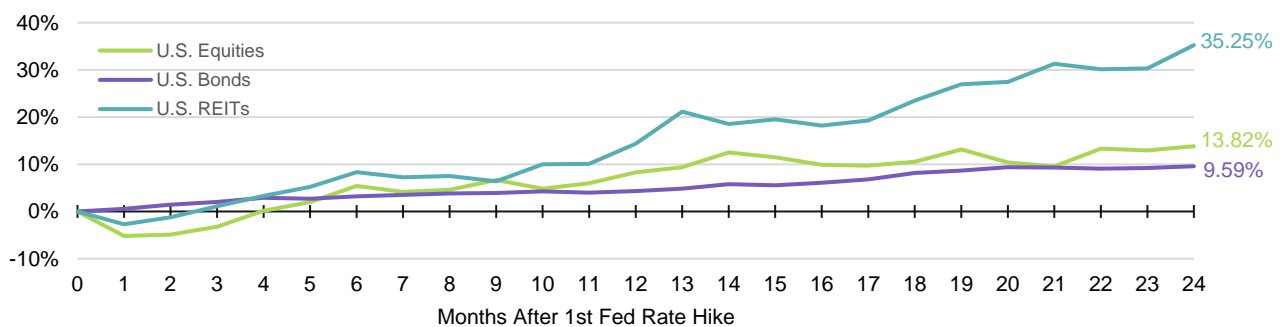
IN A NUTSHELL

- Late in the first quarter of 2022, the Federal Open Market Committee (FOMC) began raising the federal funds target rate to combat the rapid rise of inflation in the U.S. This quarter-point hike represented the first such rate increase since 2018 and the start of a new Fed tightening cycle.
- Over the last three U.S. Federal Reserve (Fed) tightening cycles, REITs outperformed both U.S. equity and U.S. bond markets, on average, over multiple time frames from the first rate increase.
- Within the U.S. REIT universe, performance by property type (as defined by FTSE sector/subsector categories) has varied widely in each tightening cycle, likely owing to other factors at play.

Summary

On March 16th, 2022, the FOMC voted to increase the federal funds target rate by 25 bps, kicking off a new tightening cycle. This paper examines how U.S. REITs have performed versus traditional asset classes (U.S. stocks and U.S. bonds) once a tightening cycle has begun. To this end, we analyzed the three most recent tightening cycles, which started in June 1999, June 2004, and December 2015, respectively, and compared the total returns from the date of the first rate hike for U.S. REITs (FTSE Nareit All Equity REITs Index), U.S. equities (S&P 500 Index), and U.S. bonds (Bloomberg U.S. Aggregate Bond Index) over two-year periods. While each tightening cycle had unique characteristics, we found that, on average, U.S. REITs outperformed U.S. equities and U.S. bonds over the subsequent six-month, one-year, and two-year periods following the cycle's initial rate hike. In this report, we examine each of these previous Fed tightening cycles in further detail.

AVERAGE CUMULATIVE TOTAL RETURN BY ASSET CLASS



Source: DWS Group, Bloomberg. As of 3/31/22.

U.S. Equities = S&P 500 Index; U.S. Bonds = Bloomberg US Aggregate Bond Index; U.S. REITs = FTSE Nareit All Equity REITs Index.

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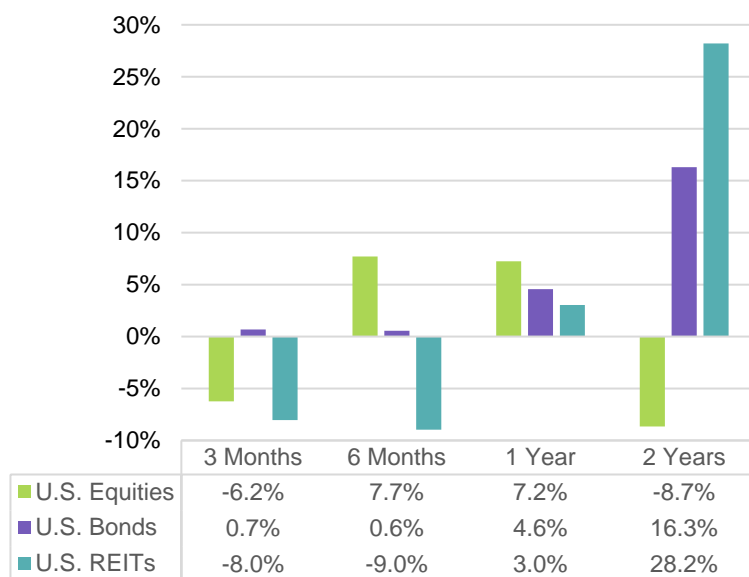
Fed Tightening Cycle – 1999

At its June meeting in 1999, the FOMC raised the federal funds rates for the first time since March of 1997 following three rate cuts in 1998. The economy was healthy, as measured by 4.8% GDP growth in 1999 following 4.4% growth in 1998, and the job market was picking up steam, with the unemployment rate in 1999 falling to 4.0% from 4.4% in 1998. Inflation was tame by today’s standards but starting to increase with a rate of 2.2% for the full year 1999, up from just 1.6% in 1998. During the course of this cycle, the Fed hiked rates a total of six times, with the last hike in May of 2000 representing an increase of 50 bps, bringing the federal funds rate to 6.5% from 4.75% at the start of the cycle.

During this cycle, U.S. REITs underperformed both U.S. bonds and U.S. equities the first year following the initial hike in June of 1999, but in July of 2000, U.S. REITs put up a strong rally of 8.7% for the month and overtook both U.S. bonds and U.S. equities in cumulative total return. It was around this time that broader U.S. equity markets (and U.S. technology stocks in particular) began suffering from the fallout of the dotcom bubble¹ bursting. While yields on the 10-year U.S. Treasury fell from around 6.5% in May 2000 to almost 4.75% in March of 2001, giving way to a rally in the fixed income market, it was U.S. REIT performance that dominated returns in the second year following the first rate hike of the cycle in 1999.

Within the U.S. REIT universe, Apartments posted the best returns over the two-year period ending 6/30/01, followed by Regional Malls and Office. While not shown in the table below, Healthcare and Lodging/Resorts were close followers, each generating greater than 35% total returns. It should be noted that even the worst performing U.S. REIT property type, Diversified, with an 18.0% total return, bested U.S. bonds and U.S. equities over this same time window.

ASSET CLASS TOTAL RETURNS SINCE 6/30/99



2-YEAR CUMULATIVE TOTAL RETURNS

Top 3 U.S. REIT Sectors	
1. Apartments	39.2%
2. Regional Malls	36.7%
3. Office	35.2%

Bottom 3 U.S. REIT Sectors	
1. Diversified	18.0%
2. Shopping Centers	19.0%
3. Manufactured Homes	19.0%

Source: DWS Group, Bloomberg, Nareit. As of 3/31/22.

U.S. Equities = S&P 500 Index; U.S. Bonds = Bloomberg US Aggregate Bond Index; U.S. REITs = FTSE Nareit All Equity REITs Index. Property type returns as reflected by FTSE Nareit sector/subsector categories.

Fed Tightening Cycle – 2004

The next Fed tightening cycle started in June of 2004 and was largely a reversal of the easing that followed the dotcom bust. The FOMC raised the federal funds rate for the first time since May of 2000 following a series of rates cuts that occurred

¹ The dotcom bubble was a meteoric rise in the equity valuations of U.S. technology stocks, which took place in the late 1990s and is now widely understood to have been caused by excessive speculation in internet-related stocks. The “bursting” of this bubble took place between March 2000, when markets peaked, and 2002, when they troughed in the aftermath of several scandals which accelerated the erosion of investor confidence.

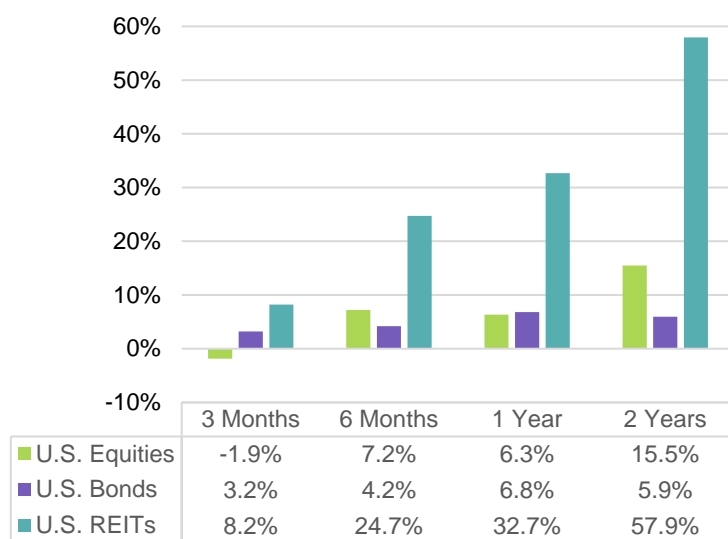
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predominantly in 2001, which brought the federal funds rate from 6.5% down to 1.0% with the final cut at the June 2003 meeting. GDP growth was 3.9% for the full year 2004, accelerating from 2.8% in 2003, while unemployment was higher but falling, coming in at 5.4% in 2004 down from 5.7% the year prior. Inflation was also increasing, reflecting 2.7% as of 2004 year-end, up from 2.3% in 2003. During this tightening cycle, the Fed hiked at seventeen consecutive meetings, all 25 bps, bringing the federal funds target rate up to 5.25%.

In this cycle, U.S. REITs lagged bonds for about a month, but then took the lead and surpassed both U.S. bonds and broader U.S. equities in cumulative total return, leading across all periods through June of 2006. U.S. REIT returns were outstanding over this two-year period, up almost 58%, while U.S. equities returned 15.5% and U.S. bonds less than 6%. U.S. Bond returns were primarily limited to coupon clipping, as the yields on the 10-year U.S. Treasury, which started around 4.6% in June of 2004 and fell to around 3.9% by mid-2005, jumped to almost 5.25% by June of 2006. Performance of the S&P 500 was relatively unremarkable during this period. While the index posted positive total returns in each full calendar year between 2004 and 2006, 10.9%, 4.9%, and 15.8% respectively, it was largely devoid of any major corrections or shocks.

During this 2-year period, Apartments put up a remarkable 75.5% total return and were closely followed by Self Storage. Aside from the Manufactured Housing segment, which gained just 2.3%, all property types bested bonds and broader equities, with even the second worst performing property type, Free Standing, generating a 27.0% total return. In fact, 8 of the 11 named property types at the time posted total returns in greater than 50% over the two-year period ending 6/30/06.

ASSET CLASS TOTAL RETURNS SINCE 6/30/04



2-YEAR CUMULATIVE TOTAL RETURNS

Top 3 U.S. REIT Sectors	
1. Apartments	75.5%
2. Self Storage	71.2%
3. Lodging/Resorts	64.1%

Bottom 3 U.S. REIT Sectors	
1. Manufactured Homes	2.3%
2. Free Standing	27.0%
3. Healthcare	31.3%

Source: DWS Group, Bloomberg, Nareit. As of 3/31/22.

U.S. Equities = S&P 500 Index; U.S. Bonds = Bloomberg US Aggregate Bond Index; U.S. REITs = FTSE Nareit All Equity REITs Index. Property type returns as reflected by FTSE Nareit sector/subsector categories.

Fed Tightening Cycle – 2015

In December of 2015, the Fed began another tightening cycle, which was characterized by the unwinding of massive amounts of stimulus applied during the “Great Financial Recession²” that occurred between 2007 and 2009. The federal funds target rate, which had now become a range (and thus we will refer to the upper bound) was taken from 5.25% in the latter part of 2007 down to 0.25% by the final FOMC meeting in 2008. This range of 0% to 0.25% was held constant until

² The Great Financial Recession (GFR) refers to the general global economic downturn that occurred between 2007 and 2009. It is thought to have been at least partially triggered from excessive financial risk and the fall in housing prices that occurred in the U.S., and the subsequent foreclosure and subprime mortgage crises. The GFR was punctuated with several notable events such as the collapse of Lehman Brothers and the forced sale of Bear Stearns to J.P. Morgan Chase and Co.

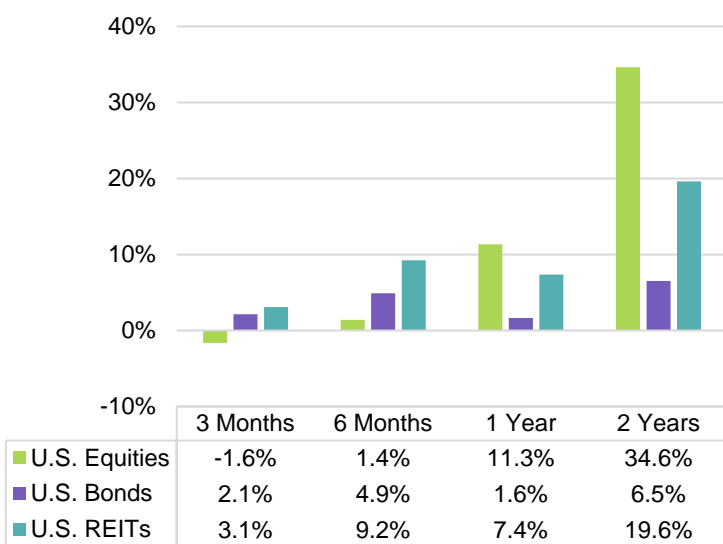
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December of 2015 when it was increased by 25bps. The next increase did not come until a full year later when the FOMC voted to increase it by another 25 bps in December of 2016. Seven additional hikes occurred from 2017 to 2018 for a total of nine hikes across the cycle, bringing the upper bound of the federal funds target rate to 2.5%.

This cycle, with its one-year hiatus between hikes, was somewhat different than the previous two. REIT performance outpaced U.S. bonds and U.S. equities at the 3- and 6-month mark, only to be overtaken by U.S. equities in month 11. Around this time, the 10-year U.S. Treasury bond sold off immensely, its yield reaching almost 2.6% in December of 2016 from a low around 1.35% in early July of the same year. These higher rates wreaked havoc on both U.S. bond and U.S. REIT performance. U.S. REITs performed well in the second year of this cycle, but U.S. equity performance still dominated. It should be noted that by the 2-year anniversary of the first hike, the fed was only mid-way through this tightening cycle, while our previous two examples were essentially completed in two years or less. Thus, we also considered returns in years three and four. U.S. REITs led in year three with a 1.7% total return, while U.S. equities and U.S. bonds were both down about 1%. During year four, U.S. equities took the lead, gaining over 25%, while the U.S. REITs returned 16.7% and U.S. bonds posted a 9.6% total return.

Two of the three best performing REIT property types in this review period did not exist as stand-alone property sectors or sub-sectors in the previous tightening cycles. Although Data Centers had their first REIT IPO in late 2004, they had previously been categorized in the Diversified property sector until 2015. In addition, Single Family Rental REITs were born out of the “Great Financial Recession” after institutional capital flowed into bulk purchases of foreclosed homes and it too became its own sub-sector property type in 2015. These two property types, as well as Industrial, Manufactured Homes, and Infrastructure REITs (another new property type), all saw returns in excess of broader equities over this two-year window. At the other end of the spectrum, retail exposed REITs (as well as Self Storage) fared poorly. Overall, dispersion within the U.S. REIT universe was quite pronounced over this period, with a greater than 75% return difference between the top and bottom performing property types.

ASSET CLASS TOTAL RETURNS SINCE 12/16/15



2-YEAR CUMULATIVE TOTAL RETURNS

Top 3 U.S. REIT Sectors	
1. Data Centers	66.3%
2. Industrial	61.7%
3. Single Family Homes	53.7%

Bottom 3 U.S. REIT Sectors	
1. Regional Malls	-8.9%
2. Shopping Centers	-8.4%
3. Self-Storage	-4.2%

Source: DWS Group, Bloomberg, Nareit. As of 3/31/22.
 U.S. Equities = S&P 500 Index; U.S. Bonds = Bloomberg US Aggregate Bond Index; U.S. REITs = FTSE Nareit All Equity REITs Index.
 Property type returns as reflected by FTSE Nareit sector/subsector categories.

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Conclusion

Every Fed tightening cycle is unique, each with its own backstory and particular macro conditions. The current cycle is no different. In the U.S., real GDP growth registered 5.7% in 2021, but this followed a -3.4% print in 2020, the result of a COVID-19 induced recession. Unemployment is low by historical standards, measuring 3.8% in February 2022, while inflation is relatively high as evidenced by a March 2022 PCE deflator of 6.4% (year-over-year), the Fed's preferred measure of inflation. As the world is still recovering from COVID-19, a war has just broken out in Eastern Europe between Russia and Ukraine. Now, with the Fed pivoting towards obtaining price stability, interest rate hikes are expected to be frequent and possibly larger than 25 bps (quite faster than the path traveled in the 2015 tightening cycle). While no one is yet calling for the total number of hikes to reach the seventeen hikes that we saw in 2004, we cannot rule it out. The path that U.S. equities, bonds, and REITs will take will undoubtedly be shaped by the various and dynamic macroeconomic forces at work. Across the U.S. REIT universe, new trends have already emerged. Some were born out the COVID-19 pandemic, such as supply chain reconfigurations and lower office space utilization due to the shift towards (and adoption of) remote working arrangements. Others are the product of longer-term secular changes that spawned new tendencies or new property types, such as data centers and infrastructure REITs. The dispersion in returns we have observed between property types is almost certain to continue, yielding future "winners" and "losers" (and therefore, opportunities). In any event, if the last three tightening cycles are any indicator, U.S. REITs as a group could see generous returns in the two-year period following the commencement of this Fed tightening cycle.

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