



DOES REAL ESTATE HAVE A HOME IN YOUR PORTFOLIO?

For centuries, investors have been building wealth by investing in real estate. Real estate has given investors a tangible real asset to help maintain the purchasing power of their savings. The 2,000 square foot question is, should you hammer these investments into your portfolio?

Before answering that question, it is important to look at your specific circumstances. How much exposure do you already have to real estate? If you already have a fair amount tied to real estate, you may not need more. Does your retirement success depend on the performance of real estate? If a real estate collapse would be detrimental to your retirement success, you need to find other ways to invest for your retirement or find a way to hedge your exposure. Is the market environment constructive? If the real estate market is overvalued, sometimes it is best to wait for a better opportunity. If these answers justify adding real estate exposure, what types of real estate investments do you want to add to your blueprint?

Gaining exposure to real estate investments

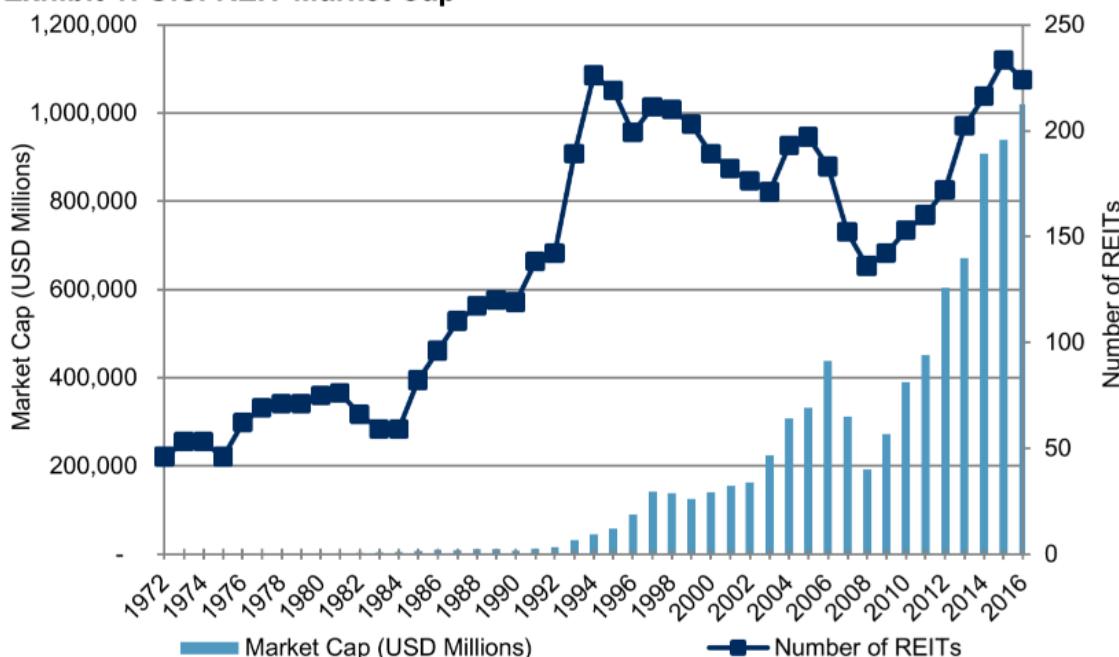
Today, you have an array of options to gain exposure to real estate investments. For example, investors may invest using: traditional exposure (e.g. single-family home), Real Estate Investment Trusts (referred to as REITs in this piece), private real estate investments (as a limited partner), mutual funds, exchange traded funds (ETFs), and a slew of other methods.

Background on REITs

What are Real Estate Investment Trusts (REITs)? The first REIT was set up in 1961 after congress enacted the U.S. Real Estate Investment Trust Act in 1960. This law was created to give investors access to returns of commercial real estate (formerly only available to institutions). REITs own income producing properties such as buildings, land, and real estate securities. To qualify, this structure must hold 75% of the assets

in income tied to real estate, pay out at least 90% to investors, and must derive at least 75% of gross income from rent, mortgage interest, or gains from the sale of real estate. REITs have drawn attention by providing income and growth potential to investors. Since the 1990s, this asset class has gained recognition and is normally part of a professional asset allocation strategy.

Exhibit 1: U.S. REIT Market Cap



Source: National Association of Real Estate Investment Trusts. Data as of year-end 2016. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Investment factors

Today, economic indicators show there is reason to believe the economy is healthy and growing. Recently, inflation and interest rates have increased. This makes sense because strong economies will likely have rising inflation as consumers are willing to spend more to purchase goods and services. As growth and inflation increase, attractive investment opportunities may arise. Investors will demand higher interest rates because the money lent to borrowers cannot be invested elsewhere. This leads to a couple of problems for real estate investors.

First problem: Going back to 1999, 40% of the return from REITs has come from dividends.¹ These dividends are paid by REITs to their investors over time.

Would you rather have \$100 today or would you rather have \$100 in the future? If you receive \$100 today, you can deposit the cash in the bank or invest the cash. In the future, this cash should be worth more than the initial \$100 you received. Since receiving the \$100 today provides opportunity and receiving the \$100 in the future does not, the value of receiving \$100 in the future

¹ S&P Dow Jones Indices LLC (<http://us.spindices.com/documents/education/practice-essentials-reits-making-property-accessible.pdf>). December 2017.

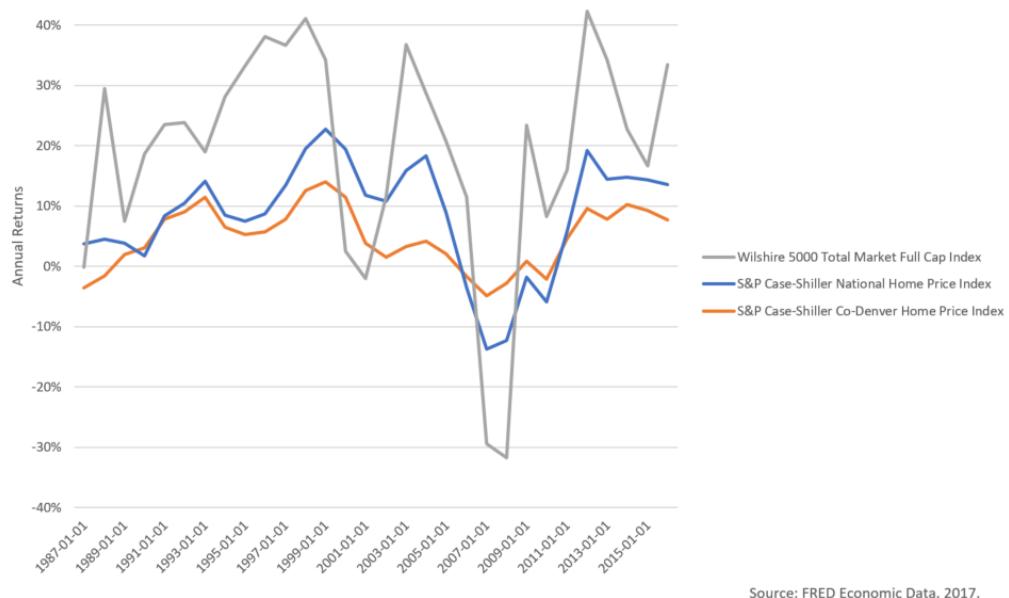
is less than \$100 today. If the money was deposited in the bank and the interest rates you receive go up. Your \$100 will grow at a faster rate. This makes the \$100 today even more attractive than receiving it in the future (synonymously, the \$100 received in the future is worth even less today). This illustrates the concept of the opportunity cost of money, which increases as interest rates rise. This opportunity cost means the value money received in the future, is worth less than the value of the money received today and will decrease as opportunity costs increase.

Since 40% of the return from REITs has been derived from future dividends, today's value of the future dividends generated by the REIT will fall as interest rates rise. This leads to a decrease in the price and may lead to underperformance of the asset class.

Second problem: As rates rise, mortgage payments become more expensive. This decreases the demand for mortgages to buy real estate, which may cause a decline in real estate prices.

A historical perspective

In Denver, Colorado, real estate investing has become the hot topic of recent discussions. With many investors confident that Denver's hot market is sure to continue. Any time you make an investment, there is an opportunity cost of doing so. Have the funds been deployed to their best possible use? This is an important question to ask before investing your hard-earned savings.



Source: FRED Economic Data. 2017.

From January of 1987 until January of 2017, real estate prices have increased an average of 4.81% in Denver, and 3.75% nationally. However, the broad stock market has increased 10.72% over this same time.² But isn't the stock market risky? Yes, but it can reward those investors who are patient and do not panic during times of stress.

² FRED Economic Data. 2017.

Above, I illustrated how rising rates can cause real estate prices to fall, how have these investments performed in other periods of rising interest rates? Surprisingly, going back to 1970, returns from REITs have been positive in four of the six rising interest rate environments, and have outperformed the S&P 500 half of the time.³

Exhibit 2: REIT Performance During Sustained Periods of Rising Interest Rates

TIME PERIOD	U.S. 10-YEAR TREASURY YIELD			CUMULATIVE TOTAL RETURN OVER PERIOD		
	BEGINNING YIELD (%)	ENDING YIELD (%)	CHANGE (%)	REITS (%)	STOCKS (%)	DIFFERENCE (%)
December 1976-September 1981	6.9	15.3	8.5	137.4	46.0	91.4
January 1983-June 1984	10.5	13.6	3.1	35.6	16.5	19.1
August 1986-October 1987	7.2	9.5	2.4	-10.1	10.9	-21.0
October 1993-November 1994	5.3	8.0	2.6	-10.3	0.1	-10.3
October 1998-January 2001	4.5	6.7	2.1	27.4	27.8	-0.4
June 2003-June 2006	3.3	5.1	1.8	108.2	37.6	70.6

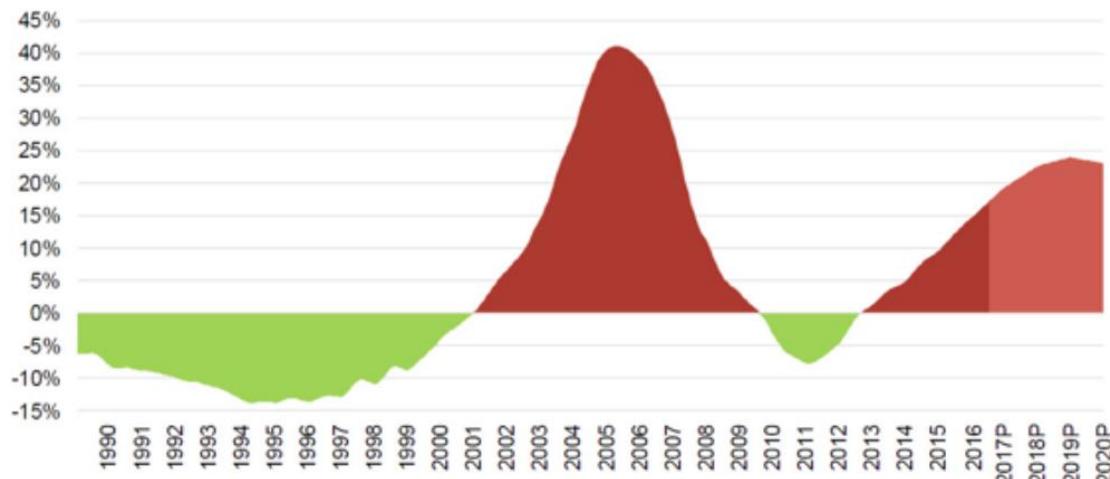
Source: S&P Dow Jones Indices LLC, Bloomberg, The Federal Reserve. REIT total returns are based on the FTSE/NAREIT Equity Index from Dec. 31, 1971, to Dec. 31, 1986, and they are based on the Dow Jones U.S. Select REIT Index after Dec. 31, 1986. Stock total returns are based on the S&P 500. Past performance is no guarantee of future results. Table is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

What circumstances led to the positive returns of REITs in four of these rising rate periods? Let's begin by looking at the late 1970s and early 1980s, where demand for real estate was exorbitantly high. This demand pushed property prices upward and contributed to the positive returns of REITs, and the outperformance over the U.S. stock market. A period of overbuilding occurred in the late 1980s. Supply outpaced demand and the real estate market struggled to keep pace with U.S. stocks. Eventually, the real estate market went bust as the economy tipped into a recession in 1990. Prices continued to fall in the early 1990s as the market tried to find balance between supply and demand. Eventually, prices had fallen far enough that investors could acquire them at attractive prices. This backdrop, combined with a hot economy, allowed REITs to provide healthy returns in the late 1990s. From June 2003 to June 2006, real estate outperformed the S&P 500 as deregulation, irresponsible lending practices, and greed increased the demand for real estate. Eventually, this led to an overheated real estate market, where home values irrationally dislocated from fundamental values (see the chart below). Again, real estate prices plummeted.

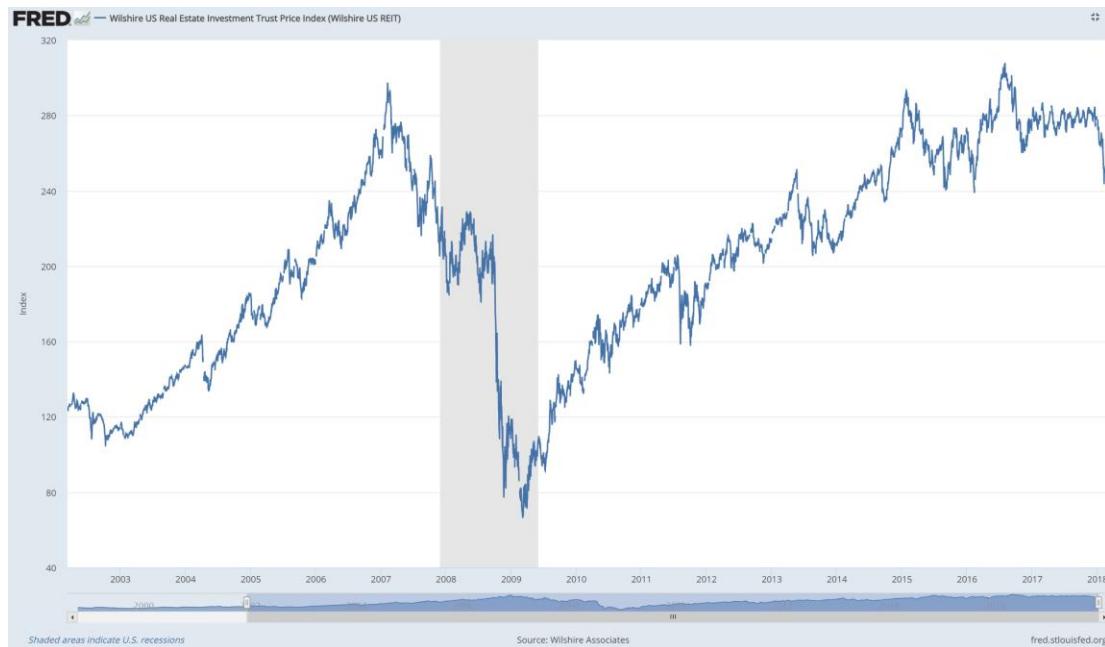
³ S&P Dow Jones Indices LLC (<http://us.spindices.com/documents/education/practice-essentials-reits-making-property-accessible.pdf>), Bloomberg, The Federal Reserve. December 2017.

Burns Intrinsic Home Value Index

Percent over/undervalued



Source: John Burns Real Estate Consulting, LLC (Data: Jul-17, Pub: Aug-17)



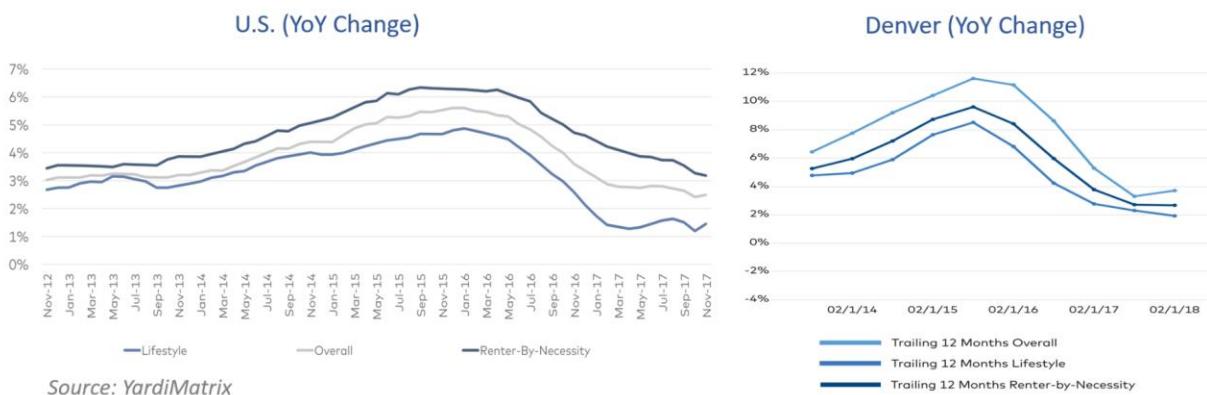
Real estate investors may run into problems with rising rates. For comparison purposes, it is worth mentioning that the U.S. stock market (proxied by the S&P 500) has provided positive returns in all six periods of rising rates.⁴ Still, real estate (and REITs) can show resilience if circumstances are constructive for the asset class. What does this mean for the real estate landscape moving forward?

Outlook

⁴ S&P Dow Jones Indices LLC, Bloomberg, The Federal Reserve.

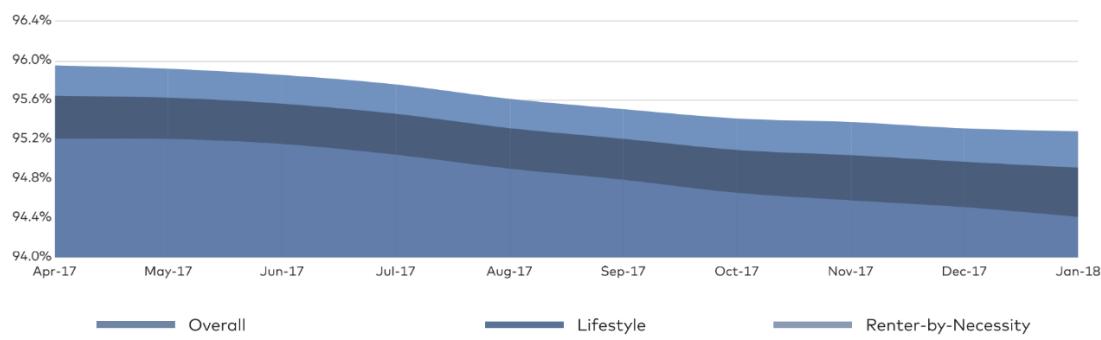
Real estate normally performs well when the economy is experiencing strong economic growth, which coincides with population growth, job formation, and higher incomes. Population growth and job formation create demand for housing. Higher incomes provide the ability to invest and own homes. This means landlords can now pass inflation through to their tenants in the form of higher rent prices while keeping vacancy rates low. In this expansion, wage growth and population growth are relatively muted when compared to what we have seen in the past. From the graph below, we can see that property owners may have depleted their ability to pass higher rent prices to their tenants.

Market Rent Growth by Asset Class



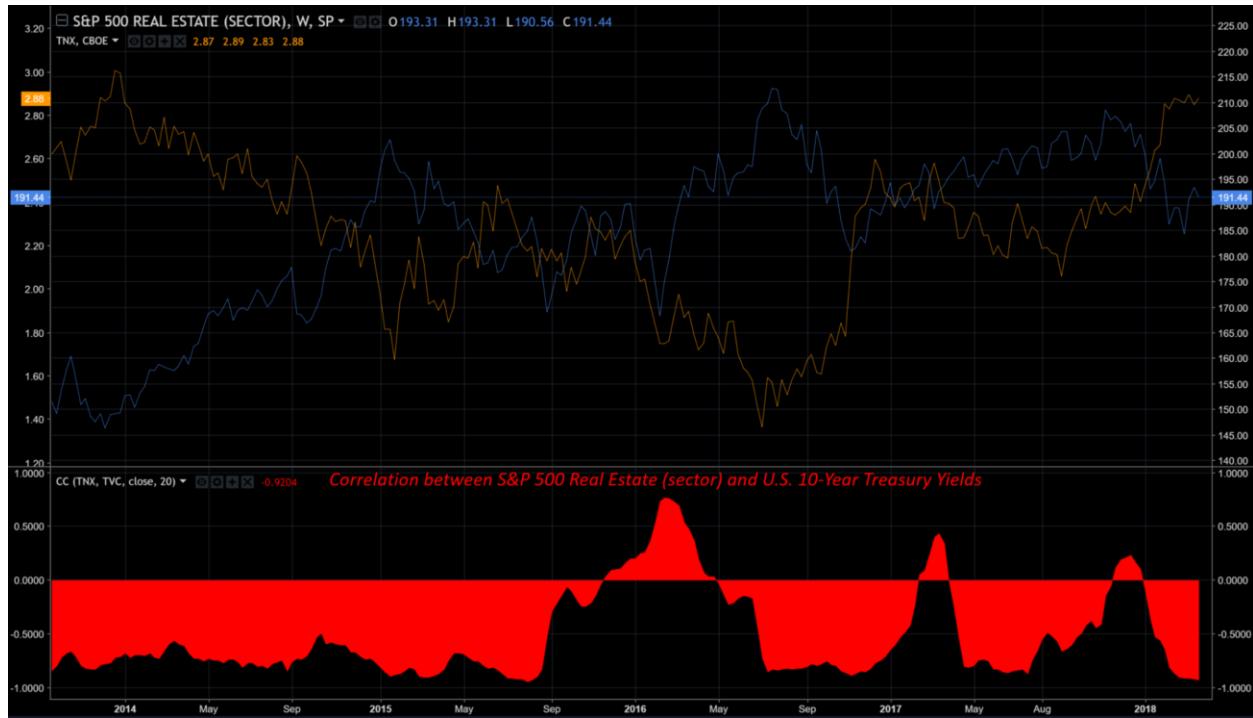
Strong economies normally drive vacancy rates down which increases the income from properties like apartments, hotels, commercial real estate. Today, vacancy rates are already low by historical standards giving us little room for improvement. Job growth can provide the demand for properties as citizens return to the work force and seek homes. Unemployment is near 30-year lows. Though we still have a little slack in the labor market, it is difficult to imagine how we will see significant boost from here.

Occupancy—All Asset Classes by Month



The stock market may have provided us with insight as to how it will behave if rates climb in this cycle. In 2013, during the last period of rising rates, what some remember as the “Taper Tantrum,” REITs significantly underperformed, with a calendar year return of 1.33% (using the FTSE NAREIT Equity REIT

index) compared to a return of 32.39% for U.S. large companies (using the S&P 500 index).⁵ In the chart below,⁶ observe the price of REITs (blue line) falling as the interest rate of the 10-year Treasury Bond (orange line) rises (and vice-versa). From this, we can posit that the market has little confidence REITs can perform well if rates continue to climb.



Source: TradingView. March 2018.

This piece was not written to dissuade investors from participating in the real estate markets. For suitable investors, real estate shouldn't have any issues finding a home in a diversified portfolio. However, the foundation of your portfolio can be built using other materials.

Let's build a successful retirement together,

Grant Glenn, CFA, CFP®

⁵ Callan (https://www.callan.com/wp-content/uploads/2018/01/Callan-PeriodicTbl_KeyInd_2018.pdf), Nareit® (<https://www.reit.com/data-research/reit-indexes/annual-index-values-returns>). December 2017. *The S&P 500 measures the performance of large capitalization U.S. stocks and is a market-value-weighted index of 500 stocks.*

⁶ www.tradingview.com. March 12, 2018.

There are risks specifically associated with investing in real estate products and real estate investment trusts (REITs). They involve risks associated with debt, illiquidity, adverse changes in general market conditions, changes in governmental, tax, real estate and zoning laws and regulations, and for some products, the risks associated with the ability to qualify for favorable treatment under the federal tax laws. There is no assurance that the investment objectives of this program will be attained. Dividends are not guaranteed and can be reduced or eliminated at any time.

Stock investing includes risks, including fluctuating prices and loss of principal.

Government bonds and Treasury bills are guaranteed by the US government as to the timely payment of principal and interest and, if held to maturity, offer a fixed rate of return and fixed principal value.

The opinions voiced in this material are for general information only and are not intended to provide specific advice or recommendations for any individual.

PERFORMANCE DISCLOSURE FOR EXHIBIT 2

The Dow Jones U.S. Select REIT Index was launched on December 31, 1998. The Dow Jones Global Select Real Estate Securities Index (RESI) and Dow Jones Global ex-U.S. Select Real Estate Securities Index (RESI) were launched on March 21, 2006. S&P GSCI was launched on May 7, 2007. All information presented prior to an index's Launch Date is hypothetical (back-tested), not actual performance. The back-test calculations are based on the same methodology that was in effect on the index Launch Date. Complete index methodology details are available at www.spdji.com.

S&P Dow Jones Indices defines various dates to assist in providing transparency. The First Value Date is the first day for which there is a calculated value (either live or back-tested) for a given index. The Base Date is the date at which the Index is set at a fixed value for calculation purposes. The Launch Date designates the date upon which the values of an index are first considered live: index values provided for any date or time period prior to the index's Launch Date are considered back-tested. S&P Dow Jones Indices defines the Launch Date as the date by which the values of an index are known to have been released to the public, for example via the company's public website or its datafeed to external parties. For Dow Jones-branded indices introduced prior to May 31, 2013, the Launch Date (which prior to May 31, 2013, was termed "Date of introduction") is set at a date upon which no further changes were permitted to be made to the index methodology, but that may have been prior to the Index's public release date.

Past performance of the Index is not an indication of future results. Prospective application of the methodology used to construct the Index may not result in performance commensurate with the back-test returns shown. The back-test period does not necessarily correspond to the entire available history of the Index. Please refer to the methodology paper for the Index, available at www.spdji.com for more details about the index, including the manner in which it is rebalanced, the timing of such rebalancing, criteria for additions and deletions, as well as all index calculations.

Another limitation of using back-tested information is that the back-tested calculation is generally prepared with the benefit of hindsight. Backtested information reflects the application of the index methodology and selection of index constituents in hindsight. No hypothetical record can completely account for the impact of financial risk in actual trading. For example, there are numerous factors related to the equities, fixed income, or commodities markets in general which cannot be, and have not been accounted for in the preparation of the index information set forth, all of which can affect actual performance.

The Index returns shown do not represent the results of actual trading of investable assets/securities. S&P Dow Jones Indices LLC maintains the Index and calculates the Index levels and performance shown or discussed, but does not manage actual assets. Index returns do not reflect payment of any sales charges or fees an investor may pay to purchase the securities underlying the Index or investment funds that are intended to track the performance of the Index. The imposition of these fees and charges would cause actual and back-tested performance of the securities/fund to be lower than the Index performance shown. As a simple example, if an index returned 10% on a US \$100,000 investment for a 12-month period (or US \$10,000) and an actual asset-based fee of 1.5% was imposed at the end of the period on the investment plus accrued interest (or US \$1,650), the net return would be 8.35% (or US \$8,350) for the year. Over a three year period, an annual 1.5% fee taken at year end with an assumed 10% return per year would result in a cumulative gross return of 33.10%, a total fee of US \$5,375, and a cumulative net return of 27.2% (or US \$27,200).