

Vanguard® Real Estate Index Portfolio

Investment Approach

Seeks to track the performance of the MSCI US Investable Market Real Estate 25/50 Index.

Equity real estate investment trusts and other real estate-related investments.

Passively managed, full-replication approach.

Low expenses minimize net tracking error.

Quarterly Commentary

Major stock markets continued to advance in the first quarter of 2024, with a number of indexes reaching record highs. In the U.S., inflation readings came in higher than expected, but the labor market stayed on a solid footing, consumer spending remained strong, and the economy showed continued vigor. Given this backdrop, the Federal Reserve left interest rates unchanged.

Global stocks returned just shy of 8% for the quarter, as measured by the FTSE Global All Cap Index. U.S. equities led the way, while those in emerging markets lagged but still finished in positive territory.

With rate cuts looking less imminent, bond yields generally rose and prices declined. The broad U.S. investment-grade bond market returned -0.72% (as measured by the Bloomberg U.S. Aggregate Float Adjusted Index).

The portfolio's benchmark, the VVIF Real Estate Spliced Index, returned -1.15% for the three-month period ended March 31.

The top contributors were data center REITs (+4.7%), other specialized REITs (+2.3%), and hotel & resort REITs (+4.8%).

Telecom tower REITs (-8.9%), self-storage REITs (-4.8%), and industrial REITs (-2.5%) were the biggest detractors.

For the 12-month period ended March 31, 2024, the VVIF Real Estate Spliced Index returned 8.68%. Data center REITs (+27.3%), retail REITs (+13.2%), and real estate services (+23.4%) were the largest contributors, while the biggest detractors were telecom tower REITs (-7.7%), self-storage REITs (-1.3%), and diversified REITs (-9.0%).

People and Process

Vanguard Variable Insurance Fund Real Estate Index Portfolio seeks to track the investment performance of the MSCI US Investable Market Real Estate 25/50 Index, which covers approximately two-thirds of the U.S. real estate investment trust (REIT) market. The portfolio seeks to provide high income and moderate long-term capital growth by investing its assets in stocks issued by commercial REITs, real estate management and development companies. Using a full-replication process, the portfolio holds all stocks in the same capitalization weighting as the index. REITs and real estate securities included in the index must have enough shares and trading volume to be considered liquid. Vanguard's Equity Index Group uses proprietary software to implement trading decisions that accommodate cash flow and maintain close correlation with index characteristics. Vanguard's refined indexing process, combined with low management fees and efficient trading, has provided tight tracking net of expenses.

Vanguard Equity Index Group

Launched in 1975, The Vanguard Group, Malvern, Pennsylvania, is among the world's largest equity and fixed income managers. As chief investment officer, Gregory Davis, CFA, oversees Vanguard's Equity Index, Investment Strategy, Quantitative Equity, and Fixed Income Groups. Rodney Comegys, Principal and global head of Vanguard's Equity Index Group, is responsible for all equity index funds. The Equity Index Group manages indexed equity portfolios covering U.S. and international markets. It has developed sophisticated portfolio construction methodologies and efficient trading strategies that seek to deliver returns that are highly correlated with target portfolio benchmarks. The group has advised Vanguard Variable Insurance Fund Real Estate Index Portfolio since 1999.

Investment Manager Biographies

Gerard C. O'Reilly, Principal. Portfolio manager. Advised the portfolio since 1999. Worked in investment management since 1992. B.S., Villanova University.

Walter Nejman. Portfolio manager. Advised the portfolio since 2016. Worked in investment management since 2008. B.A., Arcadia University. M.B.A., Villanova University.

Total Returns

	Expense Ratio	Quarter	Year to Date	1 Year	3 Years	5 Years	10 Years
Variable Insurance Fund - Real Estate Index Portfolio (2/9/1999)	0.26%	-1.23%	-1.23%	8.41%	1.60%	3.56%	6.15%
VVIF Real Estate Spliced Index	—	-1.15	-1.15	8.68	1.87	3.83	6.40
Variable Insurance Real Estate Funds Average	—	-0.66	-0.66	8.01	2.48	3.81	6.00

The performance data shown represent past performance, which is not a guarantee of future results. Investment returns and principal value will fluctuate, so investors' shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than the performance data cited. For performance data current to the most recent month-end, visit our website at vanguard.com/performance. The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index. Figures for periods of less than one year are cumulative returns. All other figures represent average annual returns. Performance figures include the reinvestment of all dividends and any capital gains distributions. All returns are net of expenses.

Note: VVIF Real Estate Spliced Index: MSCI US REIT Index adjusted to include a 2% cash position (Lipper Money Market Average) through April 30, 2009; MSCI US REIT Index through January 18, 2018; MSCI US Investable Market Real Estate 25/50 Index thereafter.

Fund Facts

Fund Number	0349
CUSIP Number	921925848
Assets (millions)	\$1,082
Inception	2/9/1999
Expense Ratio (as of 4/2023)	0.26%

Volatility Measures

	R-Squared	Beta
VVIF Real Estate Spliced Index	1.00	1.00
DJ US Total Stock Mkt Float Adj Idx	0.79	1.08

R-squared and beta are calculated from trailing 36-month fund returns relative to the associated benchmark.

Equity Characteristics

	VVIF REIT Index Portfolio	MSCI US IM Real Estate 25/50 Tran Index
Number of stocks	157	156
Median market cap	\$29.6 Billion	\$29.6 Billion
Average market cap	\$40.0 Billion	\$40.4 Billion
Price/earnings ratio	34.5x	34.7x
Price/book ratio	2.3x	2.4x
Return on equity	7.0%	7.0%
Earnings growth rate	7.9%	8.0%
Equity yield (dividend)	3.7%	3.7%
Foreign holdings	0.0%	0.0%
Short-term reserves	0.0%	—
Turnover rate (fiscal year end)	10.5%	—

Top 10 Largest Holdings

	% of Total Net Assets
Prologis Inc.	8.8%
American Tower Corp.	6.7
Equinix Inc.	4.7
Welltower Inc.	3.8
Simon Property Group Inc.	3.7
Crown Castle Inc.	3.3
Public Storage	3.3
Realty Income Corp.	3.3
Digital Realty Trust Inc.	3.2
CoStar Group Inc.	2.9
Total	43.7%

The holdings listed exclude any temporary cash investments and equity index products.

Sector Diversification (% of Stocks)

	VVIF REIT Index Portfolio	MSCI US IM Real Estate 25/50 Tran Index	Overweight/ Underweight
Data Center REITs	7.9%	8.8%	-0.9
Diversified REITs	1.9	1.9	0.0
Diversified Real Estate Activities	0.2	0.2	0.0
Health Care REITs	8.2	8.1	0.1
Hotel & Resort REITs	3.0	2.9	0.1
Industrial REITs	12.7	12.6	0.1
Multi-Family Residential REITs	8.5	8.4	0.1
Office REITs	4.7	4.7	0.0
Other Specialized REITs	6.5	6.4	0.1
Real Estate Development	0.2	0.2	0.0
Real Estate Operating Companies	0.3	0.3	0.0
Real Estate Services	7.2	7.1	0.1
Retail REITs	13.1	13.0	0.1
Self-Storage REITs	6.6	6.6	0.0
Single-Family Residential REITs	4.6	4.5	0.1
Telecom Tower REITs	11.9	11.7	0.2
Timber REITs	2.5	2.5	0.0
Total	100.0%	100.0%	

Sector categories are based on the Global Industry Classification Standard ("GICS"), except for the "Other" category (if applicable), which includes securities that have not been provided a GICS classification as of the effective reporting period.

Important information

For more information about Vanguard funds or Vanguard ETFs, visit [vanguard.com](https://www.vanguard.com) or call 800-523-1036 to obtain a prospectus or, if available, a summary prospectus. Investment objectives, risks, charges, expenses, and other important information are contained in the prospectus; read and consider it carefully before investing.

Vanguard ETF Shares are not redeemable with the issuing Fund other than in very large aggregations worth millions of dollars. Instead, investors must buy or sell Vanguard ETF Shares in the secondary market and hold those shares in a brokerage account. In doing so, the investor may incur brokerage commissions and may pay more than net asset value when buying and receive less than net asset value when selling.

All investing is subject to risk, including the possible loss of the money you invest.

Please remember that all investments involve some risk. Be aware that fluctuations in the financial markets and other factors may cause declines in the value of your account. There is no guarantee that any particular asset allocation or mix of funds will meet your investment objectives or provide you with a given level of income. Diversification does not ensure a profit or protect against a loss. Funds that concentrate on a relatively narrow market sector face the risk of higher share-price volatility.

Investments in bond funds and ETFs are subject to interest rate, credit, and inflation risk. Although the income from a municipal bond fund is exempt from federal tax, you may owe taxes on any capital gains realized through the fund's trading or through your own redemption of shares. For some investors, a portion of the fund's income may be subject to state and local taxes, as well as to the federal Alternative Minimum Tax.

High-yield bonds generally have medium- and lower-range credit quality ratings and are therefore subject to a higher level of credit risk than bonds with higher credit quality ratings.

The Factor Funds are subject to investment style risk, which is the chance that returns from the types of stocks in which a Factor Fund invests will trail returns from U.S. stock markets. The Factor Funds are also subject to manager risk, which is the chance that poor security selection will cause a Factor Fund to underperform its relevant benchmark or other funds with a similar investment objective, and sector risk, which is the chance that significant problems will affect a particular sector in which a Factor Fund invests, or that returns from that sector will trail returns from the overall stock market.

Investments in derivatives may involve risks different from, and possibly greater than, those of investments in the underlying securities or assets.

London Stock Exchange Group companies includes FTSE International Limited ("FTSE"), Frank Russell Company ("Russell"), MTS Next Limited ("MTS"), and FTSE TMX Global Debt Capital Markets Inc ("FTSE TMX"). All rights reserved. "FTSE", "Russell", "MTS", "FTSE TMX" and "FTSE Russell" and other service marks and trademarks related to the FTSE or Russell indexes are trade marks of the London Stock Exchange Group companies and are used by FTSE, MTS, FTSE TMX and Russell under licence. All information is provided for information purposes only. No responsibility or liability can be accepted by the London Stock Exchange Group companies nor its licensors for any errors or for any loss from use of this publication. Neither the London Stock Exchange Group companies nor any of their licensors make any claim, prediction, warranty or representation whatsoever, expressly or impliedly, either as to the results to be obtained from the use of the index or the fitness or suitability of the index for any particular purpose to which it might be put.

The funds or securities referred to herein are not sponsored, endorsed, or promoted by MSCI, and MSCI bears no liability with respect to any such funds or securities. The prospectus or the Statement of Additional Information contains a more detailed description of the limited relationship MSCI has with Vanguard and any related funds.

The index is a product of S&P Dow Jones Indices LLC, a division of S&P Global, or its affiliates ("SPDJ"), and has been licensed for use by Vanguard. Standard & Poor's® and S&P® are registered trademarks of Standard & Poor's Financial Services LLC, a division of S&P Global ("S&P"); Dow Jones® is a registered trademark of Dow Jones Trademark Holdings LLC ("Dow Jones"); and these trademarks have been licensed for use by SPDJ and sublicensed for certain purposes by Vanguard. Vanguard products are not sponsored, endorsed, sold or promoted by SPDJ, Dow Jones, S&P, or their respective affiliates and none of such parties make any representation regarding the advisability of investing in such product(s) nor do they have any liability for any errors, omissions, or interruptions of the index.

The Russell Indexes and Russell® are registered trademarks of Russell Investments and have been licensed for use by The Vanguard Group. The products are not sponsored, endorsed, sold or promoted by Russell Investments and Russell Investments makes no representation regarding the advisability of investing in the products.

CFA® and Chartered Financial Analyst® are registered trademarks owned by CFA Institute.

"Dividend Achievers" is a trademark of The NASDAQ OMX Group, Inc. (collectively, with its affiliates, "NASDAQ OMX") and has been licensed for use by The Vanguard Group, Inc. Vanguard mutual funds are not sponsored, endorsed, sold, or promoted by NASDAQ OMX and NASDAQ OMX makes no representation regarding the advisability of investing in the funds. NASDAQ OMX MAKES NO WARRANTIES AND BEARS NO LIABILITY WITH RESPECT TO THE VANGUARD MUTUAL FUNDS.

"Bloomberg" is a service mark of Bloomberg Finance L.P. and its affiliates, including Bloomberg Index Services Limited ("BISL"), the administrator of the index (collectively, "Bloomberg") and have been licensed for use for certain purposes by Vanguard. Bloomberg is not affiliated with Vanguard, and Bloomberg does not approve, endorse, review, or recommend the products. Bloomberg does not guarantee the timeliness, accurateness, or completeness of any data or information relating to the products.

"Bloomberg" and "Bloomberg Commodity Index Total ReturnSM" are service marks of Bloomberg Index Services Limited and its affiliates (collectively, "Bloomberg") and have been licensed for use for certain purposes by Vanguard. Neither Bloomberg nor UBS Securities LLC and its affiliates (collectively, "UBS") are affiliated with Vanguard, and Bloomberg and UBS do not approve, endorse, review, or recommend Vanguard Commodity Strategy Fund. Neither Bloomberg nor UBS guarantees the timeliness, accurateness, or completeness of any data or information relating to Bloomberg Commodity Index Total Return.

The Global Industry Classification Standard ("GICS") was developed by and is the exclusive property and a service mark of MSCI Inc. ("MSCI") and Standard and Poor's, a division of McGraw-Hill Companies, Inc. ("S&P") and is licensed for use by Vanguard. Neither MSCI, S&P nor any third party involved in making or compiling the GICS or any GICS classification makes any express or implied warranties or representations with respect to such standard or classification (or the results to be obtained by the use thereof), and all such parties hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability or fitness for a particular purpose with respect to any such standard or classification. Without limiting any of the foregoing, in no event shall MSCI, S&P, any of its affiliates or any third party involved in making or compiling the GICS or any GICS classification have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages.

CGS identifiers have been provided by CUSIP Global Services, managed on behalf of the American Bankers Association by Standard & Poor's Financial Services, LLC, and are not for use or dissemination in a manner that would serve as a substitute for any CUSIP service. The CUSIP Database, © 2024 American Bankers Association. "CUSIP" is a registered trademark of the American Bankers Association.

U.S. government backing of Treasury or agency securities applies only to the underlying securities and does not prevent share-price fluctuations. Unlike stocks and bonds, U.S. Treasury bills are guaranteed as to the timely payment of principal and interest.

Investments in stocks or bonds issued by non-U.S. companies are subject to risks including country/regional risk and currency risk. These risks are especially high in emerging markets.

Investments in Target Retirement Funds are subject to the risks of their underlying funds. The year in the Fund name refers to the approximate year (the target date) when an investor in the Fund would retire and leave the work force. The Fund will gradually shift its emphasis from more aggressive investments to more conservative ones based on its target date. The Income Fund has a fixed investment allocation and is designed for investors who are already retired. An investment in the Target Retirement Fund is not guaranteed at any time, including on or after the target date.

Center for Research in Security Prices, LLC (CRSP®) and its third-party suppliers have exclusive proprietary rights in the CRSP® Index Data, which has been licensed for use by Vanguard but is and shall remain valuable intellectual property owned by, and/or licensed to, CRSP®. The Vanguard Funds are not sponsored, endorsed, sold or promoted by CRSP®, The University of Chicago, or The University of Chicago Booth School of Business and neither CRSP®, The University of Chicago, or The University of Chicago Booth School of Business, make any representation regarding the advisability of investing in the Vanguard Funds.