Insights

Real Estate and Defined Contribution Plans

FTSE Russell

Executive summary

While exposure to the real estate asset class is common in defined benefit (DB) plans, this has only become a more recent occurrence in defined contribution (DC) plans. Many target date funds (TDFs) have now started to provide exposure to real estate through stock exchange listed real estate investment trusts (REITs), though some also allocate to “direct” or “private” real estate. Considering that TDFs are commonplace in DC plans, and the majority of net cash flows are directed to them, the wider use of real estate allocations within them brings the need to better understand this asset class.

This paper profiles the advantages of investing in the real estate asset class, including a more detailed breakdown of this sector, as well as the practical implications of accessing real estate through a DC plan.

Practical implications of providing real estate exposure within defined contribution plans

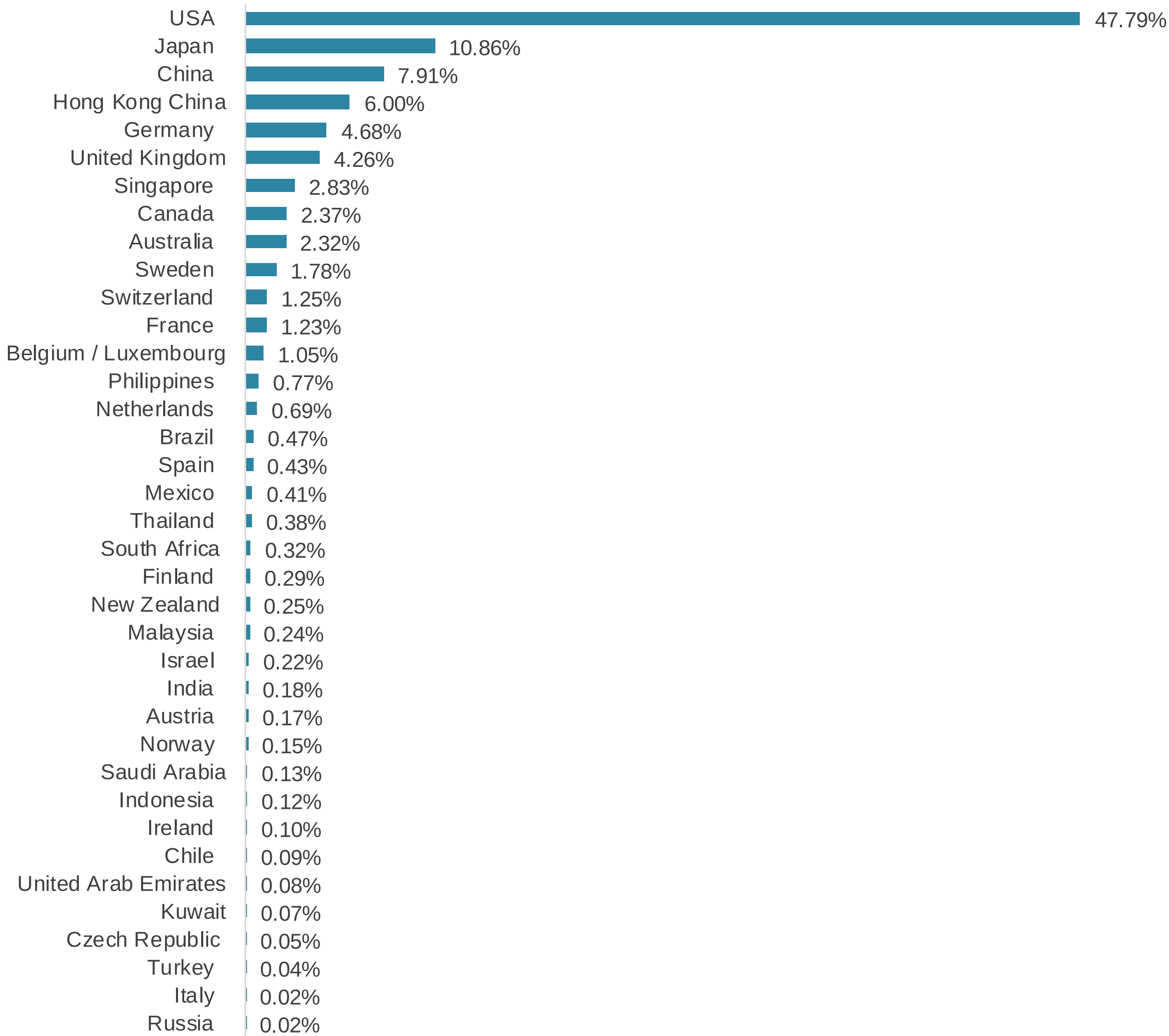
Through Target Date Funds

As mentioned above, target date funds (TDFs) are the most common way to gain exposure to real estate in DC plans. However, all TDFs are not constructed the same; many, in fact, do not allocate any assets to real estate. Further, for those that do, the allocation can vary percentage-wise, as well as varying between providing access to public or private real estate.

Through standalone funds in the core investment menu

For those DC plan participants who are likely to prefer their own approach to asset allocation, providing standalone funds in a core investment menu is an important offering of DC plans. Many plan core investment menus do not provide funds that target real estate investments. Of those that do, many of those funds focus strictly on US based real estate, which excludes access to over 50% of the public global real estate opportunity set.

Exhibit 1: Country allocation breakdown of the FTSE EPRA/Nareit Global Index



Source: FTSE Russell, March 2020

While not widely found on core investment menus, there is growing interest among plan sponsors to consider standalone funds that invest in *private* real estate. Many of these funds are invested in "core real estate" sectors (Retail, Office, Residential and Industrial). Exchange traded REITs can be utilized in tandem with private real estate funds, in the form of "completion portfolios," allowing for added diversification, lower costs, and a wider opportunity set. (More on completion portfolios later in this paper.)

Through “white label” fund of funds

A growing trend is for DC plans to consolidate their growing core investment menus into white labeled fund of fund groupings that allow for easier asset allocation decisions (e.g. a US Large Company Stock fund, a US Small/Mid-Sized Company fund, etc.). These groupings allow the plan sponsor to then define, in the case of equities, the exposure to growth or value funds within an equity asset class white label fund.

When a plan decides to utilize a white label structure for their core investment menu, one of the asset classes normally considered is real assets. Real estate firmly fits within this asset class, which also can include commodities, TIPs and infrastructure investments.

When constructing a real assets white label fund of funds, the decision of whether to allocate to public and/or private real estate lies with the plan sponsor. If private real estate is in the mix, then completion portfolios can be considered within the broader real assets framework (for example, timber allocations in relation to other commodity exposures).

How REITs deliver access to the new economy

Listed REITs are a liquid investment in income-producing real estate that have historically delivered strong total returns and a high dividend yield that is attractive to investors seeking income from their portfolio. Investing in REITs can help reduce volatility of a portfolio’s returns, as they have relatively low correlations with other asset classes.

The growth and evolution of the REIT sector has given rise to an important new dimension of portfolio diversification. The REIT universe has expanded greatly beyond the property sectors institutional investors traditionally owned—Retail, Office, Residential and Industrial (RORI). In 2000 these sectors comprised over 75% of the market capitalization of equity REITs. Over the past decade, new property types have been introduced and have grown rapidly. Today these property types outside of RORI account for half of total market capitalization.

Of special interest are REITs that invest in real estate that supports the rapidly growing technology sectors of the global economy.

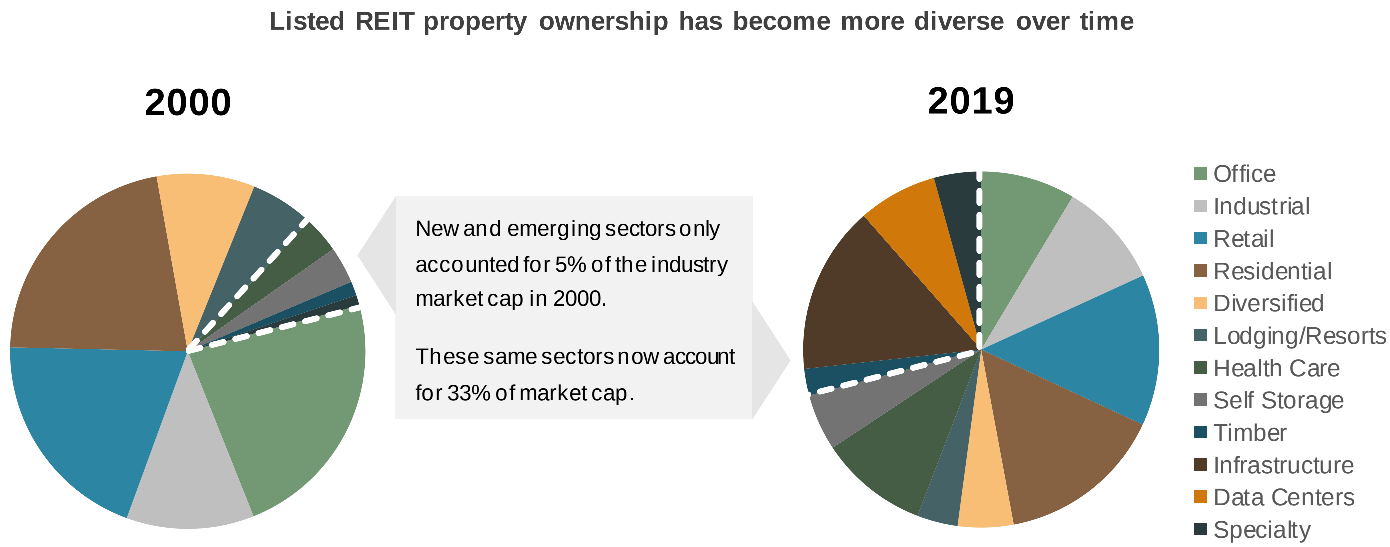
New economy and high-tech real estate

Technology has changed nearly every aspect of the US and the global economy. Two of the most prominent areas are the spread of internet communications and the rise of e-commerce. According to Cisco, global internet traffic has expanded ten-fold since 2010 and is projected to continue this pace of exponential growth. E-commerce has nearly tripled over this period, rising much more rapidly than in-store sales.

The common adage, “real estate houses the economy,” applies to the new tech economy, as well. Internet communications and e-commerce both depend on tech-related real estate, and REITs are active in owning and developing real estate that supports the tech economy. In particular, the Infrastructure sector includes REITs that own cell towers that transmit voice and data messages, and the Data Center REITs provide the facilities that house the servers that help link the data communications, store data and maintain internet web sites.

These sectors now account for 23% of the market capitalization of all equity REITs, and other new and emerging sectors account for an additional 10% of total market capitalization. In the Industrial sector of the REIT industry, logistics space has overtaken traditional warehouse and flex space as the dominant form of industrial real estate. Logistics facilities are essential for the rapid delivery of goods bought via e-commerce.

Exhibit 2: REIT sectors over time



- Historically, the dominant property sectors offering the largest scale investment opportunity included retail centers, apartment buildings, office buildings, and industrial warehouses.
- The industry has expanded to include property types reflecting the evolution of the changing US economy and providing investors with a broader opportunity set.

Source: FactSet, Nareit. New Sectors includes cell tower, data center, self storage, timberlands, single family home, and farmland REITs. All Other includes all other sectors on the FTSE Nareit All Equity REITs index. Data as of December 31, 2019.

REIT sector returns and correlations

The diversity of REIT property sectors can translate directly into improved diversification for the investor who holds not only traditional property types of RORI but also the newer REIT property types. Total investment returns range widely, with Infrastructure, Industrial and Data Center REITs delivering annualized total returns of greater than 20% since 2016 (Source: Nareit analysis of FTSE Nareit All Equity REITs Index as of December 2019.

Returns of different REIT sectors do not typically move in lock step with one another, especially among the newer property types, so incorporating the newer property types into a portfolio can provide additional diversification and reduced risks. The average correlation between the traditional RORI property types (Retail, Office, Residential and Industrial) is 76% (source: Nareit analysis of FTSE Nareit All Equity REITs Index). Correlations in this range can yield modest diversification. The tech-related REIT types, Infrastructure and Data Centers, have a correlation of 44% with other property types. This low correlation can yield significant diversification. Correlations of the remaining property types fall between these ranges, with an average of 56%.

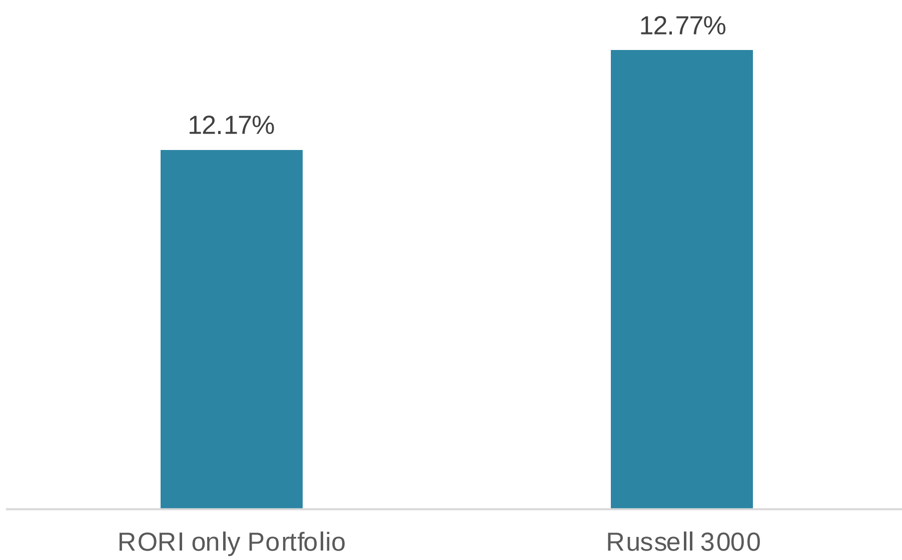
Completion portfolios

A portfolio that holds assets and property types in the same proportions as a decade ago would miss out on the diversification that can be achieved by investing in these newer and more rapidly growing REIT types. One idea is to create a “completion portfolio” that consists of these new sectors to complement the traditional real estate types in order to achieve more robust diversification.

This completion portfolio strategy can be implemented not only by investors who hold REITs, but also by investors who hold real estate exclusively through private investments. In fact, it may be more difficult and expensive to acquire investments in these newer tech-related real estate sectors in the private space, making a REIT completion portfolio strategy even more important for investors who focus on private real estate.

What follows are illustrations of the potential benefits of investing in a broad range of property types through REITs. First, consider a REIT portfolio comprising the “traditional” property sectors Retail, Office, Residential and Industrial (RORI).

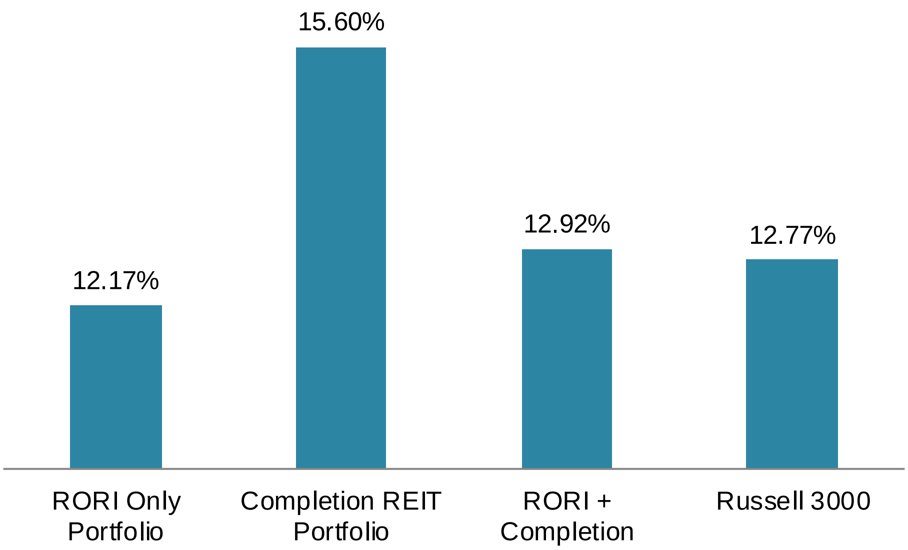
Exhibit 3: RORI only portfolio compared to Russell 3000



Source: Nareit analysis of FTSE Nareit All Equity REITs Index. Annualized total return of the RORI portfolio from 2010 through September 2019 is 12.17%, but 60 bps below the 12.77% total return on the Russell 3000 Index. Past performance is no guarantee of future results. RORI portfolio returns represent hypothetical, historical data. Please see the end for important legal disclosures.

This portfolio does not have exposures to Health Care, Lodging/Resorts, Self-Storage, Timber, Infrastructure, Data Centers or Specialty REITs (Specialty REITs own properties that don’t fit within the other REIT sectors. Examples of properties owned by specialty REITs include movie theaters, casinos, farmland and outdoor advertising sites). In Exhibit 3, you can see that on an annual basis, the “RORI-only Portfolio” underperformed the broader Russell 3000 index over the listed time period. In Exhibit 4, you can see the benefits of adding a completion portfolio (which provides broad exposure to non-RORI sectors) as compared to the annualized return on the Russell 3000, over the same time period.

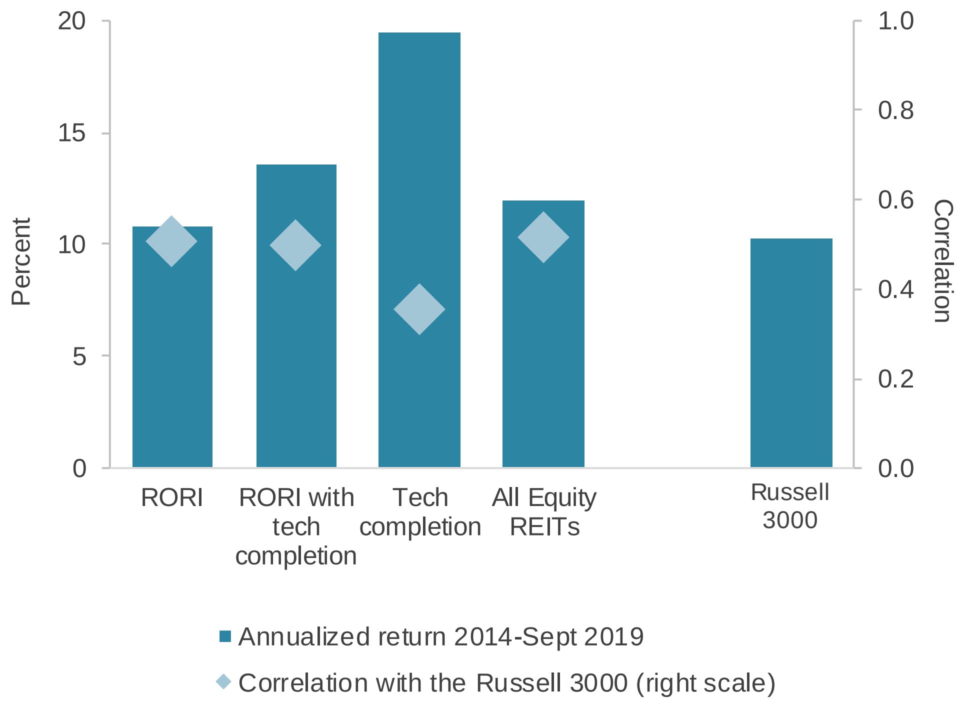
Exhibit 4: RORI + Completion portfolio compared to Russell 3000



Source: Nareit analysis of FTSE Nareit All Equity REITs Index. A completion portfolio consisting of these sectors, weighted by their market capitalization, delivered an annualized total return of 15.6% between 2010 and 2019. A combined portfolio of RORI plus the full completion portfolio, again weighted by market cap, delivered an annualized total return of 12.92% over this period. Past performance is no guarantee of future results. RORI and Completion portfolio returns represent hypothetical, historical data. Please see the end for important legal disclosures.

Exhibit 5 shows the impact of including a completion portfolio of just new tech-related REIT types. The Infrastructure sector was introduced in 2012 and Data Center REITs were incorporated in 2016. Consider the impact of adding these sectors to a core portfolio of RORI REITs for the period 2014 through September 2019 (this completion portfolio consists of the Infrastructure sector from 2014 forward and includes the Data Center sector after it was incorporated in January 2016). Total return on the RORI portfolio was an annualized 10.89% over this period, more than 50 bps higher than the 10.30% return on the Russell 3000 Index. A completion portfolio consisting of the Infrastructure and Data Center REITs, however, provided a total return of 19.53% over this period. The combined portfolio of RORI plus the new tech completion portfolio, with each weighted by market capitalization, yielded 13.59%, or 2.7 percentage points higher than the RORI portfolio.

Exhibit 5: Total Returns and Correlations, REIT Sector Portfolios



Source: FactSet, Nareit. Data from 2014 –2019. Past performance is no guarantee of future results. REIT sector portfolio returns represent hypothetical, historical data. Please see the end for important legal disclosures.

It is important to consider the impact of adding these new sectors on the volatility of the portfolio. The standard deviation of monthly returns on the RORI portfolio was 4.05% over this period. Returns on the completion portfolio consisting of Infrastructure and Data Center REITs were more volatile, however, with a standard deviation of 4.26%. Yet somewhat surprisingly, the monthly volatility of the combined portfolio decreased from to 3.78% (Source: Nareit analysis of FTSE Nareit All Equity REITs Index.)

The reduced volatility in the combined portfolio is because monthly returns on the completion portfolio have a low correlation with the broader equity market portfolio. The correlation of the monthly returns of the RORI portfolio with the Russell 3000 was 51%, similar to correlations of the All Equity REITs Index. The completion portfolio of tech sector REITs, in contrast, had a correlation with the Russell 3000 of 35% from 2014-2019 September (exhibit 5, blue diamonds), and a correlation of 24% since 2016.

The low correlations of the tech sector REITs with the broader market explain how adding a completion portfolio with higher volatility can result in a combined portfolio with lower volatility. Implementing a completion portfolio strategy can reduce overall portfolio volatility due to the increased diversification achieved by investing across a wide range of REIT property types.

Implementing a completion strategy: conclusions

Holding a diversified portfolio can maximize expected investment returns while also reducing risks. A portfolio limited to stocks and bonds fails to achieve the diversification that is possible with a portfolio that includes all available asset classes. In particular, portfolios that include income-producing real estate have achieved higher returns with lower risk over the past several decades (see, for example, Asset Allocation and Fund Performance of Defined Benefit Pension Funds in the United States, 1998-2017, CEM Benchmarking, October, 2019), and REITs are a liquid and cost-effective way for many investors to access real estate.

Investors can achieve additional diversification within their real estate allocation by holding REITs from all property sectors. One can construct a completion portfolio that consists of REITs in the newer and emerging sectors as a complement to the RORI sectors that institutional investors have traditionally focused on. At the same time, the newer REIT sectors can also serve as a complement to private real estate portfolio allocations. Investing in a 21st century real estate completion portfolio with REITs from tech-related property sectors can reduce the overall volatility of portfolio returns. When investing in real estate in the 21st century, it's only natural to consider property types of the 21st century beyond the traditional RORI sectors. These newer property types also have the potential to reduce volatility when combined with a portfolio exposed only to the RORI sector.

Overall conclusion

Providing real estate exposure in DC plans is a growing trend. When doing so, it is important to understand and decide on how much exposure is to be offered, and whether that exposure is in the public or private markets. The diversification benefits of the asset class revolve around consciously assessing allocation percentages within TDFs or white label funds, or the sophistication of the plan participant investor base. After all, while plan participants may have a gut feel on what real estate is about (from owning or renting a home, for example) the asset class does involve housing, yet so much more. Understanding the concepts around completion portfolios provides a base illustration of the many moving parts around real estate investing.

Want to learn more? Our team at FTSE Russell as well as our partners at Nareit are here to answer your questions in-depth. Please contact us at **regionaldirectoremail@ftserussell.com**.

Additional areas of interest:

Are you looking for global REIT exposure? If so, learn more about the FTSE EPRA Nareit Index Series.

Like REITs but want to have global exposure coupled with sustainable investment considerations?
If so, click here to learn more.

About FTSE Russell

FTSE Russell is a leading global provider of benchmarks, analytics and data solutions with multi-asset capabilities, offering a precise view of the markets relevant to any investment process. For over 30 years, leading asset owners, asset managers, ETF providers and investment banks have chosen FTSE Russell indexes to benchmark their investment performance and create investment funds, ETFs, structured products and index-based derivatives. FTSE Russell indexes also provide clients with tools for performance benchmarking, asset allocation, investment strategy analysis and risk management.

To learn more, visit ftserussell.com; email info@ftserussell.com; or call your regional Client Service Team office

EMEA
+44 (0) 20 7866 1810

North America
+1 877 503 6437

Asia-Pacific
Hong Kong +852 2164 3333
Tokyo +81 3 4563 6346
Sydney +61 (0) 2 8823 3521