nuveen
REAL ESTATE

What does the future spell for real estate?

An A-Z guide to investing in tomorrow's world real estate

A-Z

The information provided does not take into account the specific objectives or circumstances of any particular investor, or suggest any specific course of action. Financial professionals should independently evaluate the risks associated with products or services and exercise independent judgment with respect to their clients.

All information is as of 31 Mar 2019, unless otherwise disclosed.

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Risk factors:
Nuveen Global Cities REIT, Inc. is a non-listed REIT, which offers limited liquidity as compared to other products, such as publicly listed REITs. Investors in Nuveen Global Cities REIT, Inc. are not receiving publicly listed shares. An investment in Nuveen Global Cities REIT, Inc. involves a high degree of risk, including the same risks associated with an investment in real estate investments, including fluctuations in property values, higher expenses or lower expected income, currency movement risks and potential environmental liabilities. Please consider all risks carefully prior to investing in any particular strategy, including the following risks for Nuveen Global Cities REIT, Inc.:

- We recently commenced operations and there is no assurance that we will achieve our investment objectives.
- This is a "blind pool" offering and other than the investments described in the prospectus, you will not have the opportunity to evaluate our investments before we make them.
- Since there is no public trading market for shares of our common stock, repurchase of shares by us will likely be the only way to dispose of your shares. Our share repurchase plan provides stockholders with the opportunity to request that we repurchase their shares on a monthly basis, but we are not obligated to repurchase any shares and may choose to repurchase only some, or even none, of the shares that have been requested to be repurchased in any particular month in our discretion. In addition, repurchases are subject to available liquidity and other significant restrictions. Further, our board of directors may modify, suspend or terminate our share repurchase plan if it deems such action to be in our best interest and the best interest of our stockholders. As a result, our shares should be considered as having only limited liquidity and at times may be illiquid.
- The purchase and repurchase price for shares of our common stock is generally based on our prior month's NAV (subject to material changes as described above) and is not based on any public trading market. While there is independent periodic appraisals of our properties, the appraisal of properties is inherently subjective, and our NAV may not accurately reflect the actual price at which our assets could be liquidated on any given day.
- We have no employees and are dependent on Nuveen Real Estate Global Cities Advisors and its affiliates to conduct our operations. Nuveen Real Estate Global Cities Advisors will face conflicts of interest as a result of, among other things, the allocation of investment opportunities among us and Other Nuveen Real Estate Accounts, the allocation of time of investment professionals and the fees that we pay to Nuveen Real Estate Global Cities Advisors.
- We cannot guarantee that we will make distributions, and if we do we may fund such distributions from sources other than cash flow from operations, including, without limitation, the sale of assets, borrowings, return of capital or offering proceeds, and we have no limits on the amounts we may pay from such sources.
- This is a "best efforts" offering. If we are not able to raise a substantial amount of capital in the near term, our ability to achieve our investment objectives could be adversely affected.
- There are limits on the ownership and transferability of our shares.
- If we fail to qualify as a REIT and no relief provisions apply, our NAV and cash available for distribution to our stockholders could materially decrease and we could face a substantial tax liability.
- Our investments in International Affiliated Funds may be subject to currency, inflation or other governmental and regulatory risks specific to the countries in which the Funds operate and own assets.

We live in a world that is constantly changing, heightened by challenging market conditions, evolving investor requirements and increased sustainability pressures. The real estate industry is preoccupied with market cycles, but focusing on the immediate year ahead can come at a cost: opportunities to capture structural growth (or avoid decline) are often missed and investors risk long-term value erosion.

Introduction

Our goal is to deliver investment performance for our clients, by best positioning today's investments and identifying the optimum investments for tomorrow. We believe that firmly positioning ourselves for the future will lead to success, and have therefore embedded a future-thinking culture across our business.

We have used the local and global expertise of our people to identify the trends that will determine the use of and demand for real estate in the years to come. From aging population to zip codes, we have identified the top trends that we believe will have the biggest impact on the future of real estate. These trends have a global impact across demographics, technology, climate, politics and regulation, and are shaping the real estate of tomorrow. Having shared experience, insights and data, and evaluated the impact and certainty of a long list of trends, we refined it to create the following A-Z guide to investing in tomorrow's world of real estate.

We believe that being in touch with tomorrow's world, by being aware and ahead of these future trends, is key to preserving value and growth. It ensures that, combined with a collaborative and responsible approach, we not only identify compelling opportunities, but that we also strive to 'future-proof' our investors' interests.

We want to share insights and collaborate with investors who share our conviction that understanding the impact of megatrends is fundamental to a long-term real estate strategy.

Mike Sales
Head of Nuveen Real Estate and Real Assets

Aging population

Increasing longevity is one of humanity's greatest achievements. It also represents one of our most significant challenges. By 2050, it is projected that over-60s will swell to two billion, centenarians will increase tenfold, and most advanced economies will be as old, or older, than Japan today.*

But where there is change, there are opportunities. Historically, the old have been under-employed and under-utilized, but medical technology offers a long-life dividend. People will be fitter for longer, permitting an extension of middle age and therefore productivity and the retirement age, alleviating the pressure on pension systems.

The prosperous and energetic 'old' of the future will be a source of demand for adapting existing space as well as building new types of real estate. We see an increasing demand for health facilities integrated with residential and leisure, as one set of opportunities, and believe many more will appear.

> ***"An aging demographic will transform economies and societies, posing immense challenges to the health care system, but also opportunities in chasing the 'silver dollar'."***
>
> **Jay Rosenberg**
> *Head of Nuveen Public Real Assets*

*United Nations – Aging in the Twenty-First Century

Building

> *With constant technological advances and changes in occupiers' needs and expectations, buildings will constantly need to adapt to meet the demands of tomorrow's world."*

Chris McGibbon
Senior Managing Director, Head of Real Estate, Americas

Real estate is about the physical interaction between people and places. Customer expectations for the efficiency and experience of that interaction are becoming higher than ever. With technology rapidly impacting the nature of demand for bricks and mortar, we need to invest in - or develop - buildings that are functional and defensive, as well as relevant and progressive.

We seek buildings in resilient locations, underpinned by structural drivers of demand, and then proactively manage those buildings to ensure we meet the requirements of increasingly discerning occupiers.

Cities

Cities have many benefits available over rural areas, such as additional employment and leisure opportunities. Productivity is higher, innovation abounds and populations are younger, more affluent and with a higher level of discretionary spending, even after living costs. As a result, the best cities will grow exponentially and have continually increasing demand for real estate.

We believe that cities in which this growth is managed well, will support investment performance where supply is constrained, forming the basis for a successful investment strategy.

"The rate of urbanization is the fastest in history, proving that now more than ever, people are choosing to live, work and play in cities."

Andrew Rich
Director, Fund Management, Europe

Diversification

> *It is impossible to predict where, when and what type of economic shock will occur next, but getting diversification right may soften the blow."*
>
> **Stefan Wundrak**
> *Head of Research, Europe*

Traditionally, real estate portfolio diversification strategies have been based on past return calculations. We believe this approach is flawed; time series are too short, correlations are not stable over time and economic shocks are too diverse to draw conclusions about the next impact. Each economic shock and recession have unique triggers and different regional impacts.

We believe that diversification should instead be based on the economic structure of cities. The higher the economic, demographic and social differences between cities, the more beneficial a possible diversification effect will be. Therefore, as property is an intricate part of the economic and social fabric of a city, geographical real estate investment diversification can be captured by structural socio-economic variables.

E-commerce

The nature of e-commerce continues to evolve; consumers no longer differentiate between online and in-store retailing, but expect a seamless transition between both. This omni-channel approach will continue to impact the real estate industry, and we will see more physical assets providing an integrated approach through technological innovations.

Retailers are adding tablet screens on shop floors and in dressing rooms, so consumers can order products if they are not available in store. Click and collect services are offered through lockers or collection hubs in shopping centers, and online retailers are taking physical stores.

As retail landlords, we believe it's important to acknowledge that, as technology continues to change our retail environment, retail property will need to remain relevant. It will be aspects such as destination and experience, alongside convenience, which will determine success.

We closely monitor the impact that e-commerce has on the logistics market. A growing number of retail items purchased online that require direct delivery to the consumer, will impact the most desirable locations for logistics units.

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Online retail transactions are incorporating a growing number of connected devices such as PCs, tablets and mobiles."

Angela Goodings
Director of Research, Europe

Financing

“

The real estate finance sector continues to evolve into a more diverse market place, with a broader spectrum of lenders offering new alternatives to borrowers.”

Jack Gay
Managing Director, Head of Debt

Increased regulation in the aftermath of the financial crisis has constrained the lending appetite of banks, traditionally the main source of debt capital for the real estate sector. An increasing number of insurance companies and debt funds have stepped in to fill the gap, and these non-bank lenders provide solutions including longer-term senior debt and mezzanine finance. Non-bank lenders can then support sponsors with commercially attractive, value-added business plans, where banks may be constrained by rigid lending criteria.

For investors in debt strategies, this opens up access to a large investment universe, with a choice of sectors and different positions in the capital structure. Risk and return can be adjusted by selecting senior debt, junior debt or preferred equity investments. Debt will generally benefit from lower volatility than levered and/or unlevered equity investments. We are committed to seeking the best opportunities across the spectrum.

A welcome side effect of the increased diversity of the real estate finance sector, is the additional stability and resilience this brings to the property industry as a whole.

Globalization

The integration of financial and economic markets lure real estate investors to evaluate investments globally, to diversify their portfolios and improve risk-return profiles. We believe it is important for investment managers to respond to this global perspective, while maintaining ‘boots on the ground’ to cater for local expertise.

Meanwhile, globalization increases the brand awareness of consumers, which leads to proliferation of international brands. This gives advantage to retail landlords who have global footprints and are able to leverage their relationships with different retailers, enhancing the international brand offering of their assets.

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The international integration of economies and cultures, arising from significantly increased trades and ideas exchange, has led to an increasingly interconnected and interdependent world.”

Richard Kimble
Managing Director, Portfolio Management, Americas

Horizon thinking

Our industry is preoccupied with market cycles, but focusing on the immediate year ahead comes at a cost. Opportunities to capture structural growth (or avoid decline) are often missed and investors risk long-term erosion of value.”

Austin Mitchell
Managing Director, Head of Global Product & Solutions

Successful ‘horizon thinking’ requires a balance between analyzing the short-term economic factors impacting the year ahead (Horizon 1) and the sustained evolutionary trends ("megatrends") that will materially disrupt markets at a global level over the next 5-15 years (Horizon 3). Re-calibrating to understand these megatrends, such as demographics, technology and climate change, opens the door to an abundance of opportunities for entrepreneurship over the next five years (Horizon 2). We believe that here, the early signs of change can be identified and acted upon, to secure early mover advantage for smart investors in maturing real estate hot spots.

Inequality

The wealthiest 62 people now own as much wealth as half of the world's population, some 3.5 billion people.* Not only are housing prices impacted by global inequality; retailers and retail landlords will also need to adjust to an hourglass economy, with a growing proportion of rich and low-income households, and a shrinking proportion of middle-class households. While luxury and discount retailers could flourish, those that cater for middle-class buyers might suffer. Demand for real estate opportunities needs to be considered accordingly.

The social impact of wealth inequality has also been shown to increase crime and political instability, negatively affecting real estate value.

> ***"The extent to which income and wealth are distributed unevenly among individuals and/or populations impacts real estate at many levels."***
>
> **Nick Evans**
> *Head of Real Estate, Executive Director, Australia*

*Oxfam, January 2016

Joint ventures

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In a faster-paced and more globalized world, joint ventures are necessary to allow real estate-focused partners to achieve more success than by acting alone."

Timothy Horrocks
Head of Continental Europe

As real estate cycles shorten, cross-border investments spike and transaction times diminish, joint ventures are increasingly necessary for real estate investors, operators and managers to access the best deals and achieve optimized returns. Joint ventures allow groups with different qualities to work together to deliver and share benefits such as expertise, knowledge, relationships, diversification, efficiencies, coverage and scale.

Possessing a long track record of establishing successful joint ventures with our investors, operators and development partners around the world, we expect these relationships to be an even more critical element of our strategy in the future.

Kaleidoscope

We seek to identify the markets that will be the most attractive for investment, by analyzing the likely effects of both long-term structural trends (our "megatrends") and short-term economic cycles. These megatrends tap into evolutionary themes that have a global impact across demographics, technology, climate, politics and regulation, determining the future use and demand for real estate in the years to come.

> ***"Like a kaleidoscope, our built environment and the real estate markets in which we operate are constantly evolving and changing form."***
>
> **Natasha Trathen**
> *Associate, Global Product & Solutions*

Low-carbon economy

> ***Since 2016, the focus has turned from policy to the private sector, as businesses step up to deliver on global commitments towards a low-carbon economy.”***
>
> **Abigail Dean**
> *Head of Sustainability*

The Paris Climate Change Agreement constituted a watershed moment for the global business community - and the real estate industry in particular – because it was the inflection point at which the transition towards a low-carbon economy became a certainty.

Now the focus turns to businesses which need to deliver on those ambitions. Buildings are the source of 40% global energy use and 30% greenhouse gas emissions, representing significant potential for delivering cost-effective emissions reductions. All new buildings from 2030 will need to be zero net carbon. This will apply to all buildings by 2050. Real estate that is ahead of the curve on energy efficiency will be more competitive as market expectations shift and will be well protected against the risks associated with the shift towards a low-carbon economy.

It has been proven that the cost of inaction is now greater than the cost of action. There is a growing consensus among real estate investors that demand for buildings with green characteristics will continue to increase, meaning investors need to future-proof their portfolio to ensure their assets do not become obsolete. If carefully planned, low-carbon strategies for buildings can stimulate the growth of new businesses and jobs, as well as contribute to other, equally pressing, social development goals, such as better housing.

Migration

According to the World Bank, the percentage of international migrants worldwide increased by 33% in 2013, with 59% targeting developed regions. Almost half of such migrants are women, which is one of the most significant migrant-pattern changes in the last half century.

Elsewhere, people move or are forced to move as a result of conflict, human rights violations or to escape persecution. The United Nations reported the highest level of forced migration on record in 2014 at 59.5 million. In fact, as of 2015, one person in every 122 is a refugee, having been either internally displaced or seeking asylum.

We also see substantial internal migration taking place within countries, related to agriculture and tourism, or shifts of population into cities (urbanization) or out of cities (suburbanization). China provides a dramatic example of such shifts in recent decades, as people flock to the cities to access opportunities and services. In 2012, half of the population of China lived in a city, a figure projected to rise to 60% by 2020.

Monitoring these patterns will help investors identify opportunities for real estate demand where it outstrips current supply.

> “*Globalization has intensified the demand for workers from other countries to sustain national economies. Economic migrants, often from developing countries, migrate to earn sufficient income for survival, often sending funds home to family members.*”
>
> **Andy Schofield**
> *Director Of Research, Europe*

Net Positive

> ***A new way of doing business, which gives back more to society, the environment and the global economy, than it takes out."***
>
> **Antonia Hass**
> *Senior Associate, Global Product & Solutions*

A number of organizations around the world are setting themselves the ambitious vision of delivering benefits far beyond traditional organizational boundaries. By restoring natural capital and building social capital, businesses can put back more than they take out and thereby create a Net Positive impact. A truly Net Positive approach involves innovation, step change, transparency and partnership.

Real estate presents a tangible opportunity to deliver positive impacts to the natural world and society, engaging communities in the process, influencing policy for positive change and enhancing the good practice we already apply to corporate responsibility and evidence-based reporting. We work hard to embed this approach across our business and believe more real estate investment managers will consider corporate responsibility as part of their daily strategy.

Outlets

The range of brands and level of discounts offered by outlet malls are undoubtedly appealing to the increasingly fashionable, yet value-conscious middle-class consumers. They offer a venue for retailers to manage their inventories and the turnover component of its lease structure also provides retailers with valuable risk aversion, particularly during an economic downturn. An outlet mall is a defensive investment – it is less volatile, weakly correlated with other sectors and more resilient to the longer-term impact of e-commerce on bricks-and-mortar retail sales, as its shopping experience cannot be easily replicated online.

The outlet mall sector has proven itself to be a strong asset class during the past decade. We believe it will continue to demonstrate its performance in the future, as it will remain and arguably become more attractive to consumers, retailers and investors.

> ***"The growing demand for outlets is driven by the middle classes' attraction to obtaining significant opulent offers."***
>
> **Haoran Wu**
> Research Analyst, Europe

Private rented housing (PRS)

"Urbanization across developed and developing world cities is causing a shortage of quality housing. This is creating an opportunity for investors to satisfy structural and economic drivers for the development and management of private rented housing (PRS) a.k.a. multifamily housing."

Mike Keogh
Director Of Research, Europe

The economic rationale for PRS is fueled by strong demand, linked to long-run problems of a lack of housing supply, pricing and affordability concerns. PRS delivered competitive returns for residential investors and bucked the performance of more traditional real estate asset classes during the financial crisis.

PRS is becoming the lifestyle choice of a more flexible, global and discerning millennial workforce. Infrastructure, quality and location determine their accommodation choices and not necessarily the desire for home ownership. Increasing regulation, plus changing demographics and consumer demand for more flexible tenure, will likely lead to an influx of private capital into the residential market.

Quality of life

Urban design has a significant impact on the liveability of cities. Those with a better quality of life will generally attract a stronger and global workforce, driving demand for high-quality real estate. There is a comprehensive body of research that highlights how the design of a building impacts the health, well-being and productivity of its occupants. We believe investors and landlords have a real opportunity to enhance the well-being of the millions of people who work, shop and live in their properties.

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Includes not only wealth and employment, but also the built environment, which can in turn affect physical and mental health, recreation and leisure time and a sense of social belonging."

Richard Hamilton-Grey
Sustainability Manager, Europe & Asia Pacific

Real assets

"Real assets – real estate, infrastructure, agriculture, agribusiness, energy and timber – provide essential services and basic needs for societies."

Jose Minaya
Chief Investment Officer and President, Global Investments, Nuveen

With real assets in finite supply and demographic shifts, such as population growth and urbanization on the rise, we believe demand and value should consequently increase for this asset class. We are witnessing a secular shift towards increased investment in real assets, and as investors increasingly recognize the benefits of this asset class, we expect a meaningful shift in asset allocations to occur.

We are also excited about the interplay between some of these asset classes. For example, infrastructure investments can facilitate transportation of timberland assets; energy and agriculture assets combine in the production of biofuels like ethanol and biodiesel. By embracing these interconnections, we believe there is real opportunity to enhance growth potential over the longer term.

Sharing economy

Sharing economy refers to the shared creation, production, distribution, trade and consumption of goods and services, often enabled through technology and big data. The idea is to facilitate the redistribution, sharing and re-use of excess capacity in human and physical resources, thereby increasing the value of those goods for businesses, individuals, the community and society in general.

Can the phenomenal success of Airbnb and Uber be replicated in the real estate sector and what will that mean for traditional commercial real estate players in the market? We can see a rapid expansion in co-working office space, as pioneers like WeWork expand across the globe. Retail space can now be rented out by the shelf rack on short-term leases, giving vendors flexibility and bespoke access to locations and customers. It is yet to be determined how traditional real estate businesses respond, adapt and adjust.

> ***"Is this the beginning of the end for private ownership? These days collaborative consumption is on everybody's lips and transforming sectors from travel to lending."***
>
> **Kate Hoy**
> *Associate Director, Global Product & Solutions*

Technology

> ***3D-printing robots, artificial intelligence and virtual reality are no longer futuristic concepts; they are changing the business landscape and our everyday lives."***

Jack Sibley
Technology & Innovation Strategist

Reducing labor costs, production inefficiencies and health and safety risks are just a few of the numerous benefits for the real estate and other industries. For example, while cost-efficient technologies such as 3D printing could help resolve housing shortage, Artificial Intelligence is expected to fundamentally change the labor market and the demand for all real estate sectors. The effect of Artificial Intelligence on office, retail and logistics assets will be enormous when considering the possibility that Artificial Intelligence could take over half of all the jobs in the Unites States in the near future.

We continuously monitor technological innovations and their impact on the real estate industry, knowing that some may completely change the landscape in which we operate.

Urbanization

Developing economies in Asia and Africa are expected to see the fastest rate of urbanization over the coming decades. In more mature economies, rural to urban migration ended some time ago; many cities will experience strong population growth, but this is about choice and the increasingly mobile, global workforce. Understanding the unique attributes that make a city desirable is key to unlocking the real estate investment opportunities in developed nations.

Additionally, although trends and drivers may point to a specific city as having potential for growth, it is important to assess whether that city can accommodate that growth via the capacity of its built environment, to densify and absorb capital effectively.

> “*The rate of urbanization is a crude measure of demand for real estate, representing an opportunity for investors and developers to provide homes, shops and offices to accommodate the rapidly growing number of people wanting to live in cities.*”

Alice Breheny
Head of Research

Versatility

This describes our ability to recognize the varying demands placed on real estate over time and being prepared to adapt our thinking and the physical buildings themselves to meet those demands.”

Martin Perry
Director of Development, Europe

History has demonstrated how the use of real estate has changed. Across the world, we see historic buildings constructed as large elite residential sites, now successfully accommodating offices, doctors’ surgeries, shops and small apartments within the same built fabric. We see office buildings converted into high-end residential, hotels, care homes and student housing, as they adapt in response to the market trends and to optimize returns for our investors. Our thinking does not rest with the current or proposed use and form, but instead stretches to recognizing how that could change over time to respond to megatrends and therefore ensure we do not create legal, cultural or physical barriers to that change now or in the future.

Wealth

Growing middle classes in emerging markets are consuming more: modern shopping centers with international brands can now be found from China to Brazil.

Simultaneously, savings rates are high in emerging markets, translating into surging contributions into insurances and pension funds. These savings are leading to the creation of an institutional investment landscape in emerging markets; more of these investors will take the step to a global real estate investment stage.

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As wealth increases, the global middle classes in emerging markets are empowered to heighten demand for real estate."

Gracie Coburn
Senior Associate, Portfolio Management, Americas

XX economy

The "Double X Economy" reimagines the global economy with empowered women, engaged not only as consumers, but as investors, donors and workers."

Mike Sales
Head of Nuveen Real Estate and Real Assets

Warren Buffett once stated that one of the reasons for his success was that he was competing with only half of the population. The "Double X Economy" is a term coined by a professor of the University of Oxford, who wanted to highlight the considerable and interconnected economic contributions of women, as well as achieving the inclusion of women in the global economy. An economy with both genders working, essentially doubles the available workforce, leading to a higher quality of workforce, which enhances economic productivity. The way businesses operate and what new kind of real estate spaces and operation that demand calls for, will undoubtedly evolve from the growing proportion of female senior management and employees.

Youth explosion

Members of Gen Y (also called "millennials") range from 15 to 33 years old. They represent over 25% of the population in the United States and outnumber the baby boomer cohort. Millennials are more diverse than previous generations and have been shaped by technology, as well as challenging economic times. These factors have cultivated their unique perspectives on life and work. As this generation matures, they will increasingly influence all facets of life. Their preferences are already evident in the commercial real estate market, particularly in the retail, multifamily housing and office sectors.

> ***The "Y Generation", or "Gen Y", is currently the largest, most diverse demographic cohort across many Western regions."***
>
> **Keith Jones**
> *Managing Director, Global Products and Solutions, Nuveen*

Zip codes

> ***The localities in the United States that are prospering most are within the "super zips", containing concentrations of highly-educated, high-earning households occupying high-value homes."***
>
> **Melissa Reagan**
> *Managing Director, Head of Research, Americas*

Economic recovery in the United States has varied greatly across localities, even within metro areas. The differences can be identified using zip code data. That data has been used in recent research to craft a definition of a sub-set of zip codes called "super zips" that have concentrations of the highly-educated, high-earning households that have prospered the most in recent years. Our research shows that these super zip locations are associated with a real estate performance advantage that is most significant and positive in the retail sector.

About Nuveen Real Estate

Nuveen Real Estate is one of the largest investment managers in the world with $129 billion of assets under management.

Managing a suite of funds and mandates, across both public and private investments, and spanning both debt and equity across diverse geographies and investment styles, we provide access to every aspect of real estate investing.

With over 80 years of real estate investing experience and more than 550 employees* located across over 25 cities throughout the United States, Europe and Asia Pacific, the platform offers unparalleled geographic reach, which is married with deep sector expertise.

*Includes 287 real estate investment professionals, supported by a further 260+ Nuveen employees.

Source: Nuveen, 31 March 2019.

Contact us

nuveenglobalreit.com

Advisors
800-752-8700

Investors
833-688-3368

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