nuveen
REAL ESTATE

RealAccess

Global insights for real estate investors

ISSUE NO. 03 | WHAT'S INSIDE

Inflation fears *answered*

OPINION PIECE. PLEASE SEE IMPORTANT DISCLOSURES IN THE ENDNOTES.

Active, experienced management will **navigate** 2021 recovery

As vaccination rates increase and economies reopen, real estate will benefit from an expanding economy. We see values stabilizing, leasing activity rebounding and a very strong residential market in the U.S. This progression toward normalcy is gaining momentum and driving optimism.

Some sectors, like health care and industrial, recovered from their initial drops very quickly and are moving full steam ahead, surpassing pre-pandemic levels. Other sectors, such as retail and office, are recovering more slowly and will experience a more disparate recovery as segments of those sectors address their pre-pandemic challenges in order to fully regain strength. As the recovery continues, active managers will need to be selective and invest in assets that offer good value and a compelling growth and income proposition. The rising tide of this recovery will not lift all real estate equally.

In this issue, we examine several trends that drive performance: health care, real estate as an inflation hedge, and actively managing risk with a robust valuation strategy. In fast-paced markets, experience becomes a prerequisite to investment performance. Nuveen's real estate team relies on more than 85 years of experience and has experts on location in more than 25 cities worldwide. We offer our clients the active, experienced management required in times like these.

Sincerely,

Carly Tripp,
Global CIO, Nuveen Real Estate

Real estate recovery

Values of nearly all real estate sectors declined at the onset of the pandemic, but the initial fall was short-lived. At this stage of the recovery, we see areas of opportunity and a progression toward normalcy. However, asset selection is key and that dynamic favors experienced active managers with local expertise.

See "Are we there yet? The state of the recovery in real estate"

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Inflation fears answered

We think rates and inflation are more likely to accelerate than decelerate over the course of 2021 and beyond. Real estate may provide a particularly attractive option for investors seeking to hedge against inflation, as both rents and property values are highly correlated with rising consumer prices.

See "How do rising rates and inflation affect real estate?"

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Healthy medical office

Health care is the fastest growing sector in the U.S. economy and accounts for nearly one-fifth of GDP. As health care evolves in the U.S., we believe more care will be delivered outside of hospitals in cost-effective settings such as medical offices.

See "Medical office sector earns a clean bill of health"

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The price is right

Nuveen's teams maintain a strict valuation discipline in today's fast-paced market. Hear from a portfolio manager on techniques to value new acquisitions, where they are finding value and how they identify warning signs.

See "A disciplined approach to valuations"

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Rising Atlanta

Our research team has analyzed more than 4,000 cities and identified the top 2% we believe are best positioned to benefit from global megatrends. Atlanta is one of these cities.

See "Citywatch: Atlanta"

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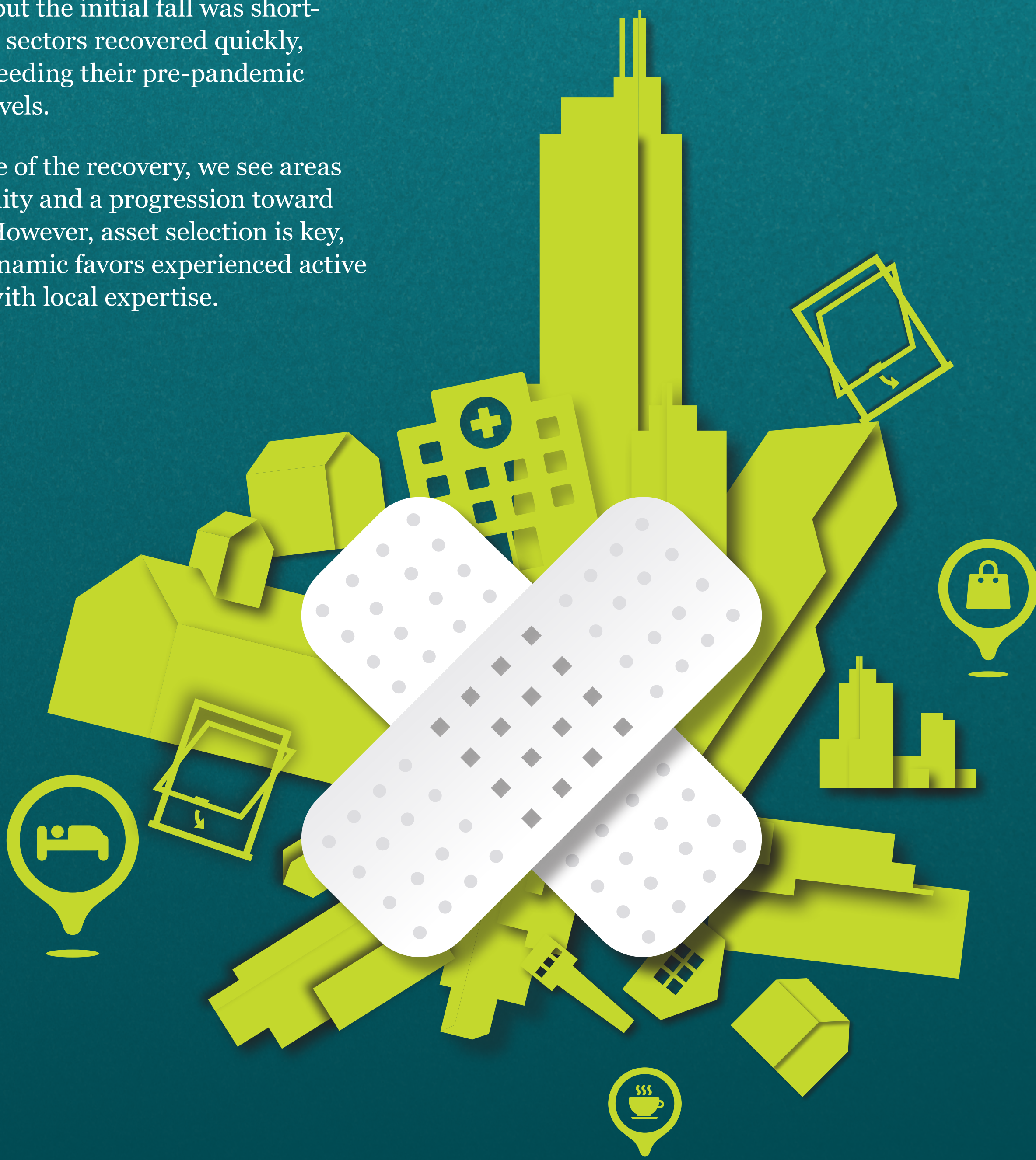
Are we there yet?

The state of the ***recovery*** in real estate

Values of nearly all real estate sectors declined at the onset of the coronavirus pandemic, but the initial fall was short-lived. Many sectors recovered quickly, and are exceeding their pre-pandemic valuation levels.

At this stage of the recovery, we see areas of opportunity and a progression toward normalcy. However, asset selection is key, and that dynamic favors experienced active managers with local expertise.



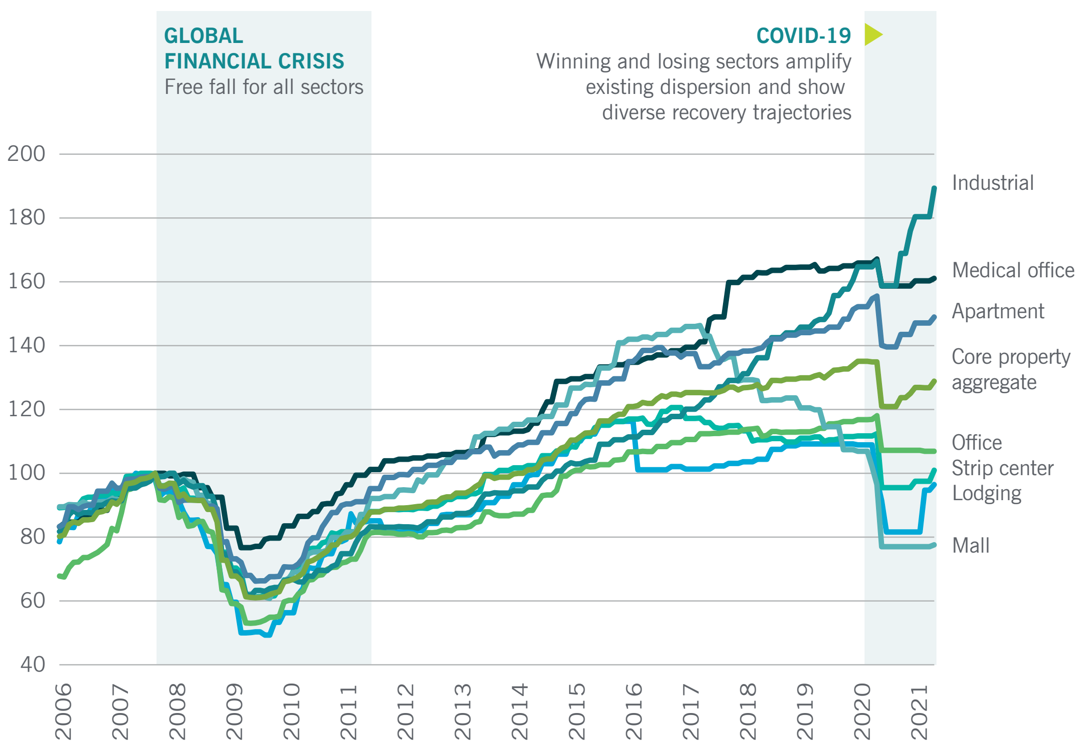
THE PANDEMIC TARGETED CERTAIN SECTORS

The current trajectory is different from the Global Financial Crisis, when all sectors suffered significant valuation declines and took years to recover. As we see it, the main difference between the two crises is the cause of the downturns. The Global Financial Crisis resulted from a capital crisis that expanded into an operational crisis. In contrast, the coronavirus pandemic caused an operational crisis that, thanks to deft fiscal and monetary policies, avoided turning into a comprehensive capital crisis.

This distinction is important. A widespread capital crisis, characterized by a lack of financial confidence and liquidity, negatively impacts all asset classes and entails many years of recovery. Conversely, an operational crisis targets only certain sectors. That is certainly the case in the current recovery. Sectors like health care, industrial and housing were fast to bounce back. Other sectors more directly hit by the economic shut-downs, like retail and office, have been slower to recover.

Real estate sectors are recovering at different rates

Commercial property price index



Data source: Green Street, 01 Jan 2006 – 31 Mar 2021. **Past performance is no guarantee of future results.** Sectors represent components of the Commercial Property Price Index.

WHAT LIES AHEAD?

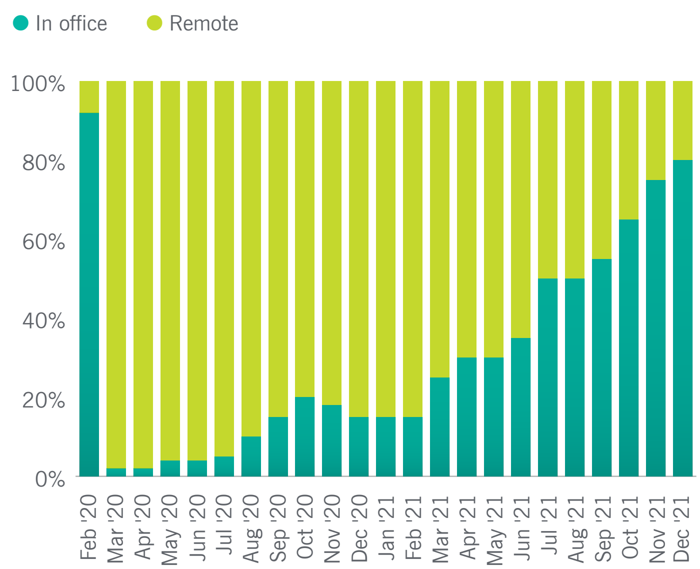
This dynamic helps explain the near-term prospects for real estate. The sectors that were operationally successful during the trough of the pandemic are highly sought after by investors and have already exceeded pre-pandemic valuations. We expect this momentum to continue.

However, investors remain skeptical about sectors where full utilization has not yet returned, such as traditional office buildings and shopping malls. Valuations remain challenged in these sectors.

Widespread vaccinations are critical for these stressed sectors and, fortunately, distribution is well underway. Employers are expected to begin encouraging employees to return to offices full-time and retail properties are lifting restrictions on density, mask-wearing and operating hours.

Return to work will benefit the office sector

Expected U.S. office re-entry timeline



Data sources: JLL Strategic Consulting Group survey of Fortune 500 office users, The Wall Street Journal.

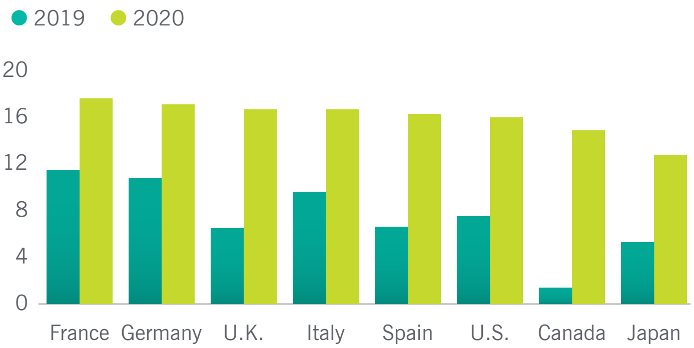
Despite a gradual return to normalcy, investments in these sectors will still require in-depth analysis, as structural headwinds prior to the pandemic have not yet receded. For example, office assets that do not feature the latest appealing amenities, healthy and comfortable layouts and environmentally friendly features were challenged before the pandemic and will be even more so when employees return to the office. Similarly, retail assets lacking needs-based, luxury or experiential offerings will face potential challenges when shoppers resume traditional spending patterns.

SAVINGS OFFER REASONS FOR OPTIMISM

Consumers spent the year of the pandemic staying home and saving money. Expenditures on commuting costs, leisure activities and annual holidays plummeted in 2020, and many consumers received relief payments from record fiscal stimulus packages. As a result, savings ratios more than doubled in some countries.

Consumers bulked up their savings during the pandemic

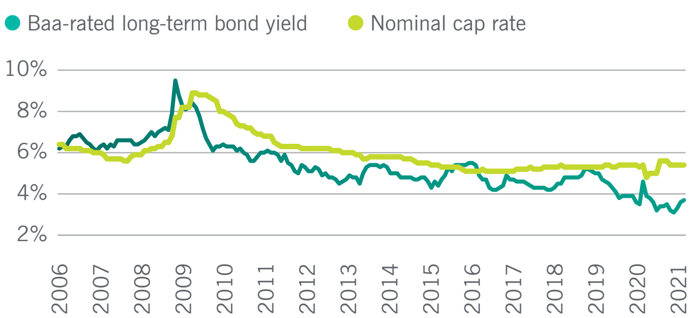
Personal sector savings ratio (%)



Data source: Macrobond, 2021.

REAL ESTATE PROVIDES INCOME OPPORTUNITIES

Investing in the current real estate environment provides an exciting opportunity to benefit from the momentum of the operationally successful sectors and leverage the short-term undervaluation of challenged sectors. At the same time, commercial real estate continues to provide investors with potentially tax-efficient, stable annual cash flows that are attractive, particularly relative to bonds.



Source: Green Street; Nominal Cap Rate of Major Sectors, 31 Mar 2021.
Past performance is no guarantee of future results.

6%

GDP growth expected

Savings reservoirs can be tapped to support pent-up demand for housing, e-commerce, clothing, entertainment and travel. U.S. GDP is expected to benefit from this spending surge, with more than 6% growth expected in 2021. We expect that activity will re-inflate any areas of flagging real estate and drive growth in new segments of the market.

How do ***rising rates and***

As we emerge from the pandemic-induced recession, central banks and governments have implemented massive monetary and fiscal stimulus policies to support re-opening. As a result, inflation risks are starting to feel more real. Real estate investors are asking how the potential for rising inflation and rates might impact their returns.

We believe rates and inflation are more likely to accelerate than decelerate over the course of 2021 and beyond. But, historically, higher interest rates have not necessarily resulted in lower property values and total returns.

The relative stability of real estate during the COVID-19 pandemic was the result of stable income generation during times of price volatility. This inflation and rate outlook highlights the importance of diversification and a highly active and localized approach to real estate investing.

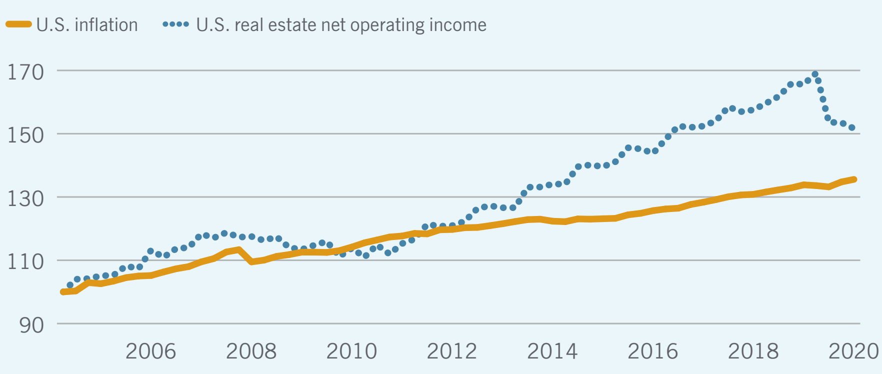
Real estate may provide an inflation hedge

Real estate may provide a particularly attractive option for investors seeking to hedge against inflation, as both rents and property values are highly correlated with rising consumer prices. Most long-term leases have built-in rent escalators that are tied to inflation, which protects the income generation of in-place leases. New leases allow investors to capitalize on rising market rents.

The sharp increase in lumber and other building costs will constrain new supply to some degree, which will further support real estate values. While rising long-term interest rates may impact real estate values, the net impact largely depends on the speed at which long-term rates increase and the driver of those increases. If increases are due to increased economic growth expectations, the overall impact of rising rates and a reflationary environment should be positive for real estate.

Higher interest rates have not meant lower property values and total returns

U.S. real estate income and inflation growth



Data source: Real estate net operating income: NFI-ODCE Index. U.S. Inflation: Moody's Analytics, 2020. **Past performance is no guarantee of future results.**

inflation affect real estate?

We believe rates and inflation are more likely to accelerate than decelerate over the course of 2021 and beyond.

AFTER ANALYZING THE EFFECTS OF THE PANDEMIC ON THESE TRENDS, NUVEEN'S REAL ESTATE EXPERTS SEE FOUR KEY OUTCOMES:

At this point, our outlook indicates that rates and inflation are more likely to accelerate than to decelerate over the course of 2021 and beyond.

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The current outlook highlights the importance of diversification and a highly active and localized approach to real estate investing.

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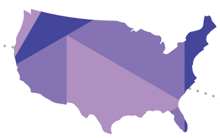
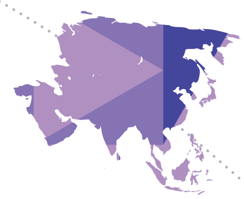




Results may vary

The impact of inflation differs by country and property type.

United States

Residential real estate leases are mainly short term, allowing for quick adjustment to new price levels. U.S. housing has historically been a low-risk segment, and its lower expected sensitivity to inflation risk is no exception.

While the industrial sector has intermediate- to long-term leases, many properties have below-market rents due to strong rent growth across the sector, even in a low inflationary environment. The sector is well-positioned to benefit from inflation driven by economic growth due to the expanding need for warehouse space.

Office properties also typically have intermediate- to long-term leases, placing the sector at greater risk. The medical office and life science segments face similar inflation risks with longer leases, but have a stronger fundamental operating environment than traditional office, making them more defensive.

The retail sectors carry greater inflation risk. The leases are intermediate-term and they rely on retailer operations, which have been challenging recently. The grocery-anchored segment offers a unique reprieve. Greater inflation would improve the grocery-anchor's finances while the small-shop rents can adjust relatively quickly.

Asia Pacific

Japan is the only Asia Pacific residential market with a deep and liquid pool of multifamily assets. The traditional lease structure means rising inflation has little bearing on rental growth prospects.

In the office market, a rise in inflation benefits landlords, as the typically shorter lease term of three years allows for reversion to market. The exception is the Australian market, where step-up rents are inflation-linked and leases are generally intermediate- to long-term.

Retailers of non-discretionary goods such as groceries should benefit from rising inflation or inflationary expectations brought about by a recovery in wages and domestic demand, which in turn allows for

Data source: PMA. Data indexed to 100 in 1995.

greater rental affordability. But the discretionary and luxury segments are still likely to be fundamentally challenged, mainly from e-commerce penetration in markets such as China, South Korea and Hong Kong.

Industrial rents should benefit disproportionately from rising inflation, as margins improve for e-commerce and third-party logistics operators. This is especially true in markets with an undersupply of modern distribution or last mile facilities such as Seoul and regional capital cities in Japan.

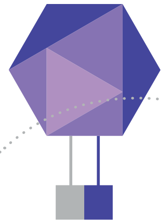
Europe

For the industrial sector, a burst of higher inflation should benefit landlords in the short term. This shift would refresh income returns that have been gradually eroded since 2010 due to lower cap rates and only moderate market rental growth. However, rental growth for logistics historically has not kept up with inflation over longer periods.

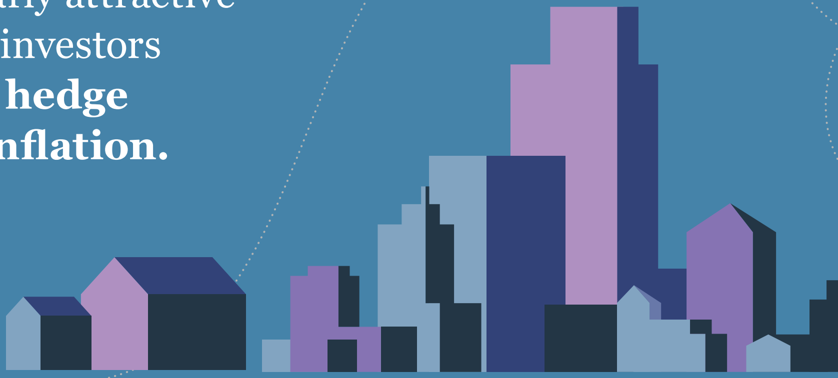
In the office sector, rents are wholly or partly uprated by Consumer Price Index inflation, and higher inflation would benefit the operating income of landlords.

Retail markets should benefit from rising inflation as global pent-up demand outstrips supply in some consumer sectors (namely hospitality and apparel), resulting in higher prices and healthier occupier balance sheets.

The housing sector proves to be one of the more defensive asset classes, largely linked to its income granularity and its essential nature, and should benefit from rising (and steady) inflation from a stronger economy.



Real estate may provide a particularly attractive option for investors seeking to **hedge against inflation.**



Medical office sector earns a clean bill of health

Health care real estate should continue to grow in importance over the coming decades. Health care is the ***fastest growing sector*** in the U.S. economy and accounts for nearly one-fifth of GDP, according to the OECD Health Statistics.

These medical facilities in the U.S. recovered more quickly than many sectors of real estate during the pandemic, due to the essential services they provide. We expect that momentum to continue as the health care sector transforms over the coming years.

MEDICAL OFFICES PLAY AN INCREASINGLY IMPORTANT ROLE

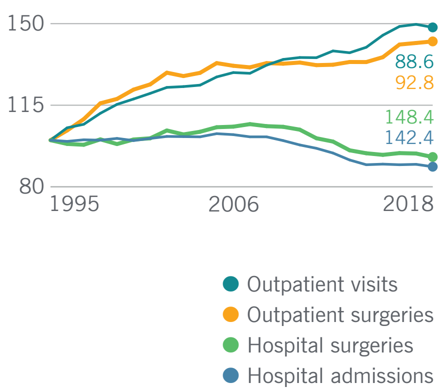
As health care evolves in the U.S., we believe more care will be delivered outside of hospitals in cost-effective settings such as medical offices. This is especially true for those that offer higher acuity services that cannot be delivered via telemedicine.

Higher acuity medical offices have historically boasted the strongest rent growth in the medical office sector. We believe these facilities will be insulated from a potential increase in telehealth going forward. This includes offices that provide traditional outpatient treatments like dental care and immunizations, as well as procedures previously provided in a hospital setting, such as hip and knee replacements, chemotherapy and radiology.

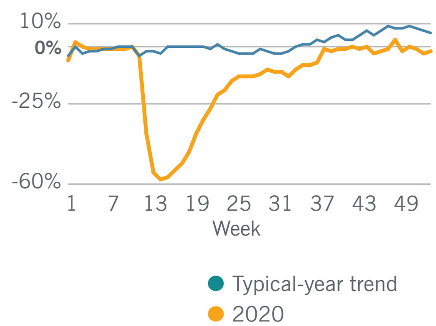
This shift is part of a nationwide effort to reduce health care costs, and is driving outpatient medical office demand. Hospital revenue from outpatient services has nearly doubled, from 28% in 1994 to 49% in 2018.

Like so many trends, the shift to telehealth accelerated during the pandemic. But even this change does not override our outlook for the sector. Medical office properties that cater to higher acuity procedures are most defensive to the increased trend of telemedicine, e-health and home health care.

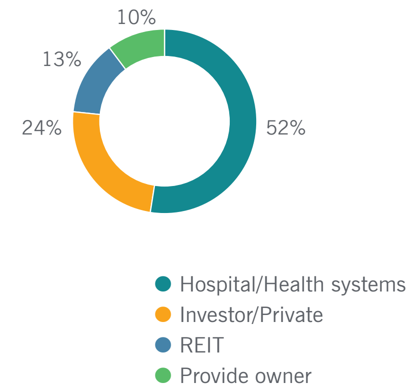
More and more health care is being delivered outside of hospitals*



Outpatient visits have withstood the challenge from telehealth**



Private ownership of medical offices will likely increase***



* Data source: American Hospital Association *Trendwatch Chartbook*, 2020. Growth of 100 since 1995. Most recent data available.

** Data source: Commonwealth Fund, February 2021. Data represent a percentage change in the number of visits in a given week from the baseline week (Week 10, or of 01 Mar 2020). "Typical year" data from 2016 to 2019 were also calculated as a percentage change from the baseline week – week 10 – in those years. Data are equally weighted across the four years.

*** Data source: Revista, December 2020.

Investing in the medical office sector requires a strategy built on both industry experience and collaboration with health care providers. We look for investments that are:

- **Build-to-core strategies** for development of medical office, backed by long-term credit tenancy of health care providers.
- **Conversion opportunities** from traditional office or retail to medical office to meet increasing health care demand and drive returns.
- **Direct collaborations with the demand source,** including hospitals and universities, to capitalize on complex health care ecosystems and underlying long-term demand.

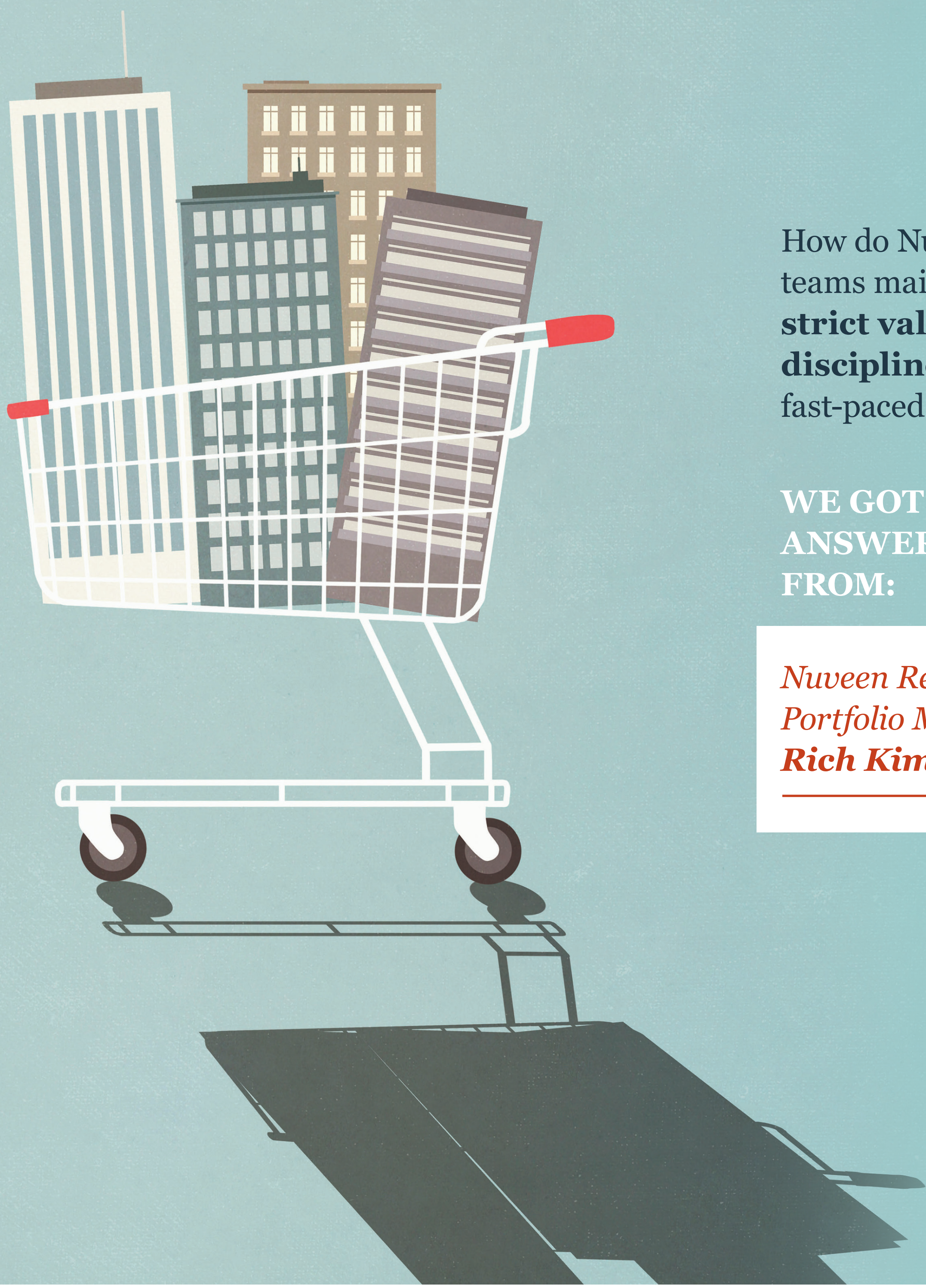
MEDICAL OFFICE PERFORMANCE AND OWNERSHIP

While we believe the pandemic will not negatively affect medical office values in general, it could cause hospitals and health systems – the largest owners of medical office properties – to consider selling their medical office holdings. These hospitals are focused on their core business, and they are anticipating shifting services driven by insurance models in the United States.

Demand is growing for new medical office services, as well as life science centers that conduct medical testing, research and development. Today, only a quarter of these properties are privately owned, but we expect that percentage to increase materially over the next decade.

The pri¢e is right

A disciplined approach to valuations



How do Nuveen's teams maintain a **strict valuation discipline** in this fast-paced market?

WE GOT ANSWERS FROM:

Nuveen Real Estate Portfolio Manager ***Rich Kimble.***

Richard M. Kimble, CFA
Portfolio Management, Americas

22 yrs. real estate industry experience
MBA University of North Carolina, Chapel Hill

Q: *Which sectors are exhibiting high valuations, and how are you navigating those areas?*

RK: Investors must be very careful if they attempt to time the market. That being said, it is important to understand when certain sectors and markets are fully priced.

For example, strong fundamentals in the industrial market are driven by increased reliance on e-commerce and changes in supply chain management. Our local teams of industrial specialists frequently see deals before they are offered to the market, so we can avoid competitive bidding processes. We understand the operational nuances in our target markets and recognize which tenants will desire a particular property.

Similarly, the multifamily sector faced compressed rent growth and increased leasing commissions in 2020, but now pricing seems to be underwritten at a full economic recovery. Sunbelt cities saw population growth in 2020, which is projected to continue over the medium term, promoting rent growth to support pricing in this sector.

Q: *Where do you see undervalued opportunities?*

RK: Certain segments of the retail sector are challenged due to oversupply, low demand for brick and mortar space and tenants with poor balance sheets. However, we see opportunity in well-located, grocery-anchored centers with a dominant anchor. This area has proven resilient during the pandemic, as the tenants cater to needs-based demand and are largely insulated from e-commerce threats. This speaks to the importance of asset selection. By picking assets that can fulfill a community's needs, tenant interest will likely follow.

We are also watching boutique medical office and life science properties priced under $20 million. These assets may have strong fundamentals but fall under the radar of larger investors. Additionally, we believe these properties offer exit optionality. We can sell as individual assets or package as part of a larger portfolio, often including an attractive portfolio premium.

Q: *How do you determine a price point for a new acquisition? And a sale target?*

RK: We use a number of techniques to value new acquisitions, including analyses based on underwritten discounted cash flows, in-place and projected income yields, sales comparables and replacement costs. Gaining confidence in a new acquisition's appropriate price requires a triangulation among these different measures, together with knowledge of the underlying assumptions. This is where local market expertise meets global macro views.

Regarding a sales target, core direct real estate is typically held long-term. Thus, we usually underwrite a 7- to 12-year hold. However, we complete a hold-sell analysis annually to determine whether the maximum value has been extracted from the asset, a sign that sale proceeds could be reallocated to more strategic opportunities.

Q: *How do you find opportunities in promising market segments?*

RK: Our structural advantage for deal flow in a competitive environment lies in our sector-based, boots-on-the-ground acquisitions teams across 26 global offices. This local focus mean the team has deep relationships with brokers, sellers, developers and tenants. This also improves pricing execution, increases transparency into an on-market deal and generates off-market acquisitions.

Q: *What are the warning signs for downside scenarios?*

RK: Our extensive underwriting process examines various downside scenarios that expose potential weak spots, including asset- and market-level risks. These scenarios help triangulate a maximum bid that we will not exceed. Our internal and third-party due diligence examines the physical, environmental, structural and legal aspects of the transaction to uncover, and typically mitigate risks. If a material risk cannot be mitigated, we will walk away from the deal.

CityWatch | Atlanta

Rising Atlanta

Our research team has analyzed more than 4,000 cities and identified the top 2% we believe are best positioned to benefit from global megatrends. Atlanta is one of these cities:

Fiscal recovery
Atlanta is well positioned for COVID-19 recovery, due to strong net migration, low projected unemployment, low concentration of small business employment and a relatively stable fiscal outlook.

Growing population
Atlanta added almost 718,000 residents from 2010 to 2019, the fourth-fastest-growing U.S. metro area.

Employment opportunities
15 Fortune 500 companies are globally headquartered in Atlanta, including Coca-Cola, The Home Depot and Delta Air Lines. High-tech employment grew at least 3% per year from 2011 to 2016.

Academic presence
Emory University and Georgia Tech comprise more than 41,000 undergraduate and graduate students.

Urban renaissance
The Atlanta Beltline is a 22-mile transportation corridor used by about 2 million people per year, luring more than $6.2 billion in private construction investment.

Connected
Hartsfield-Jackson Atlanta International Airport claims to be one of the busiest in the world, serving more than 100 million passengers per year since 2015.

Population growth (2010–2019)

718,000

High-tech employment growth (2011–2016)*

3%

Construction investments

$6.2B

* Source: Nuveen Real Estate; *Atlanta Business Chronicle*, Feb 2021; and Moody's Analytics, 2017.

Atlanta

PLEASE SEE IMPORTANT DISCLOSURES IN THE ENDNOTES.

For more information, please visit nuveen.com.

Endnotes

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All information has been obtained from sources believed to be reliable, but its accuracy is not guaranteed. There is no representation or warranty as to the current accuracy, reliability or completeness of, nor liability for, decisions based on such information and it should not be relied on as such. For term definitions and index descriptions, please access the glossary on nuveen.com. **Please note, it is not possible to invest directly in an index.**

A word on risk

Real estate investments are subject to various risks, including fluctuations in property values, higher expenses or lower income than expected, and potential environmental problems and liability. Please consider all risks carefully prior to investing in any particular strategy. A portfolio's concentration in the real estate sector makes it subject to greater risk and volatility than other portfolios that are more diversified and its value may be substantially affected by economic events in the real estate industry. International investing involves risks, including risks related to foreign currency, limited liquidity particularly where the underlying asset comprises real estate, less government regulation in some jurisdictions, and the possibility of substantial volatility due to adverse political, economic or other developments.

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REAL ESTATE

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