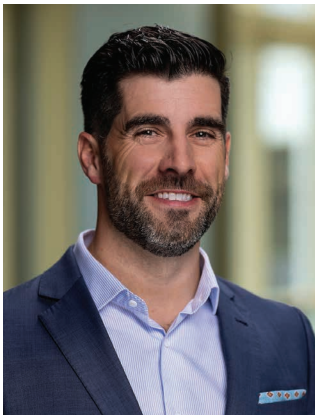
KEYNOTE INTERVIEW

Drilling down with data to the local level



A data-led approach to global cities highlights growing populations, new industries and forward-thinking city governments, says Nuveen's Donald Hall

There are several active trends driving real estate performance in global cities, which Nuveen Real Estate seeks to identify with its Tomorrow's Cities framework. This research utilizes a host of metrics including population growth and livability to identify potential cities for long-term investment.

Today, numerous cities around the world are bouncing back after the pandemic, with growing populations, increased mobility and rising tourist spending. Meanwhile, cities chosen by technology firms and advanced manufacturing companies are in line for substantial growth, according to Donald Hall, global head of research at Nuveen.

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Q What should property investors look for when determining target markets around the world?

At Nuveen, we have a robust process to identify our target cities, which we call "Tomorrow's Cities." We essentially start with all global cities and then apply various filters.

For example, to assess scale, productivity and affluence, we look at GDP, retail sales, household incomes – and the growth of those factors over time. We include data on soft factors such as connectivity, innovation, livability, youthfulness and culture via metrics like international flights, spending on recreation, access to medical and health care, crime rates and education. We factor in sustainability considerations through data on air quality, climate change vulnerability and grid carbon intensity.

Using this data, we filter down all global cities to about 90 that we feel will be most resilient over the long term – the top 2 percent. Those cities are our sandbox, and then we evaluate additional datapoints to determine which of those cities offer the best investment opportunities. We incorporate nearly 40 different data sources into our process globally, including our own internal data. Using a mix of approaches, we will tactically enter and exit cities throughout the cycle based on our projected returns, which vary due to ever-shifting real estate fundamentals and capital markets.

Q How does all this data impact investment strategy and decisions about which cities to invest in?

We use our internal data sources to help identify risks and opportunities in particular cities at an early stage, which informs our entry and exit strategy.

For example, we have been early in exercising caution in US Sun Belt cities, which experienced outsized growth and returns over the last cycle and throughout the pandemic.

However, early last year we noted the data showed a coming mismatch in supply and demand and multifamily pricing which was not reflective of mounting risks, and we adjusted our underwriting assumptions accordingly.

While we still like these fast-growing markets in the long-term, in the short-term we have found opportunities in some traditional gateway cities. Multifamily markets like Chicago and New York haven't been in vogue with investors in recent years, but demand is holding up relative to supply and there are good opportunities, particularly on a risk-adjusted basis.

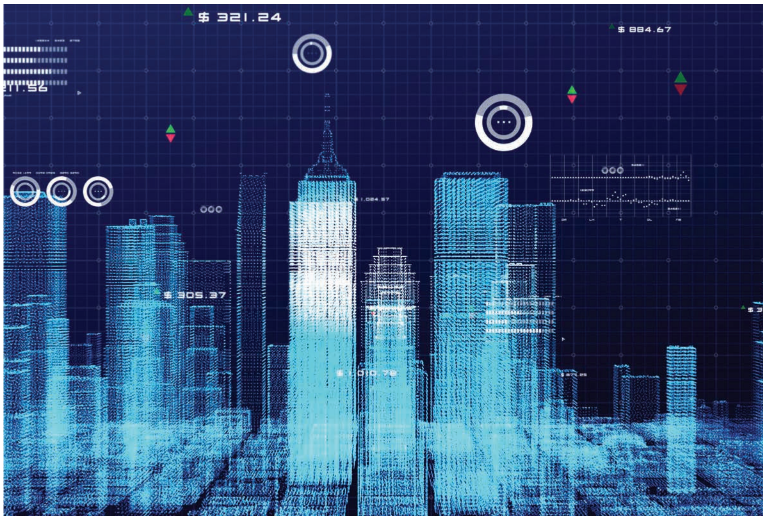
There have been several cities globally which have rebounded since the pandemic. Tokyo and Osaka have both benefited from reopening, with young professionals returning to both cities to live and work, and they have been further buoyed by an increase in international tourism.

Sydney and Melbourne have both experienced good population growth due to increased overseas migration. The return of international students is benefiting the purpose-built student accommodation sector there as well.

Within Europe, we are focused on markets which have been more resilient. Though the German economy is in recession, it is probably the only country where all its major office markets have vacancy rates below long-term averages. Again, that is an example of us analyzing the data and determining where fundamentals are holding up better.

Q Do you see many distressed opportunities in cities around the world?

We are seeing some distress, but I think it is less than people expected. Broadly, leverage has been lower this cycle because of lessons learned as well as regulations that came out of the global financial crisis. The office sector is experiencing some distress, which we continue to monitor for opportunities



Q Are there any cities you are monitoring as up-and-coming, that are just coming on investors' radar screens?

Our global filtering process drives a preference for larger cities, but we continue to monitor all markets so that we can spot potential up-and-coming cities as well. Within the industrial sector, the shift in supply chains due to China's trade dispute seems to be favoring cities along the Mexican and Canadian borders, such as Laredo, Texas, and Monterey, California. We are also seeing benefits in US East Coast ports like Savannah, Georgia; Charleston, South Carolina; and Norfolk, Virginia, as global logistics firms seek supply chain diversification. Within multifamily, smaller cities like Huntsville, Alabama, have been experiencing demand growth that's outpacing nearby cities, and Jacksonville, Florida, is seeing momentum in population growth, particularly from higher-earning fields.

Within Europe, we don't see as much movement, so cities don't tend to be up-and-comers through population growth – although there are cities being revitalized by technology. Fukuoka in Japan continues to benefit from strong human and capital inflows, which is leading to opportunities in logistics and multifamily. There are numerous examples of emerging cities with rapid urbanization growth, but many lack transparency or depth of opportunity. Our focus in Asia-Pacific primarily remains on the larger principal cities like Tokyo, Seoul and Melbourne.

but which has not been a major acquisition target for us.

At some point, cities like San Francisco, where office vacancy is currently north of 20 percent, will become interesting. Investor and media sentiment is extremely negative and there are real issues the city needs to address. However, this is not the first time San Francisco has experienced a crisis within its office market. The city endured the volatility created by the tech boom and bust, which caused vacancy to spike from 1 percent to 16 percent in the early 2000s, and the GFC, which saw vacancies rise from 9 percent to 13 percent there.

There may not be opportunities yet, but there are still reasons to remain optimistic for a recovery. San Francisco is a global hub for AI companies due to the clustering of tech talent leading innovation. According to *Forbes*, the city is home to 40 percent of the most promising AI companies, which is more than any other city in the US – and actually more than any state. And according to JLL, AI companies have already tripled their footprint in the city since 2016 and there is close to a million square feet of active office requirements from AI companies.

It may be a challenged market today, but the outlook for the AI sector combined with significant repricing may create compelling investment opportunities at some point in the next few years.

Q Which cities are embracing green or essential technology, and how will this boost those cities' long-term prospects?

South Korea is obviously a huge player in chip manufacturing, which has benefited Seoul, and the government is now providing incentives to transition its semiconductor industry toward data processing to reap the benefits of AI. And it is a city we like already with a strong domestic economy and a sturdy labor market.

Columbus, Ohio, is a particularly interesting US city that has continued to grow. Intel is investing $20 billion into two semiconductor chip facilities there, and those projects have led to a 10 percent uplift in construction payrolls over the past two years. Honda, which is the third-largest employer in that market, is investing hundreds of millions of dollars to make Ohio its North American EV hub.

Columbus is not currently on our Tomorrow's Cities list, but one we will be closely monitoring. These tech and green initiatives are driving high-value job growth, sparking innovation and leading to in-migration, and as a result will yield real estate opportunities. BMW is investing $1.7 billion in Spartanburg, South Carolina, to expand electric vehicle manufacturing there, and Hyundai is investing $5.5 billion to manufacture batteries in Savannah.

Companies on both sides of the Atlantic are keying in on locations with available and skilled labor, underused infrastructure left behind by heavy industry, available land and subsidies. Intel alone is planning to spend more than €33 billion in R&D and manufacturing in the European Union, for example. Magdeburg and Dresden in Germany, Turin in Italy and Grenoble in France are other cities getting a boost from chip and battery manufacturing.

Overall, Europe is leading the way on green initiatives. For example, Copenhagen aims to become the world's first carbon-neutral capital city, while Oslo, Lisbon and Amsterdam are working to reduce greenhouse gas emissions in the coming years. When you think back to our Tomorrow's Cities framework, you can imagine some of these cities really making further headway in livability, sustainability and resilience metrics.

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Q Looking forward, what changes are needed to make lagging cities better performers and for successful cities to maintain their status?

The pandemic proved many jobs can be done from nearly anywhere, and I believe local governments are starting to recognize that. We saw tremendous growth outside of our larger cities as people sought out lower cost of living and better quality of life. I think the smartest local governments will shift from a focus on luring companies to luring individuals through a mix of incentives.

Some of it is the basics: improving school districts and making cities safer, but also providing dynamic environments where people want to live and can afford to live.

This might involve rethinking zoning to allow for more housing so people can live in the city where they work. They also need to recognize that sleepy office blocks are often better reimagined as mixed-use neighborhoods. That shift will require partnerships between forward-thinking local governments, employers and the real estate sector. ■