

The case for real estate in Asia

Asia is at a crossroads of cyclical and secular tailwinds that could drive robust growth in its real estate sector going forward.

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As markets forge further into the mid-cycle, they are getting buffeted by short-term turbulence - one of the results of rising rates and policy normalization amidst an uncertain environment of higher inflation. We continue to expect inflation to moderate as labor supply increases and spending shifts from goods to services with the fading of the pandemic, but a relatively brisk pace of inflation is likely to persist for the near-term and the rest of this cycle.

We have been highlighting some key approaches for investors to navigate this environment. Besides avoiding cash and relying on cyclical equities to drive returns, investors can look to real assets to play an essential role in portfolios as a natural inflation hedge and alternative source of yield. Broad returns are likely to moderate and public markets could remain volatile, highlighting the benefits of less correlated sources of return such as real estate. Furthermore, real estate is an oft-overlooked way to gain exposure to structural growth opportunities, and Asia is at a crossroads of cyclical and secular tailwinds that could drive robust growth in its real estate sector going forward.

REAL ESTATE HAS LOW CORRELATIONS WITH GLOBAL BONDS AND EQUITIES

Quarterly return correlations

2008 - 2020	Global Bonds	Global Equities	U.S. Core RE	Europe Core RE (Continental Europe)	APAC Core RE
Global Bonds	1.0				
Global Equities	0.3	1.0			
U.S. Core RE	-0.1	0.1	1.0		
Europe Core RE (Continental Europe)	-0.2	0.3	0.8	1.0	
APAC Core RE	-0.1	0.1	0.8	0.7	1.0

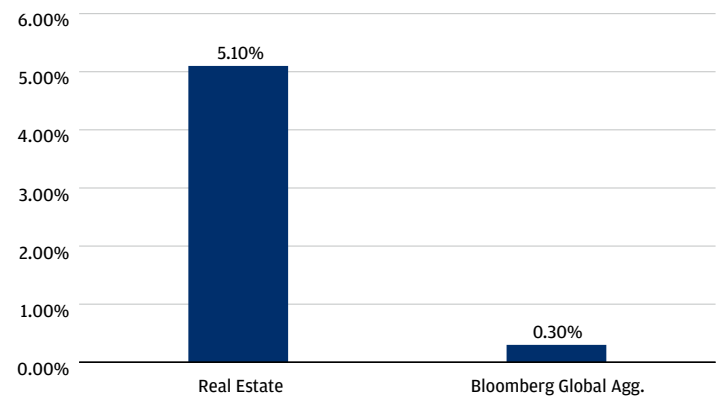
Source: MSCI, Bloomberg Finance L.P., Burgiss, NCREIF (National Council of Real Estate Investment Fiduciaries), Cliffwater, HFRI, J.P. Morgan Asset Management. All correlation coefficients are calculated based on quarterly total return data for the period June 30, 2008 - June 30, 2021. Data is as of June 30, 2021.

The role of real estate in your long-term portfolio

Real estate can be a valuable tool for constructing diversified and resilient portfolios across market cycles. Real estate typically provides a natural inflation hedge due to regular lease resets. Depending on the specific type of investment strategy, they may also provide an alternative source of stable cash yields. This is a key feature which complements traditional fixed income allocations within portfolios, which are likely to remain under pressure in a volatile rising-rate environment with low starting yields.

REAL ESTATE HAS HISTORICALLY OUTPERFORMED BONDS IN RISING RATE ENVIRONMENTS

Median annualized return in rising rate periods, 1978-2020, %

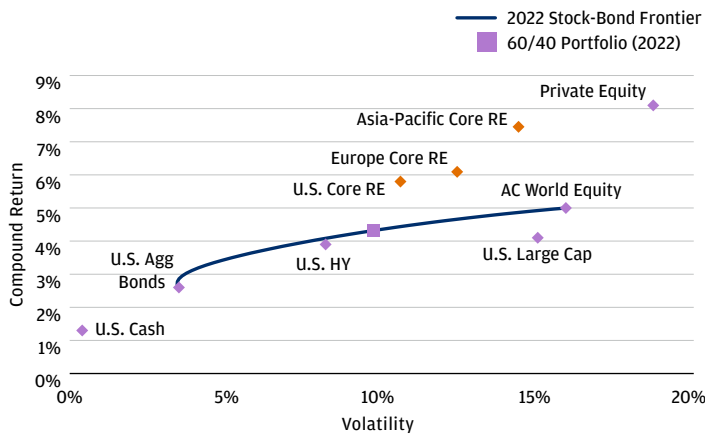


Sources: J.P. Morgan Asset Management, Pertrac. Composite returns are net of manager fees, gross of J.P. Morgan fees. NCREIF Property Index is updated quarterly. Data is as of September 30, 2020.

While real estate (particularly residential) has already forged a strong recovery from the depths of the pandemic, they could continue to deliver robust risk-adjusted returns in the medium-term due to their “inflation protection” features amidst a rising rate environment, while benefitting from continued economic growth. Over the longer-term, our LTCMAs are projecting that real estate can outperform traditional 60/40 portfolios. These characteristics make real estate a compelling consideration as one of the essential components of long-term portfolios.

REAL ESTATE COULD OUTPERFORM A TRADITIONAL 60/40 STOCK-BOND PORTFOLIO

Expected volatility and long-term returns for real estate sectors (USD) compared to the efficient frontier for a 60/40 portfolio, %



Sources: J.P. Morgan Asset Management Long-Term Capital Market Assumptions 2022. All returns (in USD) based on projections for 10-15 years. Volatility measures include de-smoothing for private assets to ensure comparability with listed assets. Data is as of September 30, 2021.

A unique way to position for structural growth opportunities

An interesting and oft-overlooked feature of real estate is that it can be an alternative way to allocate to structural growth opportunities, many of which have been accelerated by the pandemic. COVID-induced and secular population shifts in various parts of the world have major implications for residential real estate. The continued boom in global e-commerce and trade in goods necessitates more investment into logistics and production facilities, especially as corporates seek to strengthen supply chains. Continued growth in megatrends such as technology and healthcare innovation is underpinning global demand for research facilities and related office space. Positioning for these secular growth opportunities through public equities is being challenged by elevated valuations and a volatile rate environment, underlining real estate as an alternative avenue to invest into those themes.

The opportunity in Asia real estate

While global investors tend to be more familiar with real estate in core U.S. and European markets, Asia presents a compelling opportunity to diversify their real estate holdings and gain exposure to structural trends with significant potential growth. Asia is at a crossroads of cyclical and secular tailwinds which can underpin robust growth in its real estate sector in the coming

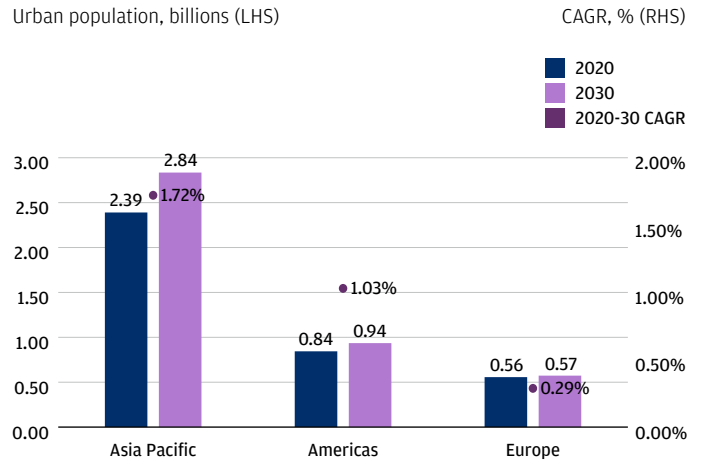
1 Source: World Data Lab, Bloomberg Finance L.P., as of September 3, 2021.

years. This positive outlook is primarily driven by powerful social and demographic changes, evolving consumption trends, growth in innovative sectors and timely cyclical opportunities as the region gradually emerges from the depths of the pandemic.

1. Social and demographic trends

Urban population growth in the Asia-Pacific is projected to be one of the strongest amongst regions globally, underpinning the continued long-term trend of rising urbanization and middle-class consumption. More than a billion people in the region are expected to join the ranks of the middle-class by 2030, further boosting Asia’s global share of the middle-class from roughly half today¹ - in contrast to slower-growing or shrinking middle-class populations in developed economies. These trends could be a key long-term demand driver for urban rental properties and industrial and logistics facilities that cater to their growing consumption needs.

THE ASIA PACIFIC IS POISED TO SEE THE MOST SIGNIFICANT URBAN AND MIDDLE CLASS POPULATION GROWTH IN THE COMING DECADE

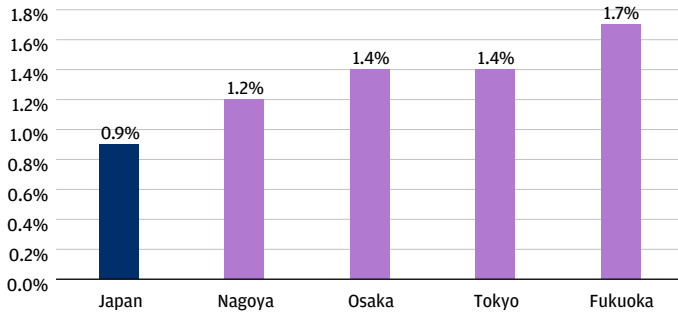


Sources: United Nations, Department of Economic and Social Affairs, Population Division (2019). World Urbanization Prospects: The 2018 Revision. Data is as of December 2018.

Zooming into specific countries, idiosyncratic population shifts within economies could also create targeted investment opportunities. An interesting example is Japan, where despite challenging demographics where the overall population is declining, key cities have seen continued population growth driven by internal migration and urbanization, underpinning strong residential demand alongside increasing foreign investor interest.

WHILE JAPAN'S OVERALL DEMOGRAPHICS ARE SLOWING, GROWTH IN KEY CITIES IS STILL ROBUST

Annual household formation (5-year CAGR), %



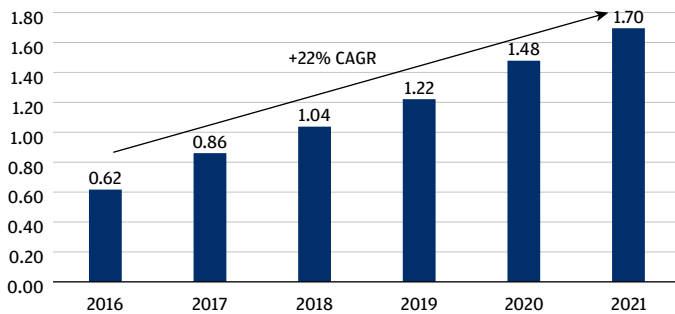
Sources: Japan Ministry of Internal Affairs and Communications. Data is as of January 1, 2021.

2. Boom in e-commerce and logistics

Investors are not strangers to the e-commerce boom that occurred in the past decade and accelerated during the pandemic. As consumption habits shift online at a more powerful pace than before, logistics real estate is a beneficiary of e-commerce demand. This dynamic is playing out strongly in the Asia-Pacific region and could be sustained. China's e-commerce markets, already the largest in the world², continued to post growth throughout the pandemic even as broad consumption remained under pressure from a slowing economy.

CHINA'S ECOMMERCE MARKET HAS MAINTAINED A STRONG PACE OF GROWTH DESPITE A BROADER ECONOMIC SLOWDOWN

Online retail sales of goods, US\$ trillions



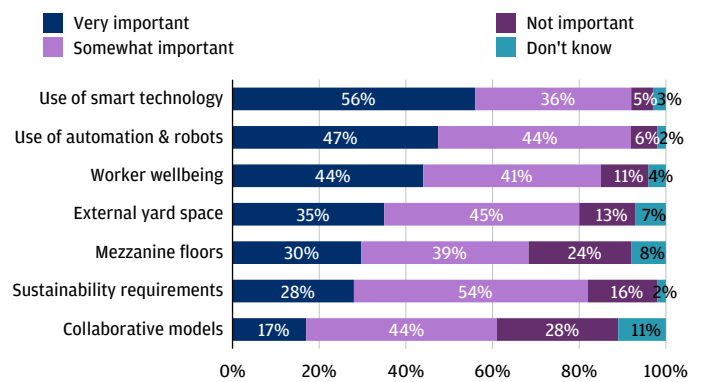
Sources: National Bureau of Statistics, Haver Analytics. Data is as of December 31, 2021.

The e-commerce boom extends beyond China. Another potential market is India, where domestic consumption has grown over 70% in the last 10 years³, with a much longer runway compared to China as incomes rise and its larger potential middle-class population catches up. Even in a mature market like Australia, online retail sales achieved over 25% year-on-year growth in late 2021.⁴ The various maturities and types of e-commerce markets illustrate the breadth of the opportunity in the logistics sector across Asia. With global trade in goods and Asia's exports expected to remain strong, especially as the region emerges from the pandemic and related restrictions, logistics facilities could benefit from cyclical demand as well.

Besides the high-level demand drivers of logistics real estate, the increasing sophistication of these warehouses and factories, involving the use of A.I. and robotics to transform supply chains, would be another source of demand for high-quality properties in this sector. The construction and upgrading of facilities designed and equipped for the integration of such technology, particularly in prime logistics hubs, present opportunities and enforce the need for differentiation and selectivity when investing in this space.

TECHNOLOGY AND AUTOMATION ARE KEY CONSIDERATIONS FOR MODERN, HIGH-SPECIFICATION LOGISTICS FACILITIES

Survey of factors that will affect the specification of standard 'big box' logistics buildings, %



Source: JLL, The Future of Global Logistics Real Estate. Data as of December 2021.

² Source: World Economic Forum, Statista, as of September 8, 2021.

³ Source: World Bank, as of July 2021.

⁴ Source: National Australia Bank, as of November 25, 2021.

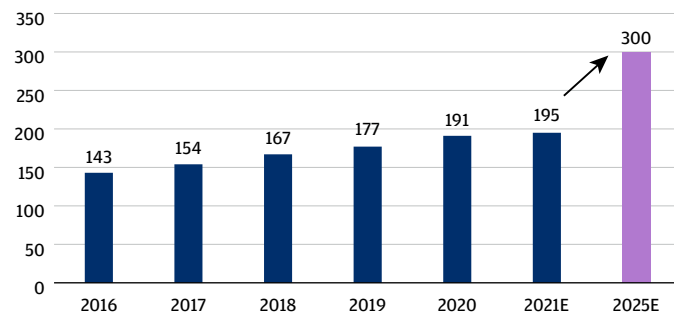
3. Secular growth in innovative sectors

While technology and healthcare innovation are global megatrends, Asia is poised to experience a significant share of the growth that comes with their development. A unique way to position for these trends is to gain exposure through related ancillary sectors, such as real estate.

As some markets experience outsized growth in “new economy” areas like technology, they create and shift demand for commercial properties. For example, Bangalore, India’s IT hub, has absorbed more office space on average since 2015 than New York, San Francisco and London combined⁵ as major global companies ramp up their footprint there to access local tech talent and reduce operating costs. The tech sectors of other economies in the region have also seen rapid job growth in recent years as local tech scenes continue to boom and global players set up hubs, presenting opportunities to capitalize on office demand in those markets.

INDIA’S TECH INDUSTRY IS EXPECTED TO CONTINUE DELIVERING ROBUST GROWTH

India IT industry revenue, US\$ billions



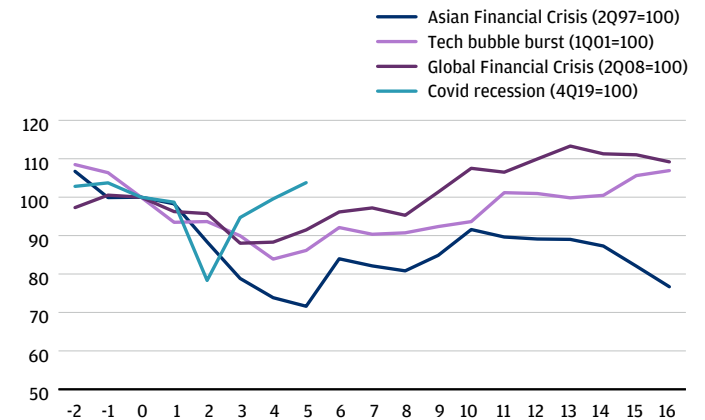
Sources: NASSCOM, Gartner. Data is as of June 2021.

Furthermore, Asia is a significant hub for and contributor to R&D spending at 46% of the global share.⁶ Beyond the tech sector, healthcare real estate is a niche but compelling part of megatrends investing. A renewed global focus on healthcare innovation in light of the pandemic, rapidly aging populations in some Asia-Pacific markets and a large and educated workforce are attractive to healthcare companies in terms of setting up research, manufacturing and treatment facilities.

Like many developed markets, Asia is also currently undergoing one of the most significant post-crisis CAPEX booms in its history, which is another potential source of buoyant demand for advanced and innovative commercial and industrial properties.

ASIA’S CAPEX RECOVERY IS THE STRONGEST IN RECENT CYCLES

Asia ex China Real GFCF (gross fixed capital formation) (pre-recession (Q0) = 100)



Source: Haver Analytics, IMF, national sources. Data is as of March 2021. Note: Asia ex-China includes India, Indonesia, Korea, Taiwan, Australia and Japan. The Asia ex-China aggregate is a weighted average using PPP-based GDP weights.

4. Tactical opportunities in pandemic-affected sectors

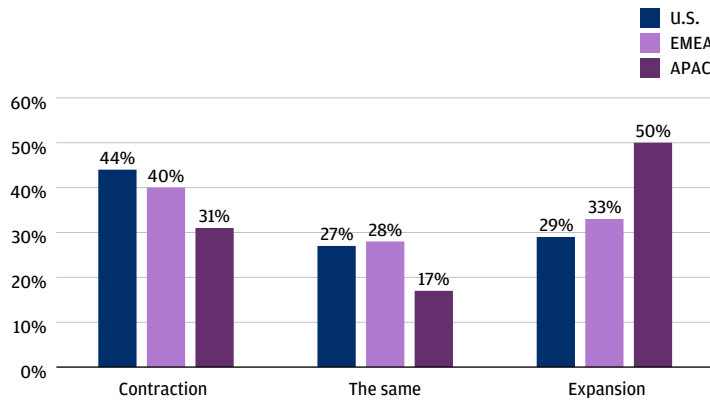
While the pandemic decimated specific real estate subsectors worldwide, notably in hospitality and offices, there are some unique cyclical dynamics in Asia that could present timely investment opportunities. Many parts of Asia are still grappling with COVID-related restrictions and mobility remains under pressure relative to pre-COVID levels. Tourism-dependent economies have continued to suffer as border restrictions remain. However, this relatively distressed environment could present compelling opportunities. Office utilization and values in core cities have remained relatively resilient compared to counterparts in other regions, and surveys point towards an expansion of net office demand going forward, a marked difference from the U.S. and Europe.

⁵ Source: Blackstone, as of January 2022.

⁶ Source: R&D World, as of April 2021.

A MAJORITY OF ASIA-PACIFIC OFFICE OCCUPIERS EXPECT THE SIZE OF THEIR OFFICE PORTFOLIOS TO INCREASE

Occupier sentiment survey, %

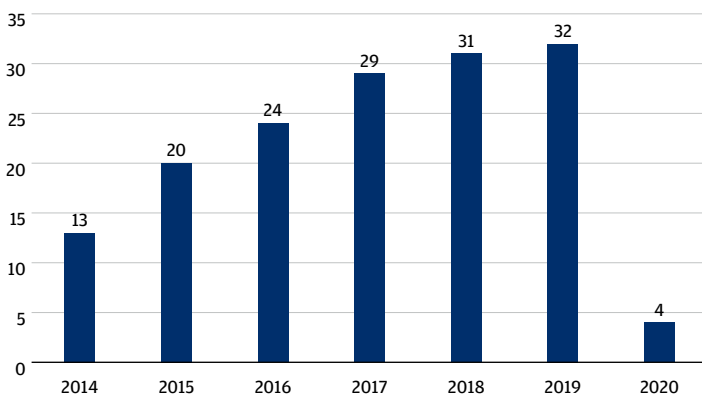


Sources: CBRE. Data is as of September 2021.

Hospitality could also see a rebound over time. While the short-term outlook for travel, particularly within Asia, remains deeply uncertain, pent-up leisure demand over the medium-term could underpin strength in the hospitality sector, alongside the broader tailwind of rising consumption in the region. For example, Japan’s tourism sector rapidly grew to a record in the decade leading up to 2020, driven by intra-Asia travel, and inbound tourist arrivals currently remain at a fraction of pre-pandemic levels. Heavily discounted valuations in that sector could present timely and tactical opportunities to position for an eventual rebound.

JAPAN’S TOURISM SECTOR WAS EXPERIENCING A DECADE-LONG BOOM UNTIL THE PANDEMIC

Japan inbound tourist arrivals, millions



Sources: Japan National Tourism Agency. Data is as of April 2021.

What about the risks in China?

A torrent of negative headlines and an ongoing implosion of indebted developers in the China property sector have understandably deterred investors from the Chinese real estate market. However, depressed sentiment and valuations in that market could present some compelling tactical entry points into selective opportunities. Most of the damage has been in the residential property sector (and the developers’ equities and credit). While our base case is for incremental support from Chinese authorities to avoid a deeper and broader economic downturn, uncertainties could likely persist and a substantial short-term recovery is unlikely. Investors with local expertise could sift through the wreckage to capitalize on distressed opportunities which have long-term and robust structural tailwinds, such as through direct investments into logistics facilities, while avoiding the risks and volatility of the residential sector and developers, all while right-sizing their overall China exposure within portfolios.

We can help

The opportunities and risks in the varied landscape of Asian real estate reinforces the need for thoughtful and active management when investing in this space. It necessitates a hands-on approach which relies on local expertise and due diligence to capture long-term returns while managing risks unique to each market and sector. J.P. Morgan is partnering with first-class managers to deliver those opportunities. Please contact your J.P. Morgan team to find out more.

Index Definitions

The **NCREIF (National Council of Real Estate Investment Fiduciaries) Property Index (NPI)** is a quarterly, unleveraged composite total return for private commercial real estate properties held for investment purposes only. All properties in the NPI have been acquired, at least in part, on behalf of tax-exempt institutional investors and held in a fiduciary environment.

The **Bloomberg Global Aggregate Index** provides a broad-based measure of the global investment grade fixed-rate debt markets. The Global Aggregate Index contains three major components: the U.S. Aggregate (USD 300mn), the Pan-European Aggregate (EUR 300mn), and the Asian-Pacific Aggregate Index (JPY 35bn). In addition to securities from these three benchmarks (94.1% of the overall Global Aggregate market value as of December 31, 2009), the Global Aggregate Index includes Global Treasury, Eurodollar (USD 300mn), Euro-Yen (JPY 25bn), Canadian (USD 300mn equivalent), and Investment Grade 144A (USD 300mn) index-eligible securities not already in the three regional aggregate indices. The Global Aggregate Index family includes a wide range of standard and customized subindices by liquidity constraint, sector, quality, and maturity. A component of the Multiverse Index, the Global Aggregate Index was created in 1999, with index history backfilled to January 1, 1990. All indices are denominated in U.S. dollars.

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