Mid-Year Update

Investment Strategy Annual

2022

July 1, 2022

CHAPTER 1

Real estate: A safe harbor amidst The Winds of Change

History will record that the first half of 2022 was filled with tumultuous surprises and rapid increases in volatility—the stock market's euphemism for a bear market. Our description of an "endemic economy" [1] was apt for the stop-start pattern as the world took one step forward and one step back during each month. For real estate investors, the big change has been the end of ultra-low interest rates in Western countries. Our strategy guidance from December 2021 has largely held up so far this year, as have the themes we highlighted to the right:

2021 Theme	2022 Outcomes	Surprises
The Endemic Economy	A slowing, past-peak recovery with improving fundamentals and a stop-start pattern of COVID re-openings occurred about as expected.	The extended lockdowns in China under a "zero-COVID" policy were an unforeseen shock. The persistence of less-lethal forms of COVID is just another in a long series of unpredictable twists of this confounding disease.
Rising Liquidity and Inflation	We expected inflation to increase gradually in 2022, but with great differences around the world.	Spiking inflation in North America and Europe and swift central bank responses were surprising in their magnitude and speed. The Russian invasion of Ukraine added to global supply chain issues.
Higher ESG Standards	The regulatory and voluntary incentives for more rigorous disclosure of energy usage, decarbonization, and for healthy building credentials are all still growing rapidly. The SEC proposed a new rule that would require listed companies to disclose their net-zero transition plans.	The rise of compliance enforcement has been swift. A major institutional asset manager was investigated for greenwashing. The SEC went farther than many expected.
Climate Change Impacts	Awareness and usage of climate risk data by investment managers is rising rapidly. Property and flood insurance costs are rising, as we expected.	The inconsistency of climate risk forecasts and the widely differing definitions for each type of risk is even greater than many thought[2].
The Long View: Demographics, Technology, Urbanization and Environmental Factors. (DTU+E)	LaSalle's Insight Report Series showed how each of the "DTU+E" secular drivers are still highly relevant -- even as they adapt to new conditions in society.	The competition and complementarity of virtual and physical space continues to manifest in many surprising ways. (see Virtual vs Physical Space below)

1 From the Investment Strategy Annual 2022, released in early December 2021.

2 See LaSalle-ULI report on climate risk data forthcoming in August 2022.

The rapidity with which these themes played out was unprecedented. Returns posted by private equity real estate in 2021 were extraordinary[3]. Yet, the speed of the changing macro environment in 2022 has already led to falling returns in listed REIT share prices, which could presage the end of rapid appreciation for core, private equity real estate in the coming year. Early reports of price chipping suggest that prices may have already backed off by 5% or 10% in some countries. It seems likely that values will continue to fall for unfavored sectors in the second half of the year, especially for older, undifferentiated office properties. The winds of change seem to be blowing everywhere, just as they did in 1989 when the Berlin Wall fell.[4]

With all the rapid changes, this Mid-Year update points to more strategy adjustments than usual, as the world experienced more geopolitical and economic history in a few months than is typically witnessed over the course of several years. Real estate generally provided shelter during the waves of volatility that swept through the securities markets in the first half of the year. In the second half, we foresee different dynamics unfolding as described in this macro environment Chapter 1, and in the specific strategy shifts recommended in Chapter 2. Finally, we revisit the role of real estate in a portfolio, based on new research done with JLL for the bi-annual Transparency Index, as well as the most recent updates to the correlations with other asset classes.

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3 The calendar year 2021 returns for core real estate: The US ODCE returns were 21% (fund-level, with leverage, net of fees). UK MSCI returns were 16.5%, Sweden at 15.8%, the Netherlands at 12.7% , and Germany at 11.9% (unleveraged, property-level and before fund fees).

4 A reference to the 1991 song by the Scorpions that captured the spirit of all the changes in Europe.

REGIME SHIFT: RISING INFLATION AND INTEREST RATES

The most important change in the macroeconomic outlook since the release of the 2022 edition of our *Investment Strategy Annual* last December has been the apparent end of the "low-low-low" era in interest rates, inflation, and growth[5]. Many world events simultaneously contributed to this inflection point including: the re-opening of economies after COVID-19, Russia's invasion of Ukraine, trade wars, and government stimulus spending. Nevertheless, there is no escaping the fact that the financial and commodity markets shifted sharply in the first half of 2022. In fact, inflation had been building up in many economies for most of 2021, as record growth rates in many countries collided with COVID-snarled trade routes to create a nasty combination of both cost-push and demand-pull inflationary forces. The big change in 2022, though, was the response of central banks and the upward movement of sovereign bond rates (see Figure 1 & 2).

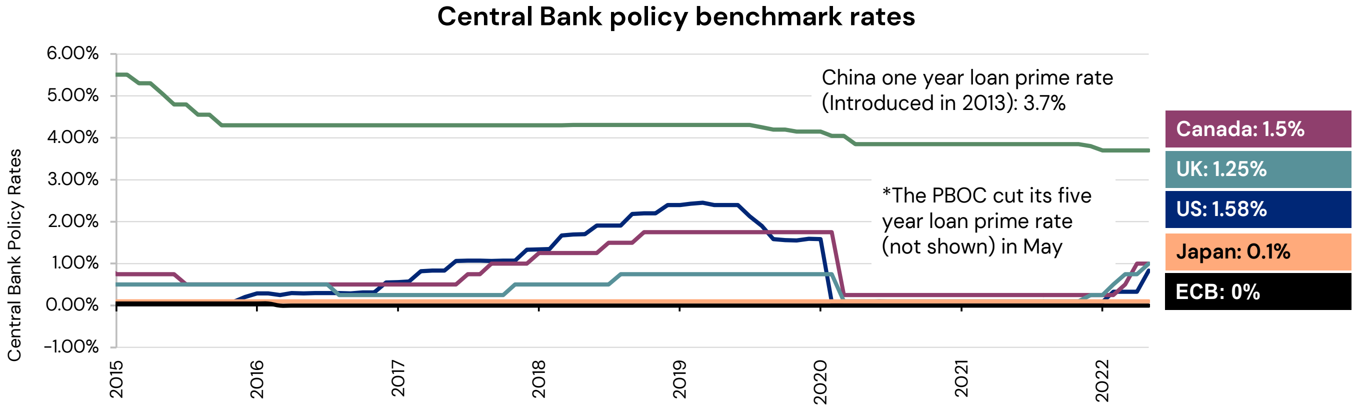
While the overall global trend has changed from the "triple low" to tilt toward a rising rate regime, each country is in a different position in this transition. Forecasts from Oxford Economics show that some countries will grow their way through this period of elevated inflation, while others are at risk for "stagflation" (see Figure 4). Each central bank will react differently and each industry within each economy will face a slightly different mix of cost-push and demand-pull inflation forces. Nevertheless, the shift to a higher interest rate regime[6] that economists have long expected has finally reached all the major countries where we invest with the notable exception of China and Japan.

5 LaSalle coined this term in 2015 to describe the tendency toward low interest rates, low inflation, and low growth after the Global Financial Crisis.

6 The magnitude of this increase varies considerably across G-7 countries, from almost no change in Japan to an increase of 200 basis points or more in the UK and the US that has already occurred and another 100 to 300 basis points likely still to come.

01 Central Bank rate hikes in US, UK, Canada, with more expected

ECB also signaled that it expected to begin rate hikes in Q3 2022

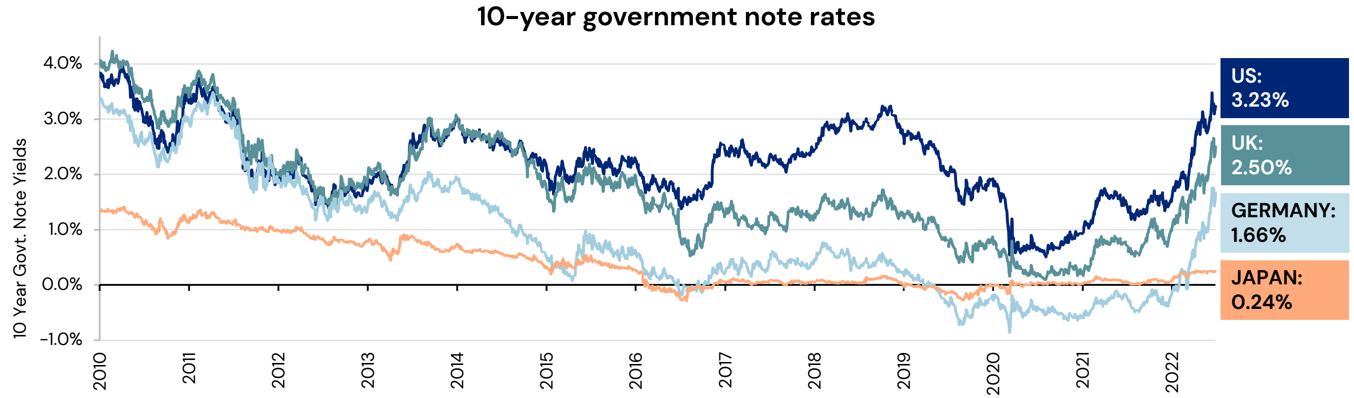


Note: Effective Fed Funds rate shown rather than target range.

Source: Bloomberg, LaSalle. Data through 28 June 2022. Note: Past performance is not indicative of future results. There is no guarantee that any trends shown herein will continue.

02 Risk-free rates shift higher

US 10Y treasury rises well above 3%. High volatility as Central Banks respond



Source: Bloomberg, LaSalle. Data through 13 June 2022. Note: Past performance is not indicative of future results. There is no guarantee that any trends shown herein will continue.

Here are the "top ten" impacts for investors to consider in the second half of the year, ranked in approximate order of importance for real estate investors:

1. Rising cost of debt	High-leverage buyers no longer dominate bidding and set prices. Home buyers may tilt to renting as home buying gets even less affordable.
2. Rising corporate bond yields	Upward pressure on discount rates and exit cap rates.
3. Higher required returns	As a corollary of #2, investors will seek slightly higher returns from real estate, given that alternative credit market products will now be priced at higher yields.
4. Capital flows to real estate	Despite the mixed impacts listed above, real estate's reputation as a better inflation hedge than fixed income will likely maintain its status as a favored asset class while the securities markets experience volatility (see Chapter 3).
5. Capital market shifts	Investor demand moves away from fixed long-term leases and toward shorter indexed leases.
6. Rising cost of construction	Chilling effect on construction, wherever rents can't keep pace.
7. Higher energy prices	Higher occupancy costs erodes tenants' ability to pay higher rents.
8. Slowing demand	As central banks attempt to cool off over-heated sectors, broad-based tenant demand will likely step down a notch because monetary policies are blunt instruments that don't distinguish well between sectors. In some parts of the world, "recession" danger signals are flashing.
9. Currency movements	Differentials in interest rates/inflation will favor currencies with rising interest rates and could raise hedging costs for currencies with lagging interest rate increases.
10. Rising expenses	Just about every expense category associated with operating a property will be under upward cost pressure. Operational-intensive properties that require a lot of headcount or energy consumption could be most affected. As a corollary to #5, net leases will be preferred by investors, but tenants will be under new cost pressures that could affect their ability to renew or to expand. Long leases to real estate operators whose margins could be squeezed by both rising occupancy and labor costs are an example of the kinds of risk to avoid.

Private equity real estate is a relatively long-duration[7] asset class. Transaction costs are high, so quick-flip trading is rarely economical. This means investors need to look beyond the next six months, when inflation will likely remain elevated. Thus, investors will need a framework to evaluate their real estate portfolios under different inflation/interest rate scenarios in the years ahead, just as they would with their other investments. Figure 3 shows in simplified terms the different ways to build inflation protection into a real estate portfolio.

7 In financial economics, bond duration is not defined as "time to maturity" or "hold period". Instead, it is a measure of sensitivity to changes in interest rates. Macaulay duration estimates how many years it will take for an investor to be repaid the initial purchase price. Modified duration measures the price change, given a 1% change in interest rates. Unlike bonds, which have contractual payments of principal and interest, real estate's residual is non-contractual and its income streams are a series of churning contracts. This means that "duration" in real estate is usually a reference to the weighted average lease term or to the hold period, not to the bond math definition.

Figure 3

Signals of inflation hedging Strength

- **Landlord pricing power** (market rental growth potential)
- **Lease structures that pass-through inflation** (e.g.,short leases, indexed leases)
- **Tenants with resilience to operating expense inflation and can absorb higher occupancy costs**
- **Optionality for capital expenditures** (for refurb or new construction) **to cope with volatility of construction costs**

Signals of inflation hedging Weakness

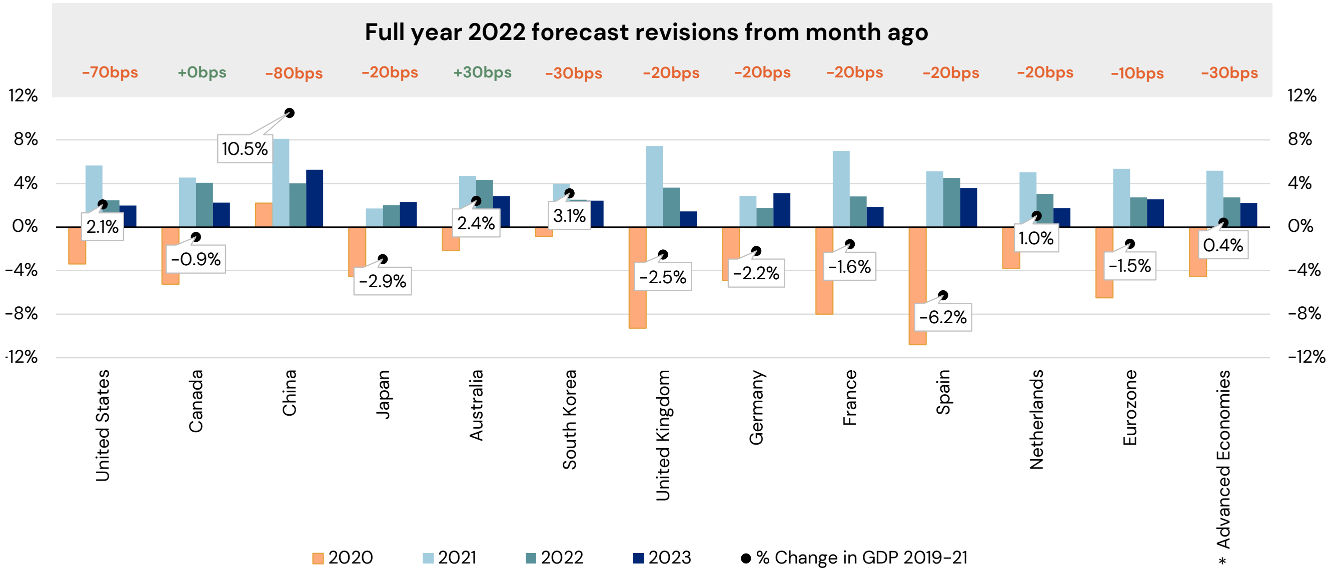
- **Weak fundamentals where current rents are lower than expiring leases**
- **Gross lease structures that put inflation risk on landlords**
- **Long, flat leases without indexation**
- **Tenants who cannot afford higher occupancy costs from pass-throughs**
- **Weaker terms in "guaranteed maximum price" contracts, where risk is shifted from the contractor to the developer/investor**

04

Global GDP forecasts downgraded in May and June

Largest negative revision in China, US slight downgrade to 2.5%, recession risks are rising

Global annual GDP forecasts



*Aggregation based on Oxford Economics country classification: https://services.oxfordeconomics.com/api/definitions/WDMacro/GlobalMacroEconomicDatabank.pdf

Source: Oxford Economics Forecast most recent as of 23 May 2022. Data most recent as of 26 May 2022

In terms of portfolio construction, this regime shift suggests that a greater diversity of lease types will help reduce risk and improve performance, particularly for long-hold, core/core+ investment styles. Just as borrowing strategies should balance term debt with floating rate debt, leases should insulate investors from several different inflation scenarios. The main scenarios to consider are these:

1. Inflation Reversal (30% probability). After the one-time pressure of COVID reopening passes, capital substitution for labor reduces the pressure on wage growth, and energy prices respond to stepped-up OPEC production. Slowing demographic growth and technology productivity helps produce a gradual return by 2024 to the 2% inflation rates targeted by many central banks. This scenario is consistent with the long-term break-even rates of inflation-indexed instruments like TIPS and Index-linked Gilts (see Figure 4).

2. Inflation Tapers Slowly (50% probability). This scenario is consistent with the views of some economists who warn that higher inflation expectations are likely to creep into labor markets and into the supply chain dynamics of capital-intensive investments. In this scenario, term interest rates settle into a range that is slightly above persistent inflation in the 3% to 5% range in 2023 to 2024.

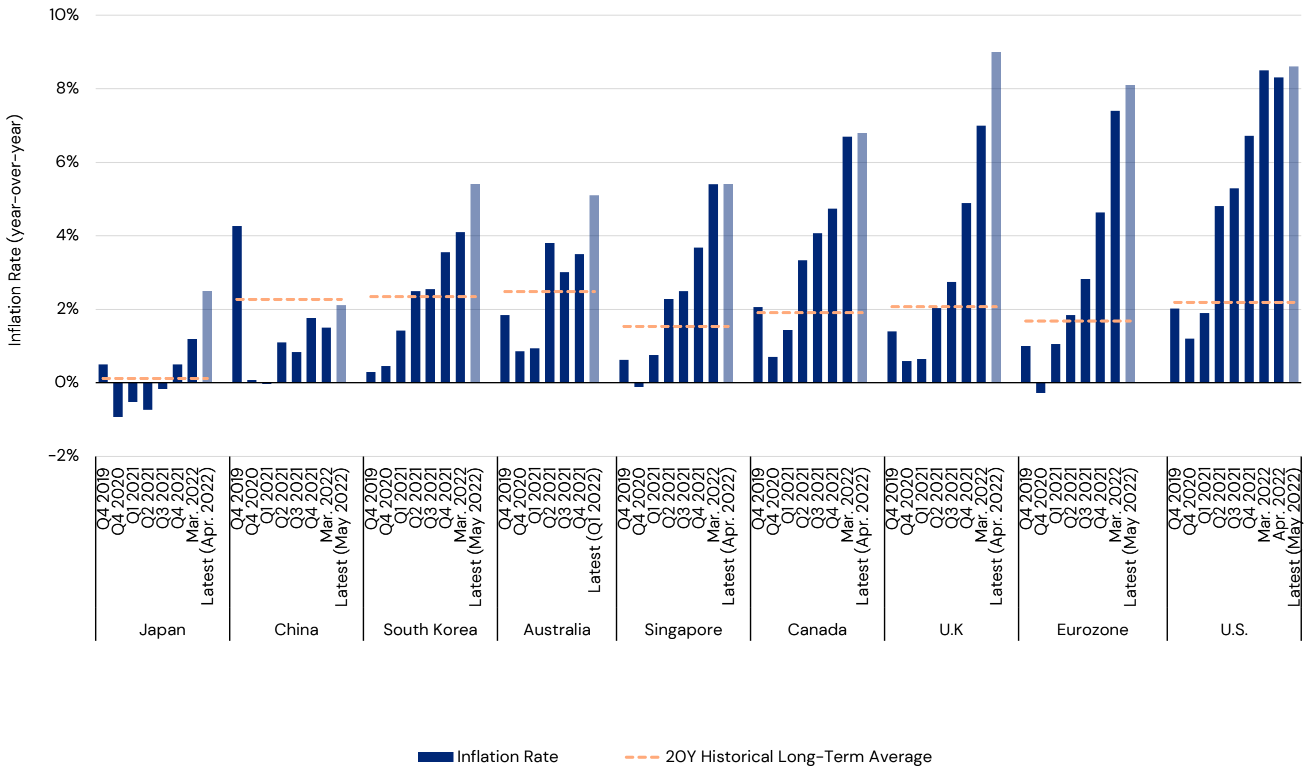
3. Elevated Inflation (20% probability). Inflation could remain elevated at levels that are totally unacceptable to central bankers (above 5%), leading to a steady rise in interest rates throughout the next three years. This was the "tough medicine" approach made famous by then-Chairman Volker of the US Federal Reserve in 1980- 81. Central bankers may be required to dole out this same brand of medicine to squeeze inflation out of the system, while almost certainly causing a recession.

Although these scenarios are all plausible for North American and European countries, Asia-Pacific may face very different dynamics. The Bank of China uses different macro-prudential techniques to manage its economy—reserve requirements, currency management, credit policies, and consumer credit regulations. China also has relatively higher interest rates and low inflation already. China has recently embarked on a path of easing monetary policy to support economic growth. Japan is also in a very different position when it comes to inflation/interest rate scenarios, with core inflation running just under 2%, (Headline CPI is just over 2%), or 600 basis points lower than the US or Europe (see Figure 4). Chapter 2 discusses these differences in greater detail and their implications for real estate investment strategies.

05

Elevated inflation persists

UK Y/Y CPI increased to 9.0% in April, US May 2022 CPI shows 8.6% Y/Y increase



Year-over-Year (YoY) inflation remains above its 20-year average in all major markets shown above except China. UK inflation is now the highest in the G7, with the US not far behind.

Note: 20 year historical long term average inflation rate is the average quarterly inflation rate from Q1 2001.

Source: Oxford Economics data to Q1 2022; latest monthly data from Australia Bureau of Statistics (Australia), Eurostat (Eurozone), Singapore Department of Statistics (Singapore), Statistical Bureau (Japan), Statistics Korea (South Korea), National Bureau of Statistics (China), Statistics Canada (Canada), Office for National Statistics (UK), US Bureau of Labor Statistics (US) to May 2022. Latest data available as of 28 June 2022.

SUPPLY CHAIN INTERRUPTIONS

Global supply chain interruptions stemming from the COVID-19 pandemic, followed by Russia's invasion of Ukraine and lockdowns in "high risk" Chinese cities, continue to drive inflation to decade-high levels (or higher) in a majority of the G-20 countries[8]. According to Gartner, 42% of supply chain leaders are struggling to balance profitability with sustainability, speed, and innovation[9]. With the lifting of strict lockdowns in several Chinese cities, the most serious disruption to supply chains should be behind us (Figure 5), barring any unforeseeable shock. Yet, even as China production comes back online, other challenges remain. Shipping costs increased seven-fold in the 18 months following March 2020[10]. In 2022, they fell to just half the 2021 peak, but are still above pre-pandemic levels. Commodity pipelines out of Russia and Ukraine are blocked, and US labor shortages at major ports create ongoing delays. The integration of global trade has been one of the defining characteristics of the last 40 years. The challenges to re-connecting supply chains are surmountable, but the political will is running against global trade in many countries, which raises new threats that are difficult to predict.

THE VIEW FROM ASIA

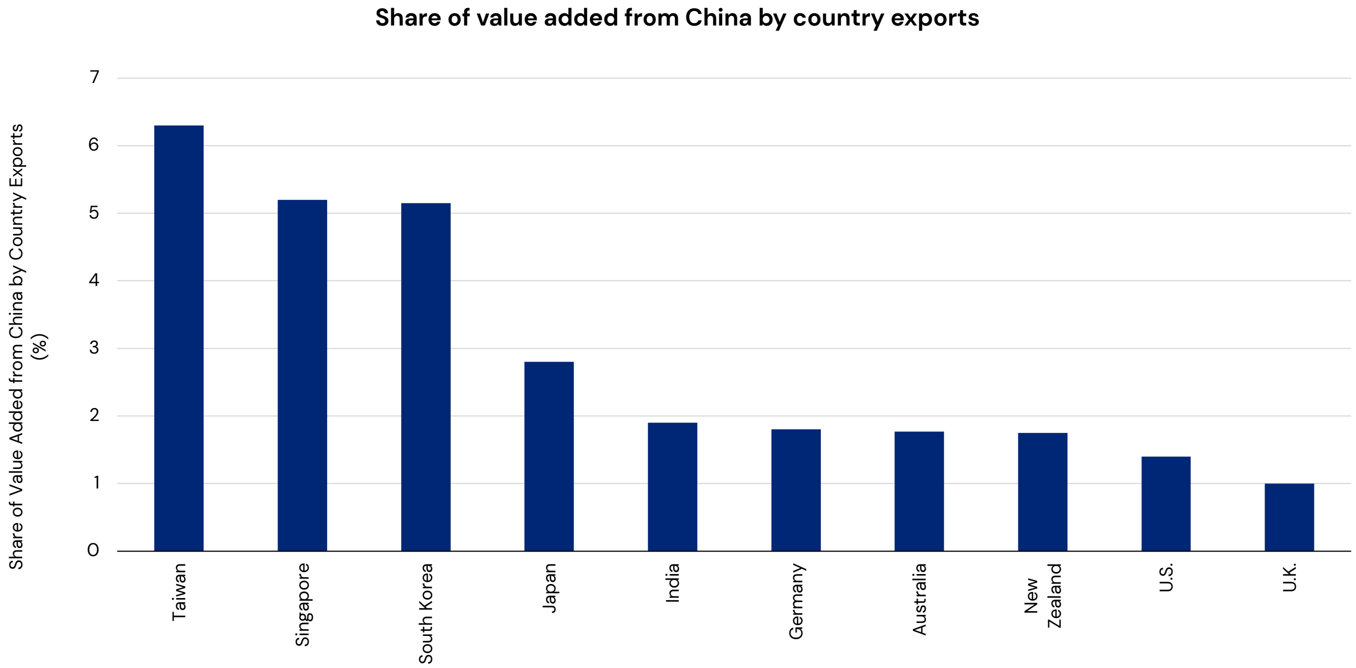
With China returning to production and President Xi calling for an all-out effort to boost infrastructure investment in 2022, and more countries globally transitioning to living with COVID-19, regional demand for construction materials could be on an upward trajectory in the near term. Oil and steel rebar prices have increased substantially since the onset of the pandemic. Nonetheless, domestic conditions and government policies drive slightly different price trends

8 Source: CEIC and Oxford Economics, as of April 2022 except Australia as of Q1 2022

9 Source: Gartner

10 IMF Blog March 28, 2022 "How Soaring Shipping Costs Raise Prices Around the World"

06 China's important position in the global supply chain



Source: OECD, HSBC, as of 2018

of construction materials and offset some (but not all) of the volatile demand from the global markets. For example, Japan is the 3rd largest steel-producing nation in the world,[11] and the country extended its gasoline subsidy program for oil distributors to September 2022[12]. Looking ahead, Japan's operating expenses and construction costs are expected to increase but not as significantly as in many countries in the West. Although oil and steel rebar prices have receded somewhat from the recent peaks, the futures markets imply prices are likely to stay substantially above their pre-pandemic levels in the next six months (Figure 6). Labor cost is another key component of construction cost. Apart from a few Asian countries (e.g., Japan and China), wages among most G-20 countries are reaching 20-year highs[13]. As unemployment rates continue to trend downwards in most G-20 countries, labor shortages could push wages higher in the near term. All of these could add to the upward pressure on construction costs. (Figure 5, Figure 6)

11 Source: The World Steel Association, as of March 2022

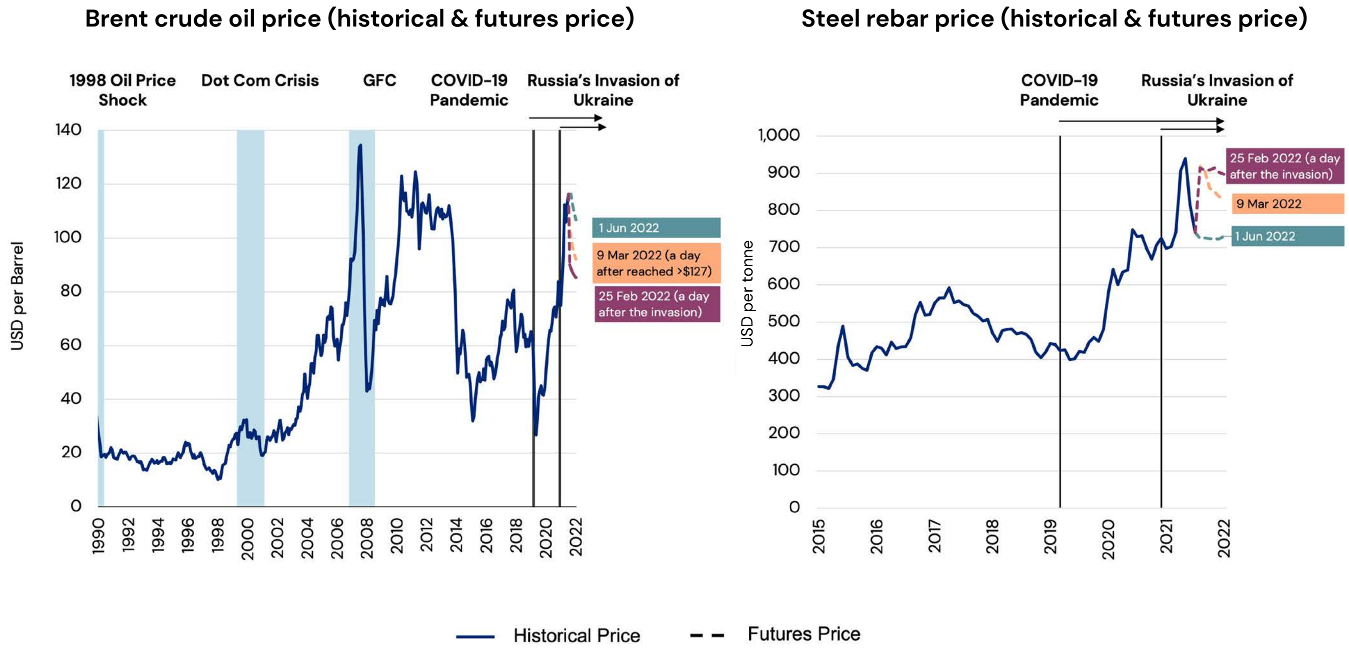
12 Source: Channel NewsAsia, April 2022

13 CEIC and Oxford Economics, as of April 2022

THE VIEW FROM NORTH AMERICA

As the two economies that are tilted more to consumer spending than any other G20 country, the US and Canada have seen supply chain disruptions that have had a material impact on the way that suppliers, producers and distributors get finished goods to consumers. One of the most important trends, as reported by many of the largest listed logistics companies in both Canada and the US, is that suppliers now want to keep more inventory on hand than before. This acts as insurance for the next supply chain interruption, whether it is due to a shortage of truck drivers, or a production slowdown in China. The disruption in US ports has also been widely reported to be more about a shortage of dock workers during COVID than a lack of container traffic from Asia or Europe. The disruptions in supply chains during COVID have many manufacturers and distributors talking up the importance of "diversifying their supply chain". On-shoring in both the US and Canada could be challenging because of the shortage of labor and the higher cost of North American workers versus labor costs in Asia or Latin America. A return to more liberal immigration policies in the US would be a boost for warehouse markets in the US. The increase in the use of robotics and the substitution of capital for labor in regional distribution centers is a more likely response. The most pressing supply chain issue facing the North American real estate industry is the difficulty accessing building materials and construction labor.

07 Oil and rebar prices are likely to stay above pre-pandemic levels



Source: Bloomberg, as of 1 June 2022

THE VIEW FROM EUROPE

In many ways, Europe's supply chain challenges mirror those of the other regions. However, there are additional problems related to the Ukraine war and Brexit which create specific but acute issues. The most notable challenge involves the supply of natural gas to Europe, which has for decades been aligned along pipelines flowing from east to west. Suddenly, the twin objectives of energy security and a desire to cut off Russia economically have led to a mandate for a rapid realignment, with Europe effectively abandoning the completed but not yet commissioned Nord Stream 2 pipeline. In its place comes investment in the regasification plants and north-to-south infrastructure needed to take gas from the global, ocean-borne LNG market. This about-face will require a large amount of private capital investment, redirect productive capacity from other industries, and contribute to inflationary pressures.

Although Russia and Ukraine export primarily raw materials such as energy, minerals, and foodstuffs, they are also isolated cases of extreme dependencies for some finished goods. For example, Ukraine is a key producer of wire harnesses for automobiles, an exposure which has led to car plant shutdowns in the EU. Likewise, Ukraine is an exporter of fire-suppressing sprinkler equipment, which has created a backlog that delayed the completion of warehouse buildings in Europe.

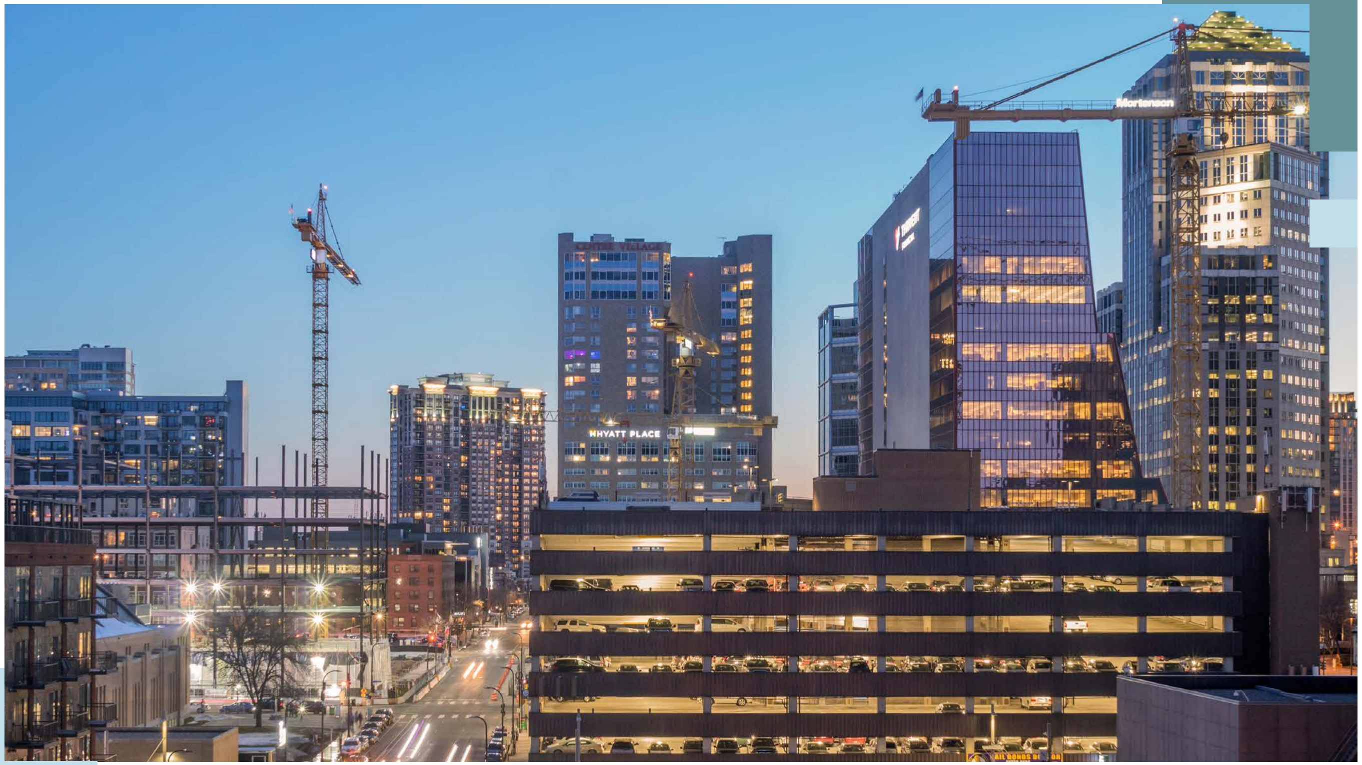
Finally, Brexit remains a lingering issue for UK and European supply chains. While images of backups at English Channel crossing points no longer feature on the news, it remains a fact that Brexit has added frictions to the flow of goods in and out of the UK. That the Northern Ireland agreement is again in question adds unwelcome uncertainty to what would otherwise be a chronic, incrementally inflationary drag on trade and productivity.

RISING CONSTRUCTION COSTS: WHAT IS THE IMPACT ON REAL ESTATE INVESTORS?

Supply chain disruptions have added enormous volatility to the cost of steel, lumber, cement and other building materials around the world. At the same time, COVID hit the construction trades hard, which made assembling work crews especially difficult in 2020-21. As COVID-19 recedes, the construction industry is coming back to life, but costs in many countries are up anywhere from 10% to 40% relative to pre-COVID levels[14].

From an investors' perspective, rising construction costs have a mixed impact. On the one hand, they can dampen the supply of new speculative buildings, when rents are insufficient to provide a competitive return in a development pro forma. This dampening effect is positive for owners of well-positioned stock when supply pipelines are paused. As replacement costs rise, valuations tend to move up also. On the other hand, many value-add and opportunistic investors rely on development to reach double-digit returns. Rising construction costs add risk and cut profit margins for this approach to non-core investing.

14 Source JLL GMP



Rising construction costs and operating expenses raise new challenges for real estate investors and owners in most countries. To mitigate risks associated with high operating expenses and construction costs, real estate investors and owners are expected to favor short leases or market conventions with CPI-linked rental review or net leases:

- Short-term leases generally do well during periods of high inflation. For example, multifamily rental properties (typically one- to two-year lease term) can keep up with inflation better than properties with long-duration leases. Commercial real estate lease conventions in many Asian markets (e.g., China, Hong Kong, Singapore) are well-positioned in a rising inflationary environment, as they are relatively short leases by global standards (typically a two- to three-year lease term). For longer leases, there are usually built-in rental increases for every two or three years. In Japan, the traditional leases are also two-year terms.
- Market conventions with inflation-linked rental reviews (e.g., Australia and most of Europe) would allow landlords to adjust passing rents with rising inflation; or net leases would allow landlords to pass through the increase of operating expenses to

tenants. In North America, CPI-linked leases are rare. But net leases are common, which puts more of the risk of rising energy and property management costs on tenants rather than landlords. Passing on higher costs to tenants only works as a strategy when the tenants' own sources of revenues are able to keep up with inflation. This framework can be used by owners and investors to offset some of the negative effects of inflation:

SIGNALS OF LANDLORD PRICING POWER

1. Healthy or improving real estate supply-demand dynamics
2. Demographic growth potential
3. Tenant selection with a focus on "New Economy" industries
4. Markets or sectors with strong or rising investor appetite

Investors can focus on attracting tenants from "New Economy" industries with upside potential on demand and the ability to pay higher rents (e.g., information and communications technology, healthcare, life science) to generate net operating income growth. Examples of inelastic demand for real estate are most plentiful in industries where the cost of occupancy is a very small portion of their overall cost structure.

In sum, revenue streams in strong sectors, markets, or submarkets that demonstrate healthy or resilient supply-demand dynamics can keep up with and surpass inflation. At the global level, logistics and multifamily rental properties have been delivering relatively strong returns because their embedded "mark to market" increases in revenue when leases roll exceed inflation. Many niche or "alternative" property types also have this characteristic, as we describe in Chapter 2.

DE-GLOBALIZATION, NATIONALISM, GEOPOLITICAL TENSIONS, UKRAINE-RUSSIA

Russia's invasion of Ukraine started on Thursday, February 24, 2022, sending shockwaves through markets. Although in retrospect, the signs of imminent military action had been in evidence for months, the beginning of a 'hot war' in Europe came as a surprise to markets and political leaders alike. The other major surprise was the strength and the durability of Ukraine's military defense, which has fended off Russian aggression in most of the country except for the East. This has enabled a limited resumption of economic activity and allowed something a little closer to normal life in the rest of the country. While humanitarian suffering continues and millions remain displaced, the transition of the conflict from an acute to chronic phase provides an opportunity to assess the longer-term implications of the war, and to situate it within a broader picture of global geopolitical stress points.

"The concepts of 'degobalization' and 'slowbalization' refer to roughly the same process, but differ as to whether global integration will actually reverse"

We segment the impacts from the conflict into three categories—direct, indirect, and structural:

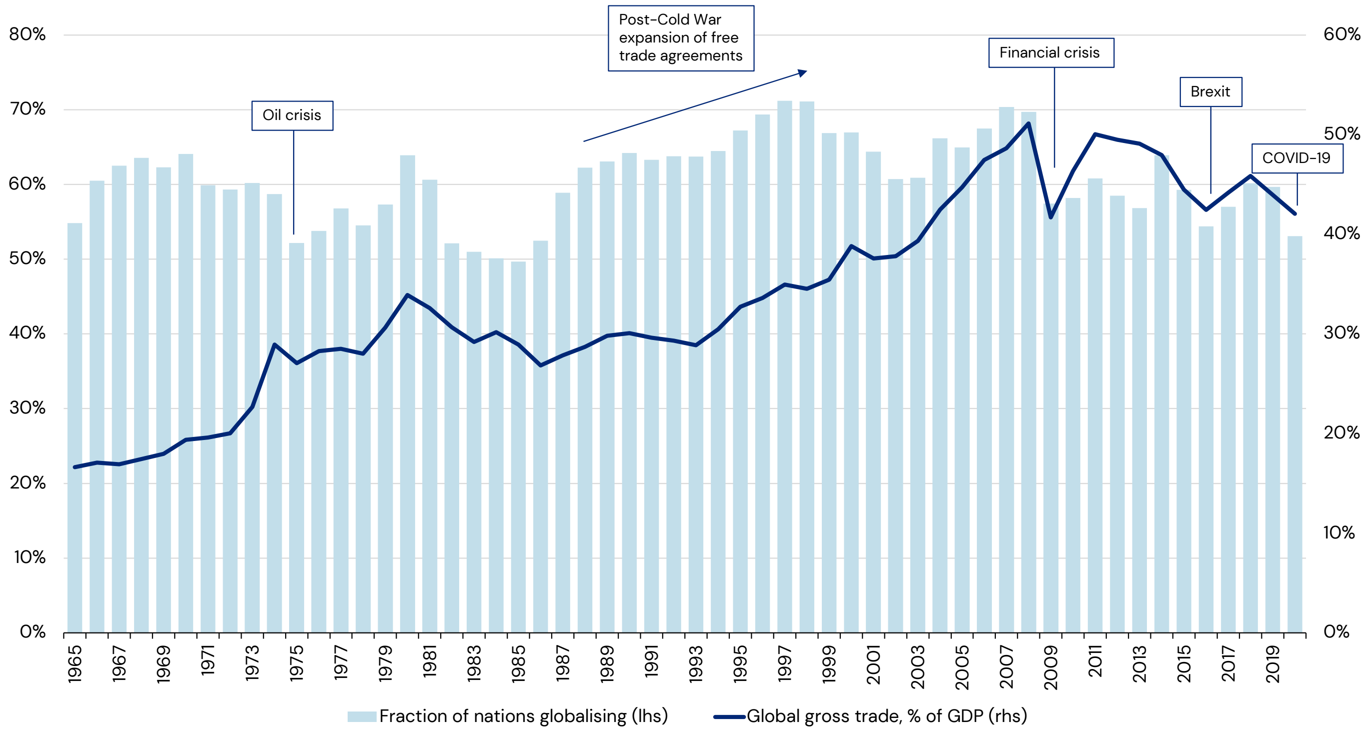
- **Direct—**From the real estate investors' perspective, exposure to conflict areas is extremely low. Neither Russia nor Ukraine is now, or ever has been, a meaningful target for cross-border investors. According to LaSalle's Investable Universe estimates, together Russia and Ukraine account for just 3% of Europe's total institutional investable universe. The Central and Eastern Europe countries that are European Union members, such as Poland and the Czech Republic, are more relevant investment markets, accounting for nearly 5% of the European investable universe. But these countries, while previously in the Soviet sphere, are now members of the EU and NATO. NATO's Article 5 means that they are militarily protected. They are therefore not at risk of attack except in a very low-probability, tail-risk scenario.
- **Indirect**—These impacts include macroeconomic and market transmission mechanisms, particularly via inflation and risk sentiment. They are significant, even though trade links between the world and the conflict zone in Ukraine are relatively small in aggregate terms. However, when combined with COVID-related snags and new sanctions on Russian exports, these blockages have become severe across Europe and beyond. Critical commodities such as energy, food, and specific products with direct implications on real estate such as sheet metal and sprinklers used in warehouse buildings are all affected. Some European countries have been dependent on Russian natural gas, and they are finding it costly and complex to transition to other sources of energy. All these factors contribute to higher levels of inflation in Europe and around the world, as well as higher interest rates much sooner than otherwise might have been the case. While these impacts are global, they are generally more severe for markets closer to the conflict zone.

- **Structural**—The final category of impacts is potentially the greatest and most enduring, but harder to judge. These are the structural or secular changes that involve a re-ordering of the way the world works. They include potential for both acceleration of and delays to the decarbonization agenda. Another is government spending, especially the likelihood that government budgets will tilt toward defense and the military, potentially at the expense of other priorities or at the cost of bigger government deficits. Migration is also a key consideration. As of June 2022, it is estimated that the conflict has caused around 7 million Ukrainians to leave the country, which is about 15% of the country's population. The EU is giving them immediate rights to live and work across the bloc, and their arrival represents the largest boost to EU net migration in living memory. That said, it remains to be seen how permanent this migration will be and where refugees will elect to settle. The structural change with the deepest and most global potential impact is the possibility that the Ukraine war represents a turning point in a broader economic and political decoupling extending far beyond Europe, which is discussed below.

What will replace Globalisation?

In the context of the overlapping crises of the war in Ukraine and the COVID-19 pandemic, globalization is arguably facing its greatest test of the post-Cold War period. But this is not just about Ukraine; examples of authoritarianism, geopolitical disputes, populism, and nationalism can be found across the world. However, real evidence on how global linkages will be reshaped remains thin. Multiple models of a 'new order' have been proposed, and there is no consensus on which best reflects what is happening. The longer-term implications for economies, and for real estate investors, depend on which is most prescient.

08 Globalisation in goods stalling, not reversing



Note: A globalizing nation is defined as one whose real gross trade (imports + exports) is growing faster than real GDP.
Source: World Bank; LaSalle

The concepts of 'deglobalization' and 'slowbalization' refer to roughly the same process, but differ as to whether global integration will actually reverse, or if its advance will merely slow to a snail's pace. Although deglobalization is often taken as a fact, clear evidence of it is mostly absent. According to an analysis by Goldman Sachs, the impact of nearshoring is swamped by the effect of other supply chain strategies, such as supplier diversification and overstocking, as firms prioritize resilience over lower cost. Goldman found that global goods trade as a share of global GDP has stabilized in the mid-40% range after a steady increase from below 20% in the early 1970s, but there is no evidence of a major retreat. However, they did find evidence of rapidly accelerating cross-border flows of technologies, data, and ideas (See Figure 7).

A reshaping of alliances and trade blocs is underway. Specifically, greater regionalization of goods trade will stand in contrast to accelerating globalization in the exchange of intangibles. One specific possible pattern of regionalization is that the world may bifurcate into two 'blocs': a closely-aligned Western grouping, led by the US and Europe, and a more fragmented collection of countries promoting alternative models to those of the West, functionally led by China but joined by an isolated Russia.

What are the consequences of these possible outcomes? Across these various models, increased fragmentation and duplication of supply chains would be a drag on productivity and economic growth, and likely drive incrementally higher inflation, especially over the adjustment period. Although the US dollar remains by far the world's dominant reserve currency, in a more divided world it is likely to increasingly share that role with other currencies, which could marginally increase US Treasury yields and discount rates for US assets.

The direct consequences for real estate investors are less clear. There is virtually no evidence of deglobalization within real estate markets. Global factors, particularly around the secular evolution of property types, have dominated country- or region-specific factors in the performance of the asset class. Cross-border investment as a share of total capital flows has remained high, and the case for building global real estate portfolios may actually be strengthened, rather than damaged, by a less economically integrated world. This is because it may result in lower correlations, and thus greater diversification potential, across global property market returns. Finally, increased inventory and redundant supply chains may add to the tailwinds for logistics demand across the globe.

VIRTUAL VS PHYSICAL SPACE

Technological advances and the remarkable speed of adoption of virtual modes of interaction, accelerated by the COVID-19 pandemic, have resulted in a re-drawing of the boundaries between physical and virtual activities. As COVID-19 moves from pandemic to endemic in most countries, it is time to revisit the sometimes complementary, often adversarial relationship between the virtual and physical worlds. As the contrived way of life adopted during the pandemic dissipates, the critical question is which changes will prove temporary and which will be permanent. Luckily, we are starting to get clarity on how patterns of live, work, and play will settle in a post-COVID world.

Work: A 'core' work week emerges

For real estate investors, a key question has been how and where people will work. While the enforced 'working from home' experiment was largely deemed a success for office workers around the world, employees have returned to physical offices in different ways and to varying degrees across cities and countries. The question is further muddied by a lack of clear signals from the data. Real-time building occupancy data are hard to come by and different indicators point to different conclusions. Kastle Systems, which tracks key card entries in the US, suggests weekly keycard entries are still only a third to half of their pre-pandemic levels, depending on the city. Further, a long trend of gradual increase seems to have plateaued. Equivalent metrics for the UK are patchy, but data from Remit Consulting peg average desk occupancy at around 30% in London in May 2022, compared to a pre-pandemic average of 60%, suggesting levels around half of a pre-COVID baseline.

These numbers are averages across the week and obscure the emergence of a "core week" of Tuesday, Wednesday, and Thursday, when occupancy tends to be substantially higher. Office attendance that is less frequent but concentrated on specific days reinforces the view laid out in our Connected Spaces ISA 2022 Insight Report that the role of offices will primarily be as hubs of in-person collaboration, rather than places for solitary work. Such temporally-concentrated patterns also bode better for office demand than a work-from-home pattern that is more evenly distributed by day of the week. However, it does mean that companies will likely need to re-imagine their existing spaces to get the best out of their office-based and hybrid-working employees.

> **"Office attendance that is less frequent but concentrated on specific days reinforces the view laid out in our Connected Spaces ISA 2022 Insight Report"**

Play: Robust return

A renewed post-pandemic desire to socialize in person has fueled a recovery in food, beverage, and entertainment in many towns and cities, as well as a surge in leisure travel. Data on 'seated diners' from OpenTable suggests that globally, dining out is running around 10% higher than pre-pandemic levels. This robust return to in-person fun is also evident in commuting patterns. The number of passengers passing through the ticket barriers on the London Underground between 8am and 9am is down roughly a third compared to pre-pandemic, while travel between 3pm and 4pm was down by around 20%, and travel between 10pm and 11pm was down just 7%. The decline in overall trips was twice as big for weekday trips as compared to weekend journeys.

There are positive feedback loops from this return to 'play' for office submarkets that offer vibrant options for socializing. Office workers seem to be more willing to go back to the office when the trip can do 'double duty' as an opportunity to also go out for dinner, grab a drink, browse the shops, or see a show. This is evident in divergences among London office submarkets. Bloomberg's Pret Index tracks sandwich sales at Pret a Manger, a lunch option favored by busy office workers who eat at their desks. The index has fully returned to pre-pandemic levels in the vibrant West End, whereas it is still down 13% in the more purely business-focused City of London. We are more optimistic about urban districts that integrate live, work, and play, than those that are monocultures of one of these. This is consistent with the positive outlook for vibrant mixed-use areas, which we called Confluence Zones in the Connected Spaces report.

Live: More dispersed, but urban living rebounds

The pandemic cast into doubt many accepted notions of the purpose of the home, its definition instantly widening from simply a place to live to one where we live, work, and play. The pandemic lockdowns and transition towards a hybrid working model in many countries made people reconsider their housing priorities. More living area, a home office, and access to green spaces have become a priority for many. People are spending more time closer to their homes, creating more vibrancy in residential areas that were once quiet on weekdays. We are already starting to see amenities once associated with CBDs, such as

food halls, opening in suburbs. The Pret Index is up 21% in London suburbs compared to the pre-pandemic level. That said, as we move beyond the pandemic, it appears as if much of the speculation of the death of city living was indeed just that. We have not seen a wholesale rejection of urban homes in favor of suburban or rural living, as evidenced by sharp recoveries in apartment rents in places like Manhattan and Central London.

Another defining feature of the pandemic was the spike in shopping online at home, driven by necessity in much the same way as was working from home. With e-commerce artificially energized due to store closures, online penetration was anticipated to fall back once in-person shopping returned. While this has been the case, not all the pandemic gains have been lost. Many countries have retained a five to ten percentage points increase in online retail sales, in effect advancing them several years along their pre-pandemic projected growth trajectory. This is possibly due to shopping habit inertia, brand loyalty, a more tech-savvy older demographic, and hitherto cash-based societies embracing electronic payment methods.

Mirroring these trends, streaming services which had experienced a surge during the pandemic are now falling back as cinemas reopen, and the same goes for the interplay between connected fitness services like Peloton and traditional health clubs.

Both the pandemic and the current cost-of-living crisis are influencing the relationship between physical and virtual real estate. Investors will need to remain adaptable throughout these changes, choosing to own real estate that is appropriately located and designed to facilitate the in-person interaction that matters, or to enable more virtual ways of working and shopping, or both.

THE ESG REVOLUTION

We added "environmental factors" to our four secular drivers for real estate eight years ago, and the pace of material change has accelerated every year since. In 2022, sustainability initiatives reached yet another peak level. Last December, we charted the spike in the number of mentions of "ESG" and "sustainability" in public company earnings calls. In the last three years, public companies and private equity real estate have moved from "talking" sustainability to the "measurement and disclosure" stage. The leaders are charting progress to reducing the carbon footprints of their portfolios. Some are already passing milestones on their way to (perhaps) achieving net zero carbon goals in 20 or 30 years' time. More focus on social impact factors like health and wellness and on meeting diversity goals are also in evidence. The drumbeat of ESG activity is growing louder each quarter and does not appear to be drowned out by all the other noise in the macro-economic soundtrack.

The change across environmental, social and governance (ESG) issues has been broad and profound, affecting nearly all aspects of the real estate industry. And this new reality will continue to rapidly evolve into the future. We're in an ESG revolution. This revolution brings new challenges and raises expectations from investors, regulators, tenants and other stakeholders. It also brings new opportunity to drive real value and real change in real estate.

Two of the most powerful forces influencing the modern management of real estate are *transparency* and *sustainability*. Rising transparency has been a trend for decades; sustainability's impact is much more recent. During the interviews for the 2022 edition of JLL's , it became clear that these two forces are now colliding in ways that are simultaneously inspiring, insightful, confusing, time-consuming, and potentially game changing.

Sustainability initiatives have moved from building certifications and fast-payback improvements, like the installation of LED lighting, to more complex data capture, disclosure, and benchmarking efforts. Energy reporting and tracking, calculation of greenhouse gas emissions, climate risk analysis, tenant reporting, and health and wellness features are among the efforts most often mentioned.

Many firms, LaSalle included, have scaled up their sustainability teams by adding technical expertise and then sharing that expertise with asset and portfolio managers. At LaSalle, this has meant deploying required training tools including webinars and a video series available in nine languages. Finally, LaSalle and other firms are focused on identifying and meeting social responsibility goals. This might include seeking more diversity in their supply chain or contributing to the life of communities where assets are located. In sum, ESG

> **"One of our goals is to integrate climate assessments into our investment, risk management and capital planning processes to better understand impacts and costs associated with climate change"**

principles are no longer just posted to websites. They are increasingly integrated into the business and decision-making processes at many firms.

To help drive the ESG revolution, the industry must be equipped with the right knowledge and tools. For example, at LaSalle we created a Climate Risk Task Force to understand and interpret the data produced by climate scientists on how climate change will impact different parts of the world. One of our goals is to integrate climate assessments into our investment, risk management and capital planning processes to better understand impacts and costs associated with climate change.

At LaSalle, we have refined our investment and asset management strategies so that portfolios and business lines can actively work to reduce carbon emissions – a critical component of the ESG revolution. This work could

lead to more efficient operations, increased resiliency, and future-proofed assets. All stakeholders – investors, employees, community partners – could benefit. The ultimate beneficiary is intended to be future generations who benefit from decarbonization, lower weather-related stress, and inclusionary economics that includes job training and community benefits.

CHAPTER 2

Asia Pacific: Lower inflation than the West, China re-opening

In the first half of the year, investors had to navigate an environment of rising inflation and the end of easy money in several countries, amid shocks from the war in Ukraine and lockdowns in China. Inflation rates in major Asia Pacific countries have increased but are slightly better contained by global comparison. Domestic conditions and/or measures in several Asian countries have lessened some impacts of global inflationary pressure, leading to monetary policies in the two largest economies of the region, China and Japan, to diverge from the tightening trend in the West.

The real estate market recovery in Australia, Japan, South Korea, and Singapore has generally played out as we anticipated in the 2022 ISA. By contrast, the recovery in China and Hong Kong was disrupted by stringent COVID-19 measures, which surprised on the downside. Furthermore, our conviction of the limited impact of a hybrid work model [1] on Asia Pacific office demand at the beginning of the pandemic has played out as we expected, while the speed of the office market recovery in Singapore, Australia, and South Korea surprised on the upside. The favorable investor appetite for Asia Pacific commercial real estate also surprised on the upside, which was evidenced by the 22-year high transaction volume in 2021, primarily driven by domestic investors (Figure 1). Looking forward, some investors could take a pause due to rising borrowing costs, but we

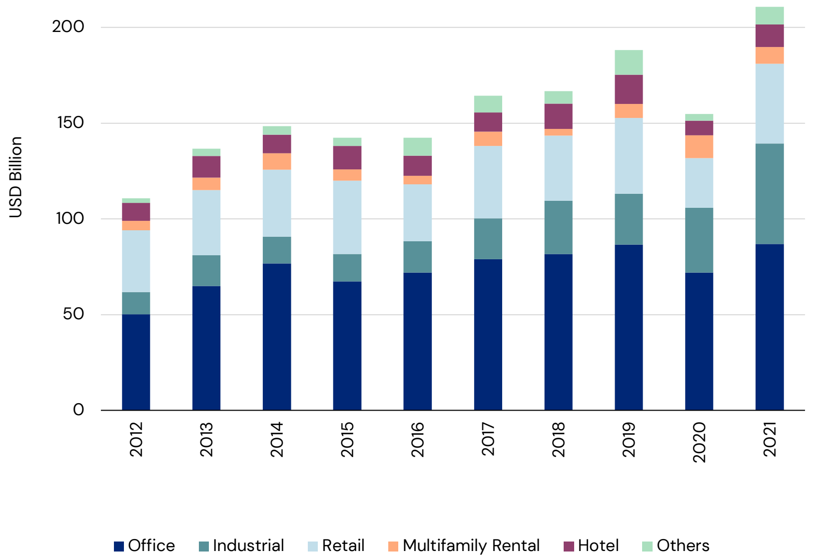
1 with more days a week working in the office than working remotely

do not see liquidity exit the real estate sector. Cross-border transaction volumes of commercial real estate in countries with weak currencies against the USD (e.g., Japan and China) could increase.

Over the next six to twelve months, we expect to continue to see some level of divergence between Asia Pacific and other regions, as well as within the region itself. Most Asia Pacific countries are expected to miss their economic growth targets in 2022. Although recession risk remains low in Asia Pacific for the rest of 2022 (Figure 2), the probability of recession could increase for several countries if the US and EU go into a recession. Australia, Singapore, and South Korea are likely to continue to lead the economic growth in the region; and Japan is expected to follow supported by its gradual transition to living with COVID-19. China could outperform the rest of the region if the country can reach a COVID-19 new normal. The downside risk to the outlook remains in the pace of rising inflation and interest rates. Interest rates are increasing in markets like Australia, Singapore, and South Korea (Figure 3), where real estate fundamentals and investor demand are also improving. Therefore, capital values for stabilized assets in these markets are expected to remain relatively stable in the rest of 2022, despite interest rate increases. In Japan and China, the accommodative monetary policies and depth of the domestic investor pool are expected to support capital market liquidity and capital values in the near term. After reviewing the strategies across major markets where we are active in Asia Pacific, we maintain our recommendations for low-return and higher-return strategies, but with a few cautionary considerations.

01 Record-high commercial real estate transaction volume in Asia Pacific in 2021

Commercial real estate transaction volume in major Asia Pacific markets by sector



	2021 Transaction Volume as a % of the Pre-Pandemic Level (Avg. of 2017-2019)	The Year Recorded Highest Volume (2007-2021)
Office	105%	2021
Industrial	208%	2021
Retail	112%	2021
Multifamily Rental	142%	2020
Hotel	93%	2019
Others	98%	2019
TOTAL	**122%**	**2021**

Note: The above transaction volume includes office, industrial, retail, hotel, multifamily rental, and other deals above USD 10 million, excluding development deals. Major Asia Pacific markets included in the transaction volume are Australia, China, Hong Kong, Japan, Singapore, and South Korea.

Source: MSCI Real Capital Analytics, as of 2021.

RISK MITIGATION AMID RISING CONSTRUCTION COSTS AND INTEREST RATES

Construction costs are likely to remain high in most parts of the region over the next six to twelve months, primarily due to supply chain interruptions, time lags between the increase of raw material prices and the passthrough to construction products, especially in South Korea, Australia, Singapore, and to a lesser extent, Japan. If China's economic recovery turns out to be faster and stronger than anticipated, demand and prices for construction materials could increase in China and the region. Nonetheless, we view any sharp acceleration in construction costs in the region to be unlikely as rising interest rates are moderating demand for construction materials in many countries. High construction costs are also likely to moderate some new developments in the short term, which could be welcoming news to markets with large supply pipelines and provide some support for stable occupancy rates. To mitigate risks associated with high operating expenses and construction costs and rising interest rates, real estate investors are expected to favor the following:

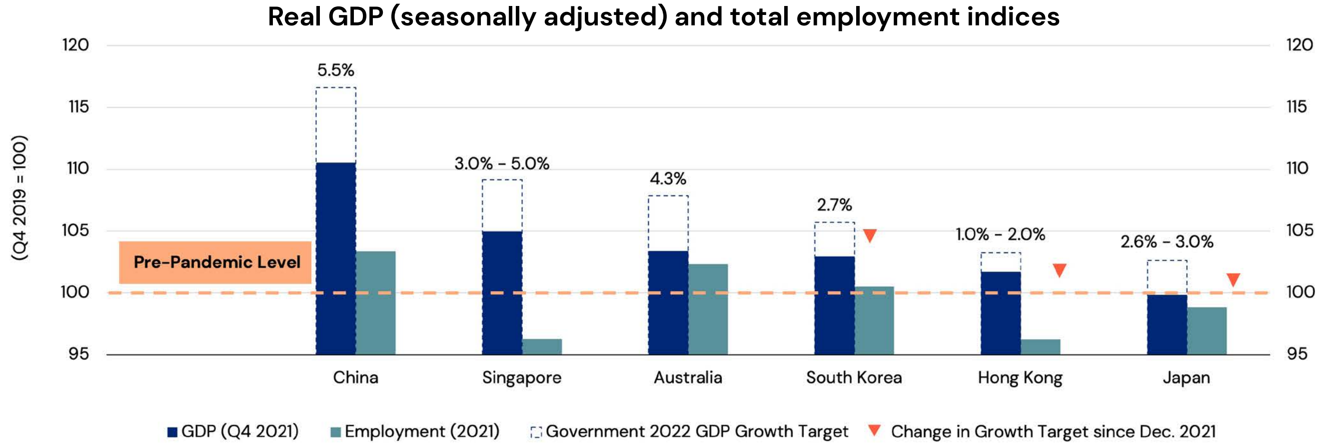
- **Short-term leases, leases with CPI-linked rental reviews or net leases generally do well during periods of high inflation.** For example, multifamily rental properties (typically one- to two-year lease term) can keep up with inflation better than properties with long-duration leases. For other commercial real estate leases in Asian countries (such as China, Japan, Singapore), the typical lease terms are two to three years. The traditional Japanese leases are also two years. Hence, most Asian countries where LaSalle focuses on have relatively short lease terms by global standards, which makes these Asian markets well-positioned in a rising inflationary environment. Market conventions with CPI-linked rental reviews (e.g., in Australia) would allow landlords to be compensated for rising operating expenses, or net leases would allow landlords to pass through the increase of operating expenses to tenants.

- **Seek demographic growth potential to boost returns.** Positive demographics are key drivers of real estate demand, particularly multifamily rental and for-sale residential demand. Among developed Asia Pacific countries, Australia and Singapore are expected to have the highest demographic growth in the next five years.[2] Furthermore, despite being perceived as an aging nation with low population growth, Japan has markets (e.g., Tokyo Prefecture, Fukuoka city) with population growth potential in the next five years.[3]

- **Favor tenants from "New Economy" industries.** Investors can focus on attracting tenants from "New Economy" industries (e.g., information and communications technology, healthcare, life science) with upside potential on demand and rents to generate net operating income growth.

02

Major Asia Pacific economies most likely to miss their growth targets in 2022



Note:

The GDP Index is based on real GDP, seasonally adjusted, and in local currencies.

The employment data for all countries except China are based on total employees across all industries, all status in employment (e.g., Local, PR, Foreigners) and all types of employment (e.g., Full Time, Part Time).

China's employment data is based on urban employment.

Source: Oxford Economics (Historical GDP), as of Q4 2021; Australian Bureau of Statistics (Australia employment), LaSalle Investment Management based on data sourced from National Bureau of Statistics via WIND (China employment), Census and Statistics Department (Hong Kong employment), Statistical Bureau (Japan employment), Ministry of Manpower (Singapore employment), Statistics Korea (South Korea employment), as of 2021; Reserve Bank of Australia (Australia's GDP target), as of 3 May 2022; National People's Congress (China's GDP target), as of 5 March 2022; Census and Statistics Department (Hong Kong's GDP target), as of 13 May 2022; Bank of Japan (Japan's GDP target), as of 28 April 2022; Monetary Authority of Singapore (Singapore's GDP target), as of 25 May 2022; Bank of Korea (South Korea's GDP target), as of 14 April 2022

2 Oxford Economics, June 2022

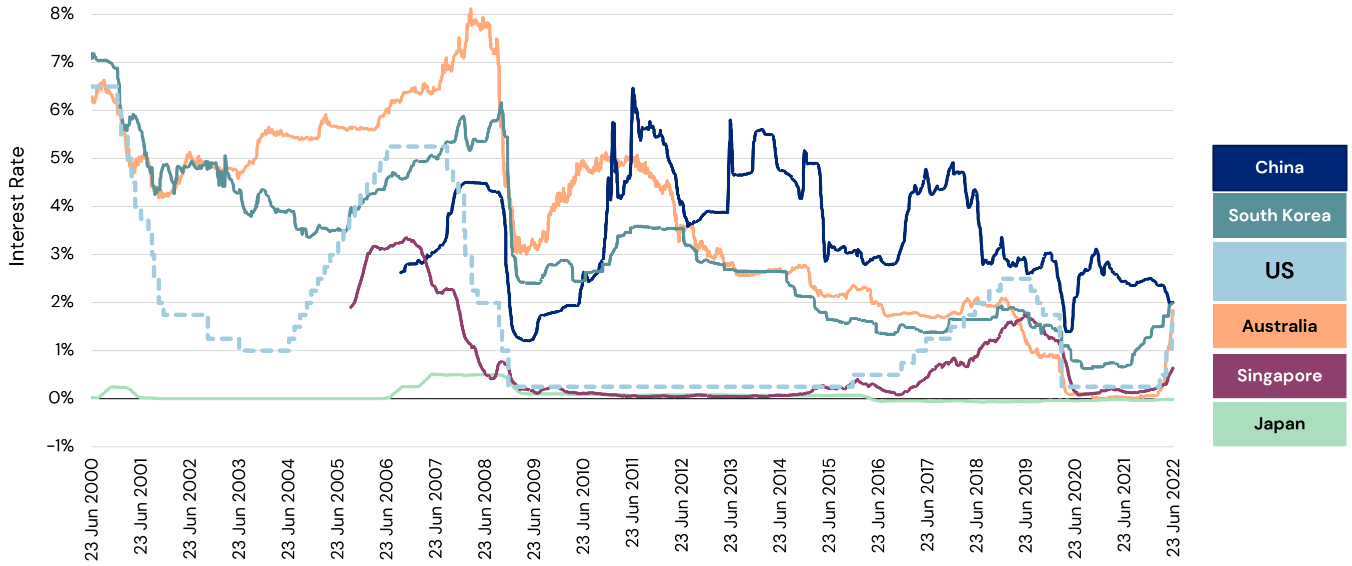
3 Oxford Economics, June 2022

- **Focus on sectors, markets, or submarkets that demonstrate recovery momentum or with relatively healthy supply-demand dynamics.** For instance, most office markets in the region have registered declining vacancy rates, bottoming rents, or even positive rent growth over the past quarter or two.

- **Focus on markets or sectors with strong investor appetite.** For example, logistics capitalization rates in Australia and South Korea have compressed over 100 bps over the past 12-24 months. Investor appetite is expected to remain strong and support capital values, despite rising interest rates. As another example, although the pace of Japan office occupier market recovery has been behind that of several office markets in the region (e.g., Singapore office), the office transaction volume in Japan has been strong and stable during the pandemic compared to the rest of the Asia Pacific region. The favorable investor demand has led to continuing capitalization rate compression among Japan office assets since 1) the office sector remains the largest and most liquid sector in Japan; and 2) vacancy rates of major office markets in Japan remained some of the lowest among major office markets in Asia Pacific, despite the relatively slow pace of recovery.

- **Seek potential value-added or off-market opportunities to boost returns elsewhere.** Where possible, investors can seek off-market opportunities to avoid bidding up entry prices, or value-added opportunities to improve returns and potentially offset some impacts from rising operating expenses, construction costs and interest rates through either building-specific renovation/repositioning to achieve occupancy improvement or rental uplift.

03 Rapid interest rate increases in South Korea, Australia and Singapore, but easing monetary policies in China and accommodative policies in Japan



Note:

Australia's interest rate refers to the 3 Month Bank Bill Swap Rate (BBSW), China's interest rate refers to the 3 Month Shanghai Interbank Offered Rate (SHIBOR), Japan's interest rate refers to the 3 Month Tokyo Overnight Average Rate (TONA), Singapore's interest rate refers to the 3 Month Singapore Overnight Rate Average (SORA), South Korea's interest rate refers to the 3 Month Certificate of Deposit (CDC), and U.S.'s interest rate refers to the U.S. Federal Reserve funds rate based on the upper range of the target band.

Source: Bloomberg, as of 23 June 2022

OFFICE: STRONG RECOVERY MOMENTUM

As we anticipated in ISA 2022, real estate fundamentals of most Asia Pacific office markets have improved or bottomed (Figure 4). The relaxation of social distancing measures and the strong willingness to return to offices have supported the recovery of office demand, especially in Australia, Singapore, and South Korea. These markets are leading the transition from pandemic to endemic in the region. The Singapore office market not only continues to recover as we have predicted, but also is the first to register positive rent growth among major office markets in the region. The improvement in the Australian office market has surprised us to the upside due to the faster-than-anticipated relaxation of social distancing measures. Despite the quasi-State of Emergency imposed in early 2022, the Japan office markets have remained relatively resilient due to the high willingness to return to offices. In Hong Kong and Shanghai, stringent COVID-19 measures have disrupted the recovery momentum. The good news is that stringent COVID-19 measures also halted projects slated to be completed in 2022 and 2023 in Shanghai, which could facilitate the stabilization of occupancy towards the end of 2022 to early 2023.

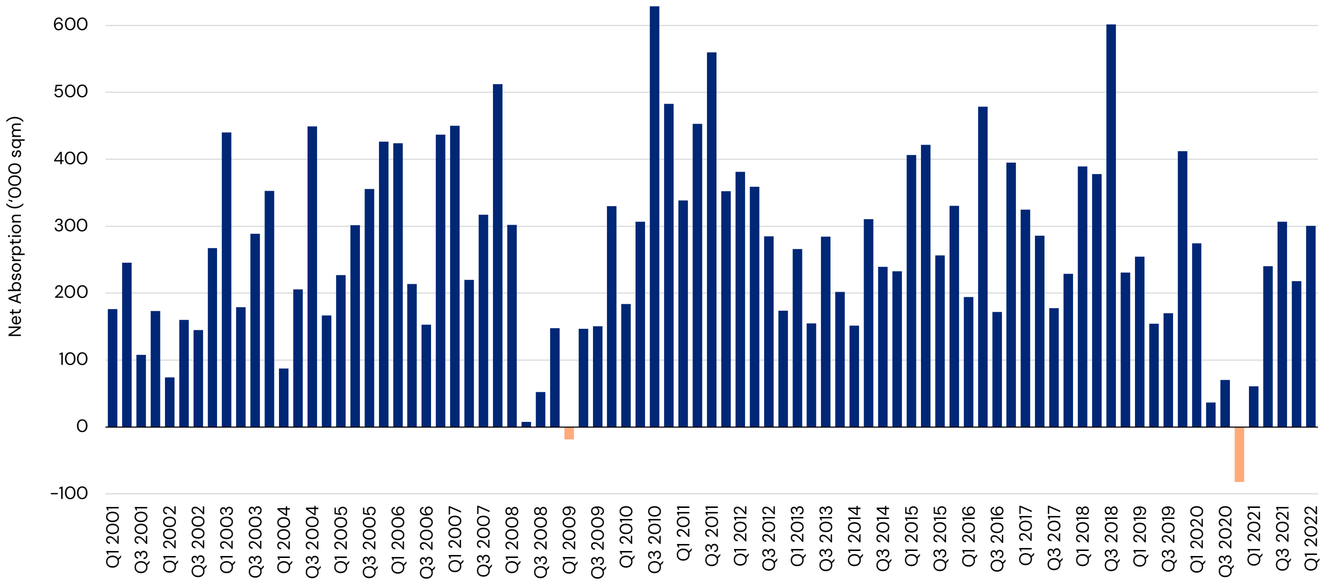
Looking ahead, Singapore, Australia, South Korea, and to a lesser extent, Japan, are expected to continue to lead the office recovery in the region. The recovery momentum in Hong Kong and Shanghai is expected to pick up once economic activities return to a new normal. We continue to expect a wide performance dispersion by market/location, tenant industry, company size, and building specification. Investor appetite for Asia Pacific offices is expected to remain strong, as shown by the record-high transaction volume for offices in 2021 (Figure 1). The abundance of liquidity has supported office capital values. With borrowing costs rising in most Asia Pacific markets, the probability of further capitalization rate compression is likely to be low. However, any material capitalization rate expansion in the near term is also unlikely as office fundamentals in most markets are improving and investor appetite for offices in the region remains solid, particularly among domestic investors.

We continue to favor offices in Tokyo for core and non-core strategies. For high-return strategies, we still favor Singapore CBD, where healthy pre-commitment activities among new projects and the moderating supply pipeline suggest that the rental growth cycle could be extended longer than during previous cycles. In addition, we favor high-return strategies in Fukuoka, Sydney, and Melbourne, as these markets are expected to demonstrate healthy or improving supply-demand dynamics in the next two to three years. However, investors need to be flexible on the exit timing due to macroeconomic uncertainty.

04 Strong office demand recovery in Asia Pacific despite the headwinds

On an aggregated basis, AP office only posted one single quarter of negative absorption

Aggregated office net absorption in Asia Pacific, Q1 2001–Q1 2022



Note:

- The aggregate office net absorption in Asia Pacific includes the following office markets: Grade A office in Tokyo 5-ku, prime offices in Brisbane CBD, Melbourne CBD, and Sydney CBD, and investment grade offices in Beijing (including CBD and Finance Street), Shanghai CBD (including Pudong and Puxi), Hong Kong Central, Osaka, Singapore CBD, and Seoul (including CBD, Yeouido, and Gangnam).
- The net absorption data are from Q1 2001 except Osaka, which is from Q1 2008.

Source: JLL REIS, as of Q1 2022

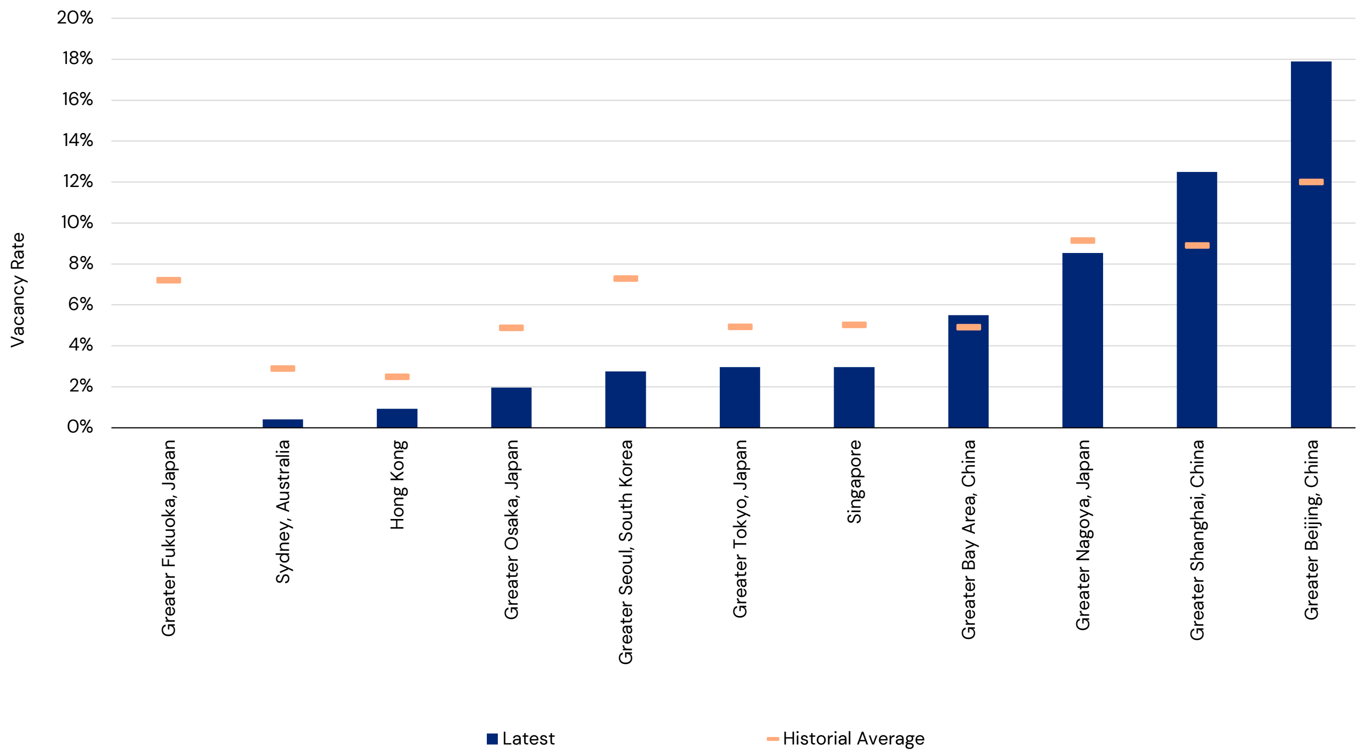
LOGISTICS: FUNDAMENTALS REMAIN HEALTHY

As we anticipated in the 2022 ISA, Asia Pacific logistics market fundamentals remain healthy. Although the aggregated net absorption in the region slowed in the first quarter of 2022 primarily due to temporary impacts in China, the aggregated supply also declined due to rising construction costs and delays caused by COVID-19 resurgences, resulting in low vacancies in most markets by historical standards (Figure 5).

We remain positive on the demand drivers for logistics, such as domestic consumption and the growth of e-commerce, in the next six to twelve months. In China, some logistics tenants are considering diversifying the locations of their facilities to mitigate the impact of the COVID-19 prevention measures on their operations. This trend is expected to be a net positive to logistics demand in China. Over the next six to twelve months, supply risk is likely to diverge in the region. In Australia, low vacancies (i.e., near or below 2%) among existing stock and high pre-commitment rates among pipeline projects suggest that vacancy rates are most likely to remain tight in the near term. Some submarkets in Greater Seoul are expected to experience rising supply, which may impact the pace of leasing and rent growth in the near term. That said, construction disruptions due to COVID-19 resurgences and rising construction costs may delay the delivery or discourage the commencement of some new developments, which could provide support for occupancies in the near-to-medium term.

The logistics sector continued to be favored by investors with strong pricing (Figure 1). Given the divergence of monetary policies and the macro market environment, logistics yields are likely to remain stable (e.g., in Australia, South Korea, and Japan) or could present slight downward pressure (e.g., in China) in the next six to twelve months. Our recommendations remain largely unchanged from the 2022 ISA, with cautionary signs on markets with high supply pipelines. Within those markets, we favor locations with strong growth prospect of demand or locations/facilities close to consumer centers for last-mile deliveries.

05 **Low vacancies in most Asia Pacific logistics markets by historical standards**



Note:

Latest refers to Q1 2022 except for Sydney which is as of 2H 2021, and Japan which is as of April 2022.

The historical average data for each market starts from: Sydney (2H 2019), Greater Bay Area (Q2 2018), Greater Shanghai and Greater Beijing (Q4 2015), Hong Kong (Q2 2014), Japan (Q3 2008), Singapore (Q4 2011), and Greater Seoul (Q2 2018).

Greater Bay Area includes Guangzhou, Shenzhen and Dongguan only due to data availability in Q1 2022; Greater Beijing includes Beijing, Tianjin, and Langfang; Greater Shanghai includes Shanghai, Suzhou, Jiaxing, Kunshan, Taicang, and Changshu; Greater Fukuoka includes Fukuoka Bay, Inland Fukuoka and Tosu; Greater Osaka includes Osaka Bay and Inland Osaka; Greater Nagoya includes Aichi Bay and Komaki; Greater Tokyo includes Ibaraki, Saitama, Chiba, Tokyo, and Kanagawa prefectures; and Greater Seoul includes Seoul, Incheon and Yeonggi-do.

Source: CBRE (Sydney), as of 2H 2022, JLL REIS (except Sydney, Japan and Singapore), LaSalle Investment Management (Singapore), as of Q1 2022; Ichigo Real Estate Services (Japan), as of April 2022.

MULTIFAMILY RENTAL: INCREASING CONVERSIONS FROM OTHER USES

Multifamily rental performance in the region over the past six months was largely in line with our expectation, except China. In Tokyo, occupier demand, especially in the Tokyo central five wards, is projected to pick up as the country transitions to living with COVID-19. The occupier demand for professionally managed multifamily rental units (typically without full kitchens) in Shanghai is expected to slow in the near term, as some tenants are concerned about potential lockdowns and prefer units with full kitchens. This recent trend could provide value-added opportunities to renovate units and tailor for tenant needs. Despite the near-term challenges in Shanghai, we continue to favor the multifamily rental sector in most parts of Asia Pacific, as policy tailwinds and fundamental drivers for the sector remain intact (Figure 6).

There is a growing trend that investors buy hotel/ retail/residential assets with plans to convert them to multifamily rental assets.

There is a growing trend that investors buy hotel/ retail/residential assets with plans to convert them to multifamily rental assets. Investors have been particularly active in Hong Kong, which surprises on the upside. We expect investor appetite for multifamily rental assets to remain strong in the region. As a result, multifamily rental yields in markets where interest rates are increasing could remain stable or show a slight downward bias in the next six to twelve months. Our recommendations remain mostly unchanged from the 2022 ISA. In the post-pandemic era, we expect multifamily rental assets with strong ESG, health & wellness, and favorable WFH amenities at locations with strong Work-Live-Play attributes to outperform.

06 Fundamental drivers for multifamily rental remain intact

Fundamental drivers for multifamily rental in Asia Pacific

	Fundamental Drivers
China	• Low affordability on home ownership • Urban migration • Favourable taxes for rental property owners and operators • Decreasing household size and increasing the age of marriage/having the first child • Lack of professionally managed rental stock
Japan	• Low affordability on home ownership • Urban migration
Hong Kong	• Low affordability on home ownership • Decreasing household size • Structural shift in tenant profile • Lack of professionally managed rental stock
Australia	• Low affordability on home ownership • Lack of professionally managed rental stock

Source: LaSalle Investment Management, as of June 2022

RETAIL: RISING DOMESTIC INVESTOR APPETITE IN SOUTH KOREA AND AUSTRALIA

The retail occupancies in most Asia Pacific markets held flat or improved slightly from six months ago (Figure 7), showing some early signs of recovery. However, the discretionary retail sector (represented by prime retail shopping centers) in the region remains weak, with some diverging trends by market and retail category. In Singapore, the occupier demand for prime retail space picked up faster than anticipated, as tourist arrivals gradually increased after its international borders were fully re-opened. Nonetheless, our outlook on prime retail shopping centers remains weak. Without Chinese tourists returning to other Asia Pacific markets, prime retail shopping centers in most Asia Pacific markets are unlikely to fully recover to their pre-pandemic levels in the next six to twelve months. Nonetheless, retail demand in China and Hong Kong is expected to recover with the most recent announcements on the gradual loosening of the COVID-19 prevention measures.

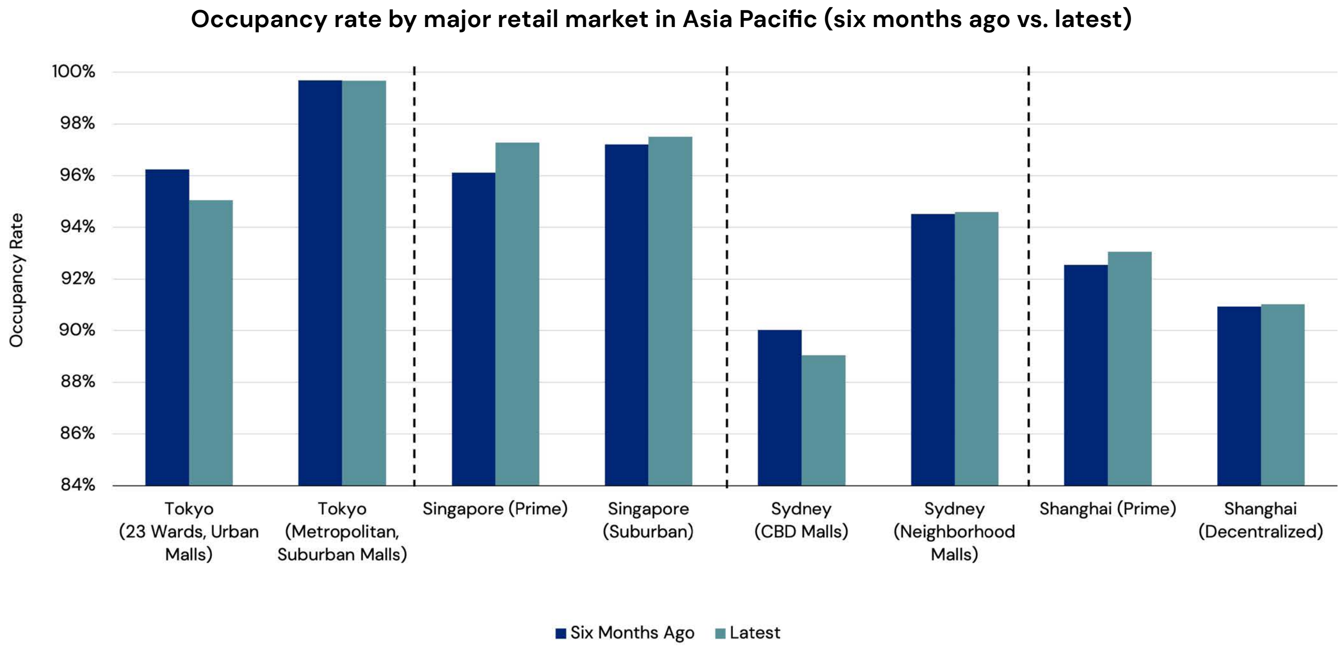
Food and beverage (F&B) operators have benefited from the relaxation of social distancing measures. However, the growth of their sales revenues is unlikely to immediately trickle through to rent growth for landlords. F&B retailers typically run their businesses on thin profit margins and could be more vulnerable to rising inflation. Therefore, optimizing exposures to F&B tenants in the tenant mix and finding or maintaining creditworthy tenants are even more important than six months ago.

Despite the relatively slow recovery momentum, the retail transaction volume in major Asia Pacific markets rebounded in 2021 to the highest level since 2007 (Figure 1), primarily driven by strong domestic investor demand in Australia and South Korea. The focus continues to be on either well-located shopping centers targeting non-discretionary spending or dominant prime retail shopping centers. Despite the strong transaction volumes in Australia and South Korea, the retail sector is generally not favored by investors. Considering e-commerce disruptions, the relatively slow recovery momentum, and rising interest rates, retail capitalization rates in major Asia Pacific markets are likely to remain flat or expand slightly in the near term. Therefore, we remain cautious on retail investments in Asia Pacific and recommend evaluating opportunities on a deal-by-deal basis.

HOTEL: AUSTRALIA AND SINGAPORE LEAD THE RECOVERY

The fundamentals in several Asia Pacific hotel markets improved as domestic travel and (more recently) international travel resumed after the COVID-19 resurgences were under control. Australia and Singapore eradicated quarantines, COVID-19 testing, and visitor arrival limits at a faster-than-expected pace as they transition to living with COVID-19, leading to an uptick in

07 Retail fundamentals remain weak, but showing early signs of bottoming



Note:

The latest occupancy rates are as of Q4 2021 for Sydney, February 2022 for Tokyo and Q1 2022 for Shanghai and Singapore. Occupancy rates from six months ago are as of Q2 2021 for Sydney and Q3 2021 for Tokyo, Shanghai and Singapore.

The occupancy rate data for Tokyo is based on preliminary estimate.

Source: JLL REIS (Sydney), as of Q4 2021, ARES (Tokyo), as of February 2022, and JLL REIS (Shanghai and Singapore), as of Q1 2022

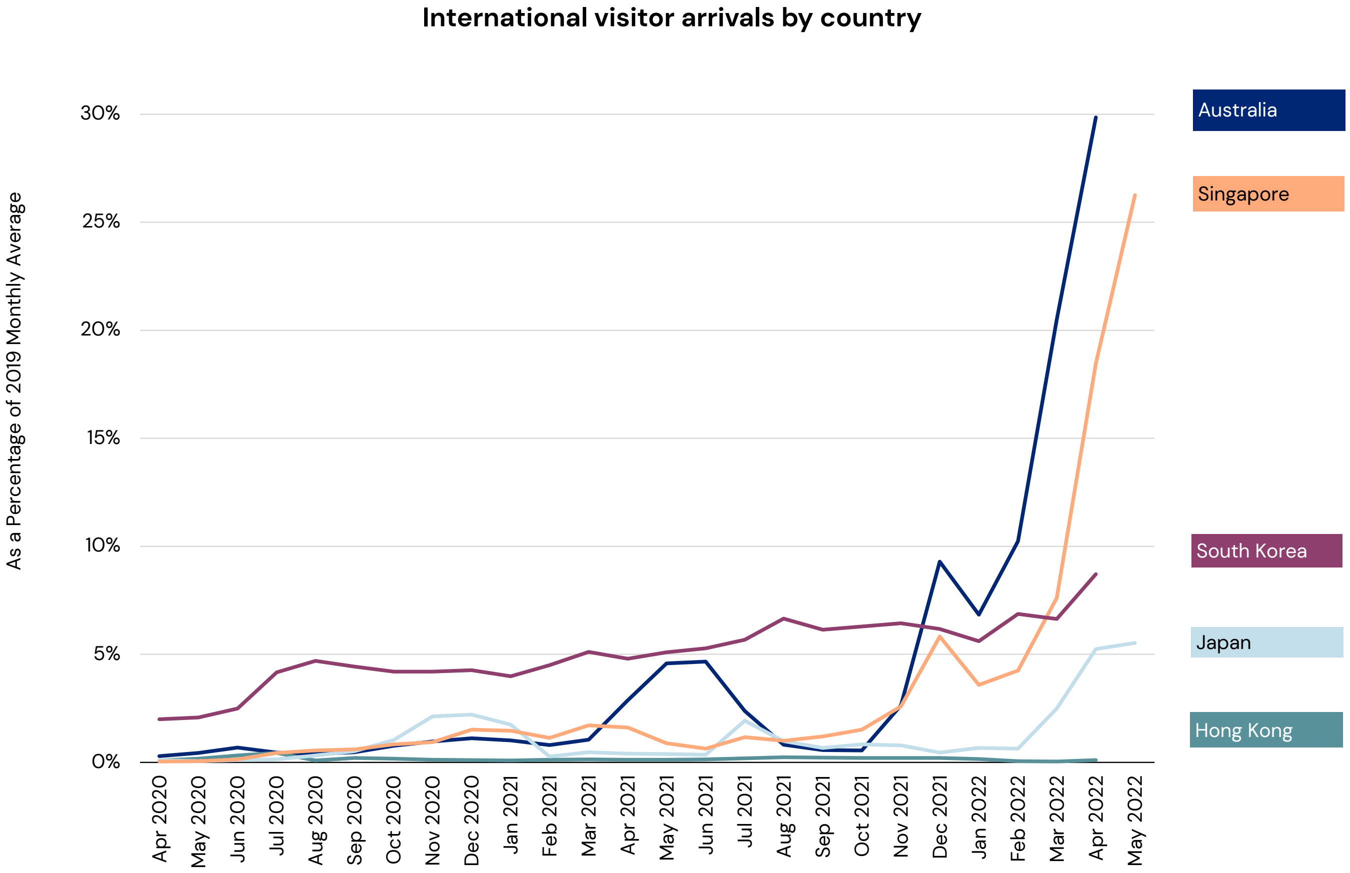
Looking forward, the recovery in the hotel sector continues to hinge on the governments' ability to manage COVID-19 resurgences and the path to living with COVID-19.

international visitor arrivals and a gradual improvement in hotel fundamentals (Figure 8). In contrast, the recovery led by domestic leisure tourists in China was disrupted early this year, due to the stringent COVID-19 prevention measures.

Looking forward, the recovery in the hotel sector continues to hinge on the governments' ability to manage COVID-19 resurgences and the path to living with COVID-19. The constraints on airline capacity, labor shortages and rising labor costs are also expected to drag the recovery of international travel, and consequently, the recovery of the hotel sector. Therefore, our view remains that domestic and leisure travel is expected to continue to lead the hotel recovery in the region. Markets that have transitioned to living with COVID-19 and kept their borders open are expected to outperform. With that said, investors need to be flexible on the exit timing, given the uncertainty over the pace of recovery and the resumption of business and leisure travel.

08 International travel is picking up as borders are re-opening

Domestic travel is likely to remain the main driver of the recovery



Source: The Australian Bureau of Statistics (Australia), The Hong Kong Tourism Board (Hong Kong), and The Korea Tourism Organization (South Korea), as of April 2022; The Japan National Tourist Organization (Japan), and The Singapore Tourism Board (Singapore), as of May 2022.

Europe: On the "front lines" of geopolitical tensions and inflationary pressures

> In our 2022 ISA, published in January 2022, we anticipated a continuation of the then well-underway post-pandemic recovery, with the chasm between Europe's favoured and unfavoured sectors gradually closing as both investors and the end users of real estate return to offices and physical retail. But the aphorism, "the only constant in life is change", has never been truer. In February, the Russian invasion of Ukraine was a shock that, joining a string of other global stress points, catalysed a further upward shift in already elevated inflation and sparked increased risk aversion, thus driving a sharp increase in borrowing costs for assets such as real estate.

Many of the underlying stress points are global, and are covered in depth in Chapter One. But Europe is literally at the 'front lines' of the geopolitical and energy crises. Given that it has both structurally more subdued growth potential than other regions, and relatively low-yielding property, the impacts on real estate capital markets are being especially acutely felt in the region.

To tackle inflation spikes, Europe's monetary policymakers, including the ECB, the Bank of England, and other regional central banks, have started or signalled an imminent start to their hiking cycles. Theirs is not an easy task in a macroeconomic environment rendered fragile by supply chain issues, a hot war on the region's periphery, and a squeeze on consumers' disposable incomes. The risk of recession in Europe is undoubtedly high and rising. (Figure 1)

Real estate investors also face considerable industry-specific changes. Materials shortages and the rising cost of construction are impacting development activity, causing some projects to be delayed or cancelled. On the positive side for owners of existing assets, this is the first step in the market adjustment mechanism that leads to higher rents. As we have pointed out, real estate assets can act as a hedge against inflation whenever and wherever market conditions allow landlords to raise rents.

However, it takes time for higher rents to be passed through into cash flows, especially in sectors and geographies with long leases and without high-frequency, unconstrained inflation indexation clauses. Some property sectors in Europe, such as regulated residential, are especially limited in their ability to efficiently and quickly pass through rental growth into net operating income.

The eventual pass-through of inflation will come too late and too unevenly to prevent a softening in values in the near term. Against a backdrop of squeezed distribution yields due to a jump in all-in borrowing costs of around 200-250 basis points, split roughly evenly between a change in base rates and an expansion of risk margins, there is clear evidence of an adjustment in values. Compared to slower-moving, backward-looking price indices, the value decline looks to be, on average, around 5%. But against pricing expectations that had been running hot just a few months ago, market clearing prices are around 15% down from what was anticipated upon the launch of sales processes.

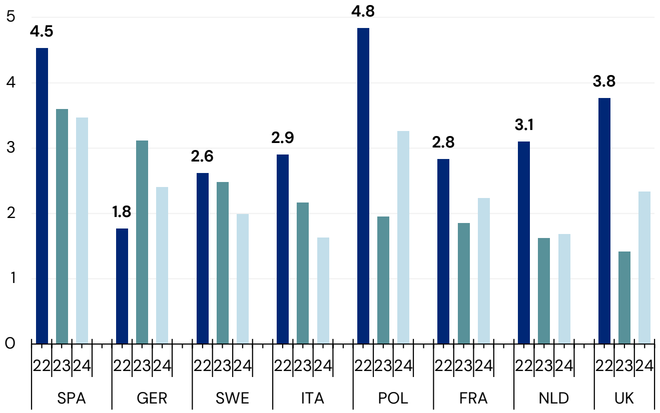
There are anecdotes of winning bidders re-trading, potential buyers pulling out, and failed auctions. At the same time, however, there are just as many stories of the best assets, especially those well positioned for post-pandemic and decarbonising world, trading at or above prior levels. All-cash buyers have stepped in and carried the market for such properties.

01 Overall GDP growth forecasts downgraded as a result of Ukraine war

Macro uncertainty pushes up borrowing costs in 2022

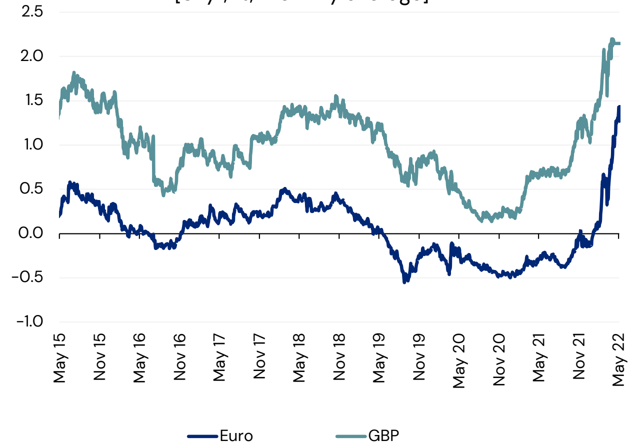
European GDP growth

[% pa]



Interest rate swaps

[5-yr, %, monthly average]



LaSalle (06/22), Oxford Economics (05/22), Thomson Reuters (05/22)

While this environment is uncertain, we anticipate attractive buying opportunities to come from it. Investors seeking value-add returns can be expected to benefit from dislocation. They should also continue to seek opportunities to reposition assets into the categories benefitting the most from the quality chasm noted above. In the longer run, we see the potential for stabilisation; Europe's long-run inflationary pressures remain structurally weak, and the ECB is evidencing a renewed willingness to tackle excessive risk spreads, suggesting borrowing costs may eventually settle at a lower level than today.

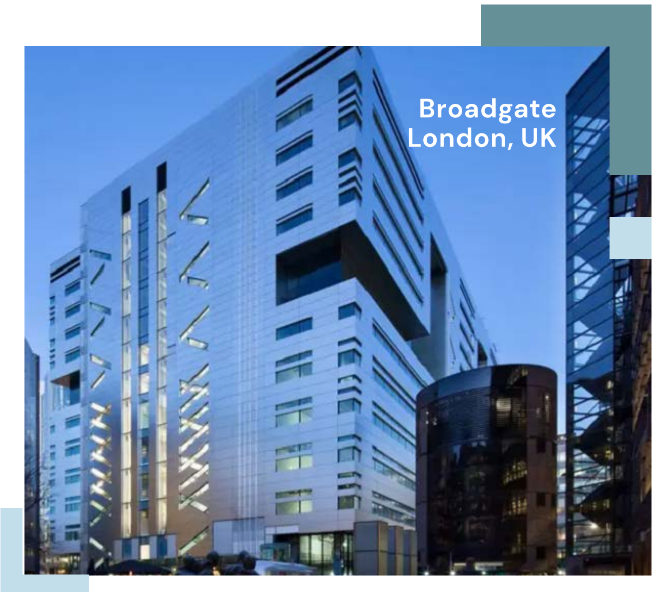
This environment is playing out differently in different sectors, meriting a discussion of how these trends are manifesting on the ground for the various property types.

RETAIL'S REBOUND POSTPONED

The European retail sector has for years been characterised by high cash yields, rebased rents in wake of e-commerce's rise, and tenant rent relief due to lockdown closures. Six months ago, it was our view that a subset of retail property represented an attractive risk-adjusted return opportunity due to the potential to rebound from this position of weakness, especially in the UK where to date more pain has been seen than on the Continent.

Our conviction in this robust recovery has been shaken by inflation's tight squeeze on discretionary spending power. We have seen a strong return to in-person shopping, at the partial detriment to online shopping's gains in some product categories. However, consumers, faced with higher energy and food costs, are looking for ways to save in other areas of spending. Retail warehouses have remained relatively resilient due to the non-discretionary nature of underlying demand of grocery anchors and their convenience offer. We are also bullish on outlet centres, given their strong value proposition and offering as a low cost family "day out".

But fundamental challenges for continental European shopping centres and high street retail are now expected to take longer to resolve than previously, although we remain of the view that destination shopping and leisure will remain an integral part of the retail experience in the long term. We take a cautious, highly selective approach to the retail market, recognising that in this challenging envronment it may be possible to identify instances of deep value.

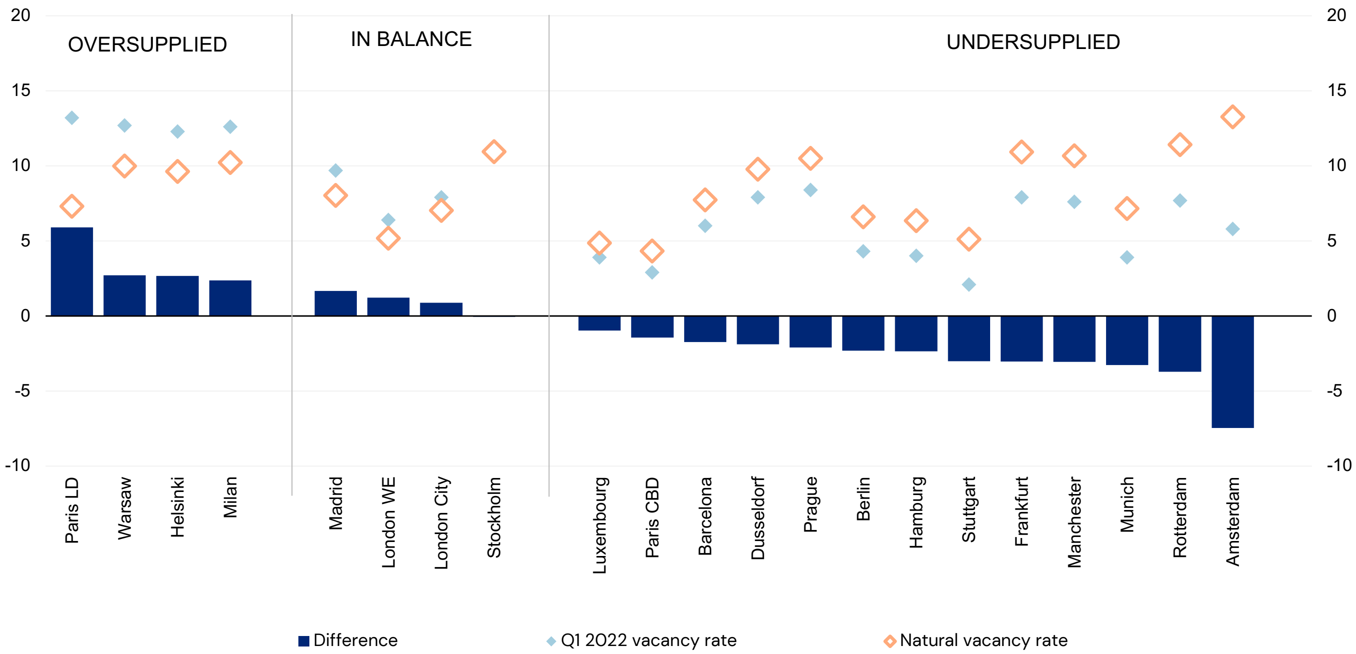


02 Space availability still below natural vacancy in most office markets

Low vacancy rates offer opportunity to raise rents

Office Market Conditions

[Current vacancy vs natural vacancy rates as % of office stock]



Source: LaSalle (05/22) JLL (Q1 22)

OFFICE SECTOR CHALLENGED BY 'TRIFURCATION'

As with retail, the office sector is experiencing occupier and investor demand varying greatly by quality of asset and microlocation, with demand focused on the best office space. This is especially true of 'experientially rich' buildings in well-connected locations that meet occupiers' sustainability agendas and offer high-quality amenities and wellness credentials. This trend, combined with the low availability of space relative to estimates of markets' 'natural' vacancy rates[1] (Figure 2), continues to place upward pressure on prime rents throughout most of Europe, despite weak demand for less attractive assets.

1 'Natural' vacancy rates are econometrically-estimated levels of vacancy below which rental growth tends to be observed for a market. These can vary widely between markets due to a range of structural factors.

With the pathway to Net Zero Carbon in mind, the age and quality of the existing stock in European markets presents an opportunity to create the offices of the future, particularly through refurbishment. That is why we describe the office market as 'trifurcating' rather than bifurcating. Long-term core investors should gravitate to the best assets on net zero pathways, but buildings capable of being upgraded into that category are worth targeting for value-added strategies. However, there is a growing range of older stock which is likely to be stranded, and should be sold at—or at times even below—current valuation before liquidity dries up.

LOGISTICS' DEMAND STORY INTACT, DESPITE AMAZON WOBBLE

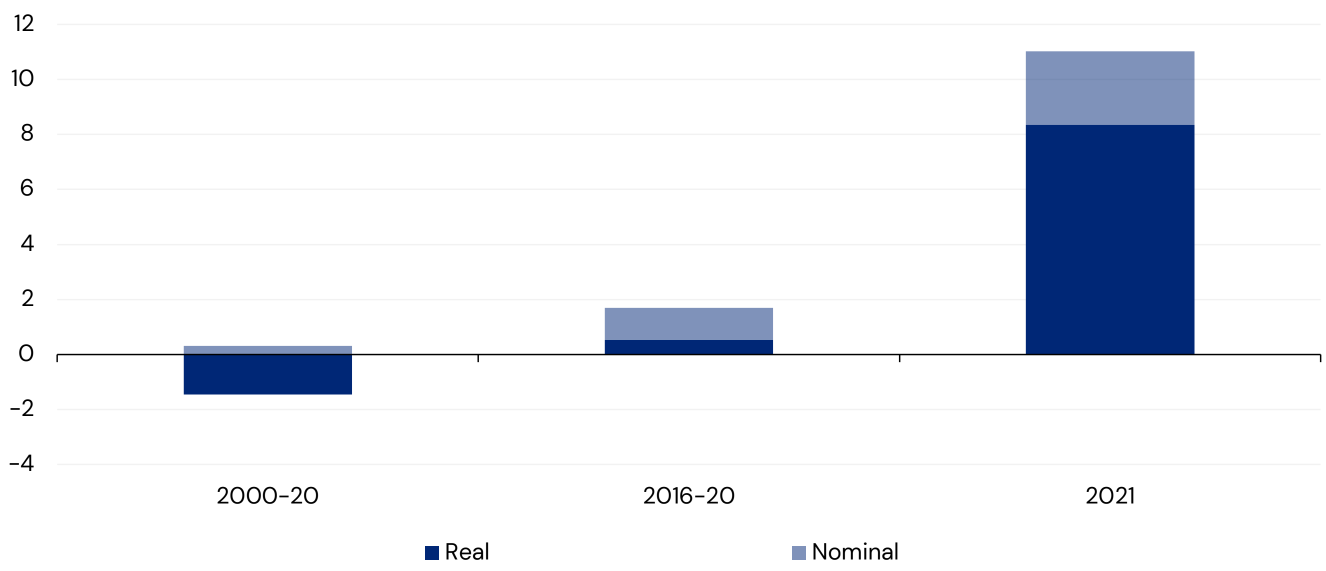
The logistics sector has not been immune to recent market shocks and the ongoing cost-of-living crisis either. The slowdown in net absorption by major occupiers, such as Amazon, marks a change from many years of continued expansion. That said, it is easy to overstate the risk this poses. While Amazon's demand in the UK has been significant at 40% of total big box take-up in recent years, the picture is different on an aggregated European level, where Amazon made up just 13% of all big box space taken in 2021.

It helps that Europe is still relatively early in the adaption curve of e-commerce. According to Green Street, Amazon's ratio of warehouse space per household in Europe is around a third of that in the US. And as we observe globally, Amazon's growth and promotion of same- and next-day delivery has reset consumer expectations for the speed of fulfilment. Other firms are still playing catch-up to this change, and we expect them to drive logistics demand even as Amazon's expansion slows.

03 Strong logistics demand meets insufficient supply

Anticipated construction delays will provide further boost to rental growth

European Prime Logistics Rental Growth
[average % per annum]



Rental Growth is for Belgium, Czech Republic, France, Germany, Hungary, Italy, Netherlands, Poland, Spain & UK
Source: LaSalle (03/22), JLL (Q4/21)

Indeed, the logistics sector recorded the highest demand for new space ever in the first half of 2022, driven by this continuous e-commerce expansion, as well just-in-case inventories and the nearshoring of some manufacturing activity. As a result, vacancy rates remain at historical lows. We remain confident in the prospects for European logistics rental growth, even if more selectively than six months ago. (Figure 3)

LIVING STRATEGIES' PROSPECTS AT RISK OF DIVERGENCE

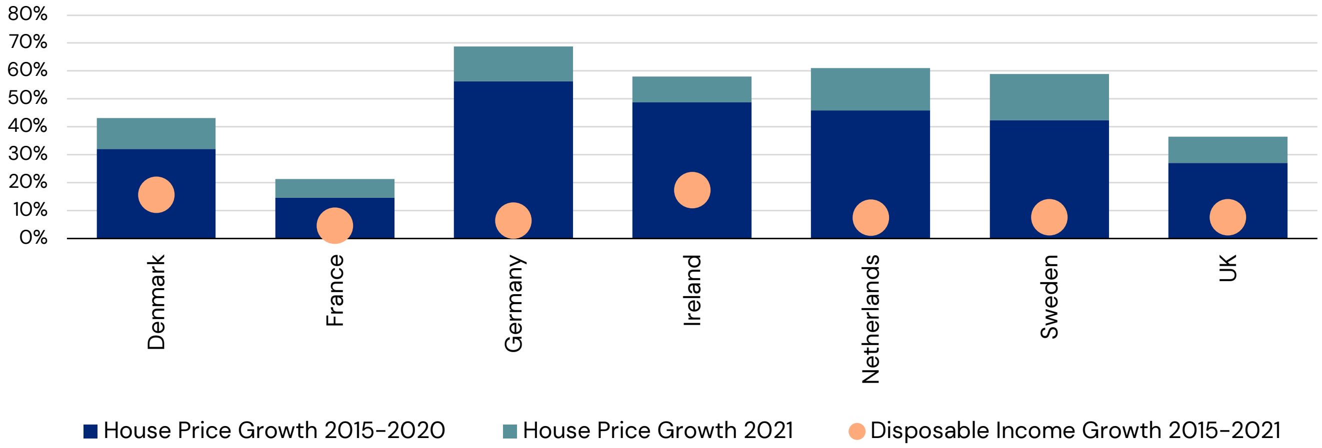
The Living sectors remain underpinned by strong demand drivers including robust household formation growth in key cities, an ageing population, increasing mobility, and a structural undersupply across Europe. In the current environment it is important, however, to closely examine regulatory constraints to growth. It was once a 'stylized fact' that regulated residential in Europe delivered 'inflationary' rental growth, but it is increasingly clear that the more accurate characterization is that it generates steady growth near to the low single-digit levels where inflation had been for so many years. Regulated residential will be mostly unable to pass through inflation at today's elevated levels into cash flows. On top of this, politicians will be tempted to pull any regulatory lever available to keep pressure off for their voters, so rent controls are at an elevated risk of being tightened.

For the more niche living sub-sectors, such as student housing and senior housing, it is important to be early on the investment curve to take advantage of more attractive pricing. Currently, the niche living sectors provide a yield premium to traditional residential, which is expected to narrow as they become more institutional. These sub-sectors also tend to have low or no rental regulation. (Figure 4)

04 Income growth has not kept pace with house prices, suggesting a pull back in values

European income growth vs house price growth

[% p.a. 2016-2021]



Source: LaSalle (06/22) Oxford Economics (06/22)

A FRAMEWORK FOR A MORE CAUTIOUS INVESTMENT FOCUS

With the situation changing quickly, it is becoming harder to find attractive investment opportunities, at least until clarity around a stable level of pricing emerges. Simply put, the risk to values comes through via both (1) upward pressure on yields and (2) the inability of rents in some markets and sectors to grow with inflation. Correspondingly, we are most concerned about the trajectory of values in (1) the lowest yielding markets/sectors where increases in the cost of debt have flipped geared yields to 'negative leverage', and (2) markets/sectors where landlords do not have strong pricing power. In this context, we recommend thinking about sectors according to a simplified matrix of yield levels vs. growth potential. (Figure 5)

Very low-yielding sectors with excellent fundamentals, growing rents, and ability for those rents to flow efficiently into net operating income (NOI) are depicted in the top right quadrant. These are assets such as logistics, prime low-carbon offices in key cities, and unregulated residential. In these markets, the impact on values will depend on the relative magnitude of an uncertain upward shift in yields and the uncertain extent of going-forward rental growth. The likelihood of the latter materialising will hinge on whether the European economy manages to avoid a significant recession.

In **low-yielding sectors with barriers or risks to NOI growth** (bottom right quadrant in the table), we recommend caution until markets stabilise. This includes sectors with structural features that inhibit pass-through of inflation to rents, such as regulated residential or long leases with no or poor indexation clauses.

Higher-yielding sectors/markets with more challenged fundamentals (bottom left quadrant in the table) are intuitively those in which 'deep value' may be identifiable. This line of thinking was behind our conviction last year in a value recovery for a subset of the UK shopping centre market. However, concerns around economic growth cloud our conviction in such market segments today. The nascent retail recovery, for example, is at risk from inflation's pressure on real incomes. Moreover, the execution of capex-rich strategies to 'fix' assets in this category are pressured by construction cost inflation.

Finally, **sectors with "better" yields and strong NOI growth prospects** (A1) are rare but remain attractive. We should highlight that "better" is a relative term and we are not implying that these assets are available at absolute high yields, but at levels with some gap to financing costs. Sectors/markets that remain in this attractive category include some less mature living sub-sectors (such as senior housing) and potentially aggregation of granular light industrial space.

The current landscape has contributed to a deterioration in real estate capital markets sentiment and major changes to forecasts are needed to reflect a variety of changes across all property sectors. A key takeaway is that European real estate investments continue to be influenced by sector selection more than geography, and increasingly dominated by careful stock selection. Despite months of major market volatility, reasons remain to monitor for potential inflection points and carefully watch governments and central banks' next steps. Given many unknowns, investors may find it harder than usual to pick up the signal from the noise. But in our view, this environment only reinforces our long-term focus on real estate that is resilient to a wide range of macroeconomic conditions.

05 Investing in the face of inflation, rate rises & growth risks

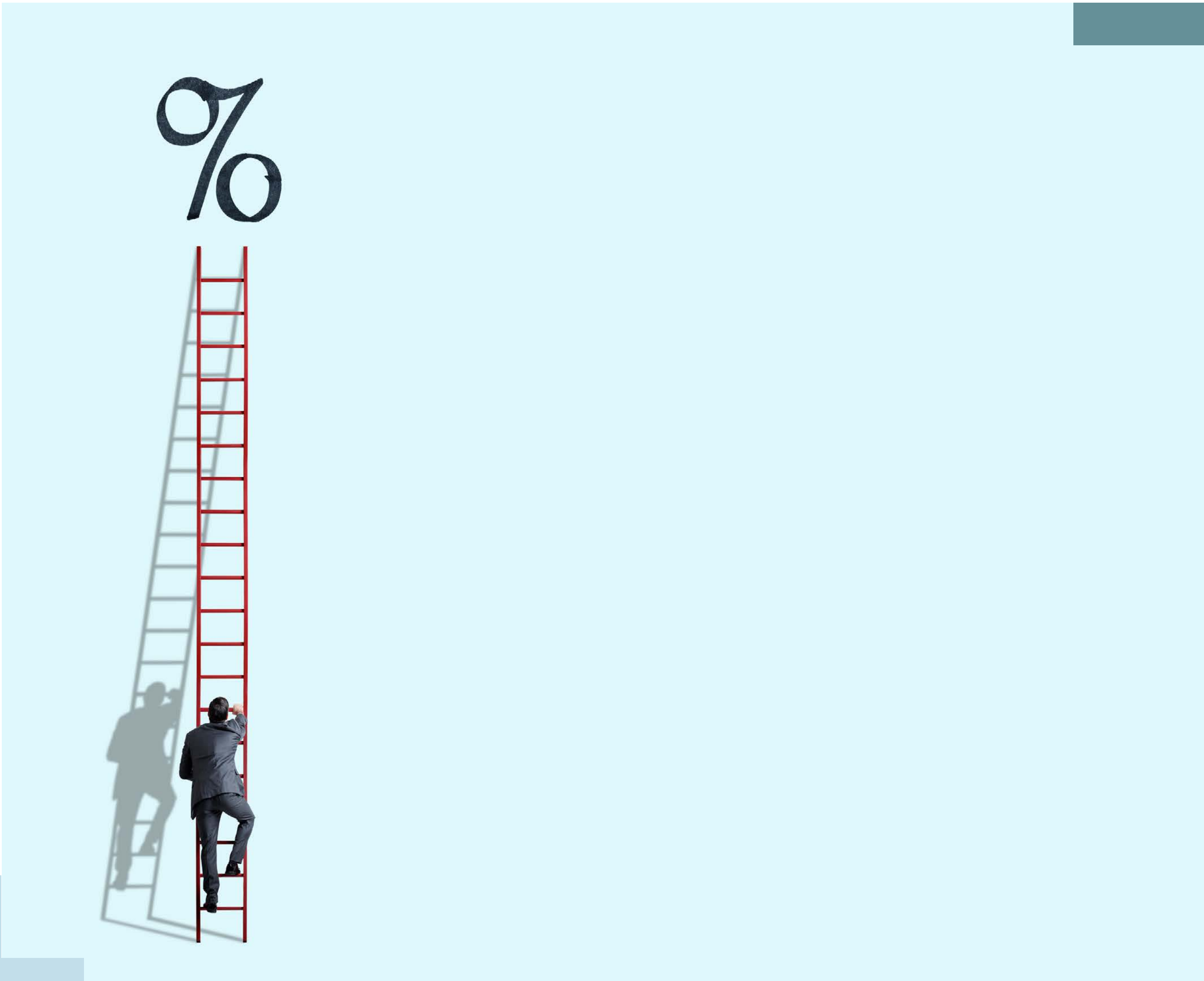
Low yielding sectors at risk, but have to balance with NOI growth potential

	Better cash yields	Low cash yielding
Strong NOI growth likely	**MOST ATTRACTIVE, BUT RARE** Outlet malls Less mature Living subsectors Some affordable housing sub-segments Life sciences	**UNCERTAIN** **(performs if growth holds)** Logistics (especially urban) Prime, ESG-rich office in tight markets Unregulated residential
Strong NOI growth not likely	**UNCERTAIN** Shopping centres B-grade offices	**CAUTION** Regulated residential Supply-prone motorway logistics Non-indexed LT leases

Source: LaSalle Investment Management.

North America: Downshift after the turn

The global shifts and shocks in the first half of 2022 have been felt in North American real estate markets, with more impact on the overall direction of the market than the texture of the market. The regime shift from "low, low, low" has led to changes in pricing across asset classes, and real estate is no exception. As is typical for private equity real estate, the data is slow to reflect changes, but the market is responding in a way that is maintaining market liquidity and providing price discovery. The "Texture" of the market--referring to what is in favor and out of favor within real estate among tenants and investors--has changed less, both in terms of pricing and our outlook/recommendations. Looking ahead, we expect the ongoing impacts from the macro shifts to have a greater impact on real estate overall than our strategies for investing within real estate.



MACRO ECONOMIC SHIFTS AND IMPACT ON REAL ESTATE CAPITAL MARKETS

The macro impacts of slowing economic growth, persistent higher inflation, and rising interest rates covered in Chapter 1 are having a negative impact on the North American real estate markets, especially relative to our expectations at the start of the year. Of these three factors, the largest impact on real estate has come from higher interest rates. Around the start of 2022, both the US Federal Reserve and the Bank of Canada shifted their tone on actions related to lowering inflation and

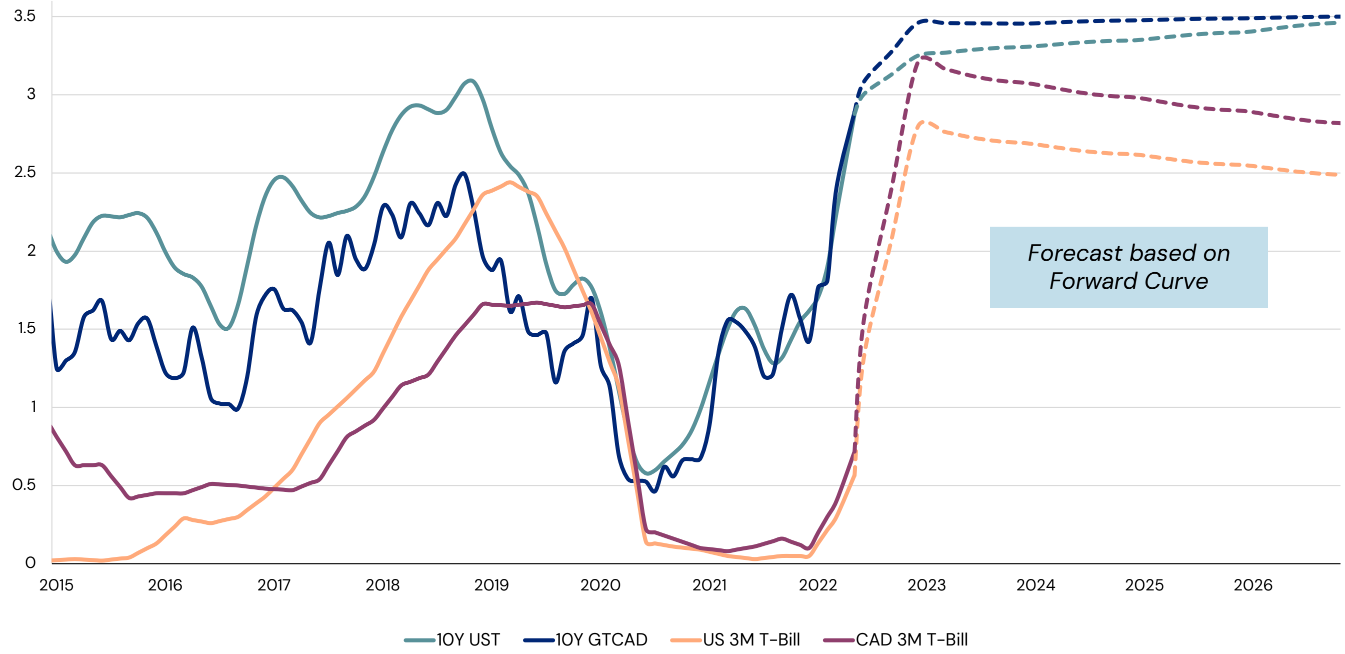
There have been two major sources of impact on the real estate market.

then followed through on that with rate hikes. The view that inflation would moderate on its own went away, and the central bankers made it clear they would be taking more decisive action to slow inflation--and in the second quarter, followed through on that intention with additional rate hikes. As shown in Figure 1 the market followed the central banks in recognizing this, and the forward curve on short-term rates and long-term rates quickly shifted higher, with not much of a lag before this impacted real estate markets.

There have been two major sources of impact on the real estate market. The first is that borrowing rates moved higher to a point that borrowing was no longer accretive for the lower-yield segments of the market (notably long-leased industrial, apartments and single-family rentals). This took highly leveraged buyers out of the market, leading to smaller bidding tents and less aggressive pricing. The second was stock market declines and broader denominator effects on real estate allocations. Combined with real estate's strong appraised value growth in 4Q21 and 1Q22, investors who were under-allocated to real estate at the end of 2021 were often at target allocations two quarters later. For established real estate investors, these impacts reduced pressure to allocate new capital to real estate.

The net result was a decline in real estate market pricing during the second quarter. We estimate pricing has

01 Interest rates moved higher in first half of 2022 and further increases to short-term rates expected



Source: NCREIF, LaSalle Investment Management, Moody's Economy.com, Bloomberg, Oxford Economics. Baa, Treasury Forward Yield, and Oxford Forecast as of 28 June 2022.

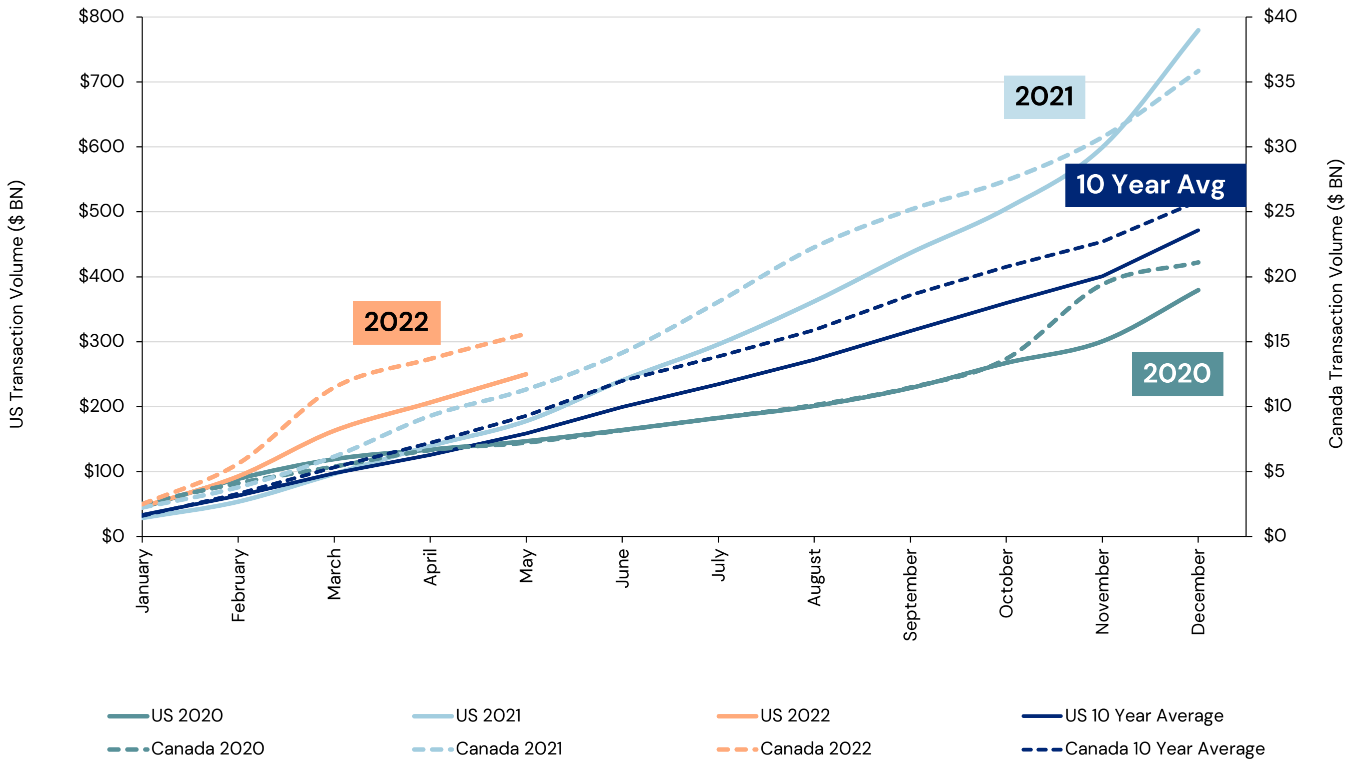
shifted downward from a peak in the first quarter of 2022 by a range of 0 to 15%, depending on market segment. However, this needs to be put into the context of the previous 12-18 months, when pricing was up significantly (upwards of 50% in some of the hottest segments of the industrial market). One signal that the price declines are not significantly impacting sellers is continued strong transaction levels. Figure 2 shows Real Capital Analytics data, indicating US transaction volumes in 1Q22 were $157.6b, 76% higher than a year ago at 1Q21. In Canada, USD $10.7b traded in 1Q22, 71% more than 1Q21. Although volumes for 2Q22 are not yet available, anecdotally properties are still trading, although the number of bidders is down. Transaction volume is likely to be lower than the very high levels in the second half of 2021, but in line with historical levels.

Historically, when real estate pricing declines, the market shock often leads buyers to believe values are down. And with uncertainty around the price decline, buyers reduce bids to a lower price than sellers are willing to accept. This opens up a bid-ask gap that lowers transaction volume, which creates uncertainty on how much pricing is down in reality. But this time has been different in many cases, with buyers and sellers accepting similar price declines, enabling transactions to continue to price and close.

One measure of the impact of higher interest rates on real estate values is the spread between a bond interest rate and the real estate cap rate or income yield. Our preferred comparison is the Baa Corporate bond in the US and the BBB Aggregate Corporate bond in Canada. Figure 3 shows this historically. The increase in interest rates in 2022 pushed that spread below historical average levels. There are reasons the spread should be narrower than normal currently, which relate to the strong outlook for real estate income growth and the higher relative value of real estate income, which provides some inflation protection compared to fixed income. This is one way that inflation has been a positive for real estate capital markets. But even accounting for these factors, the current gap is unsustainably wide. We don't think write-downs to appraised values are imminent; instead, the gap will be closed gradually as future income growth increases income yields rather than property values. For example, in the US, NOI growth of 10% with no value growth would increase a 4.0% income yield to 4.4% and go a long way towards bringing the real estate income yield to a level that seems more normal in the current market.

Another dynamic that can occur as markets shift is a broad pull-back of capital. This often shows up first in the debt markets, but so far this has been limited in North America. There has been an increase in spreads, and the cost of debt has moved more meaningfully higher due to the overall interest rates. Terms are tightening and lenders are being more critical of property underwriting and ability to service debt in a rising interest rate environment. The CMBS market has been most impacted

02 Transactions continue to close in US and Canada during initial months of 2022



Source: Real Capital Analytics (RCA). Note: Closed transactions over $5mm; excludes development sites. Entity/M&A transactions are excluded. Most recent data as of 22 June 2022.

by market turmoil, and as a result has become a less-attractive source of capital. Banks, Lifecos, and debt funds are still lending, but with demand for debt high and the CMBS market slowing, some borrowing needs might be unmet. In the closing weeks of the second quarter, the debt market is far from the frozen conditions experienced at the outset of the GFC and the COVID-19 Pandemic, but debt could become harder to secure, especially for less-established sponsors and more challenged assets. For borrowers, leverage is less accretive than last year, but many are still using leverage with the belief future income growth will make leverage accretive to returns over their hold period.

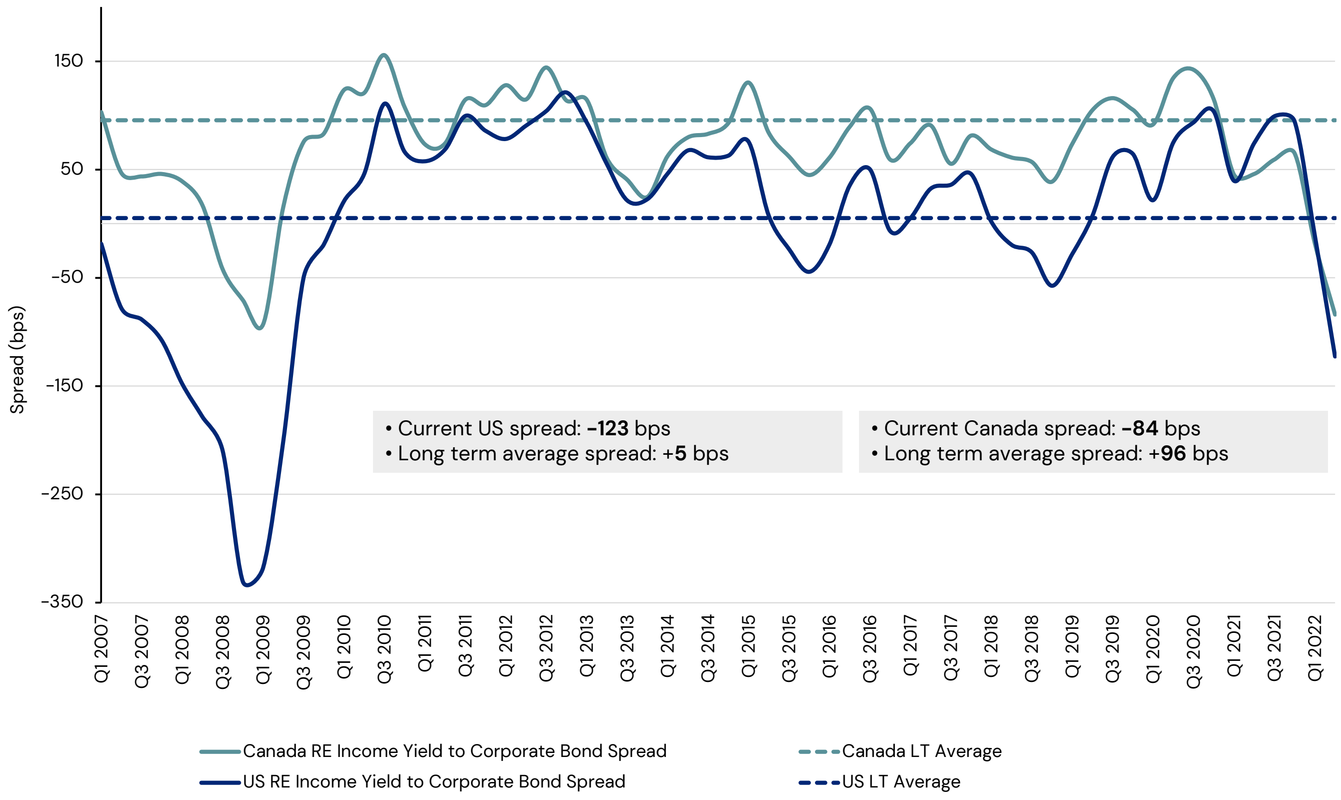
Capital flows for real estate equity are also a barometer of market health. When capital flows to real estate are strong, values tend to move higher; and when capital flows are down, values will move lower. In the US, the major capital source we flagged in the 2022 ISA was the NAV REITs. These funds have continued to raise large amounts of capital in the opening months of 2022, and there has been no slow-down as broad market volatility increased. There also remains a large amount of dry powder from closed-end funds raised in previous years. New commitments from established institutions are slowing as denominator effects impact their allocations. Public REIT values are down, and many REITs are trading below NAV, which limits their ability to acquire property in the private market. In Canada, transaction levels for office and retail have paused, but the appetite for apartments and industrial remains strong as investors are attracted to the strong income growth opportunities expected in these sectors.

IMPACTS ON REAL ESTATE FUNDAMENTALS

Real estate fundamentals have remained excellent for many property types and are playing out as expected across the board. Our outlook is more impacted by higher inflation and the lowering of growth forecasts. For the strong-performing property types like apartments, industrial, and life sciences, the rent momentum in 2021 continued into the opening months of 2022. Demand has also remained very strong, and landlords have retained much of the pricing power they enjoyed in 2021.

Inflation has been one justification for raising rents, and tenants with limited space options have absorbed those rent increases thus far. For the strong-performing property types, there is likely more upside to income growth from the continued high level of inflation than there is downside. Inflation has been a negative, however, for property types where landlords lack the pricing power to push rent increases. For offices in particular, stagnant

03 Higher interest rates caused real estate spread to bonds to move negative, a signal of lower relative real estate value



Sources: Bloomberg MSCI Canada Annual Property Index, NCREIF Property Index, LaSalle Investment Management, Moody's Economy.com BBB bond data to May 2022; Baa Yields as of 14 June 2022. NCREIF data through 1Q 2022.

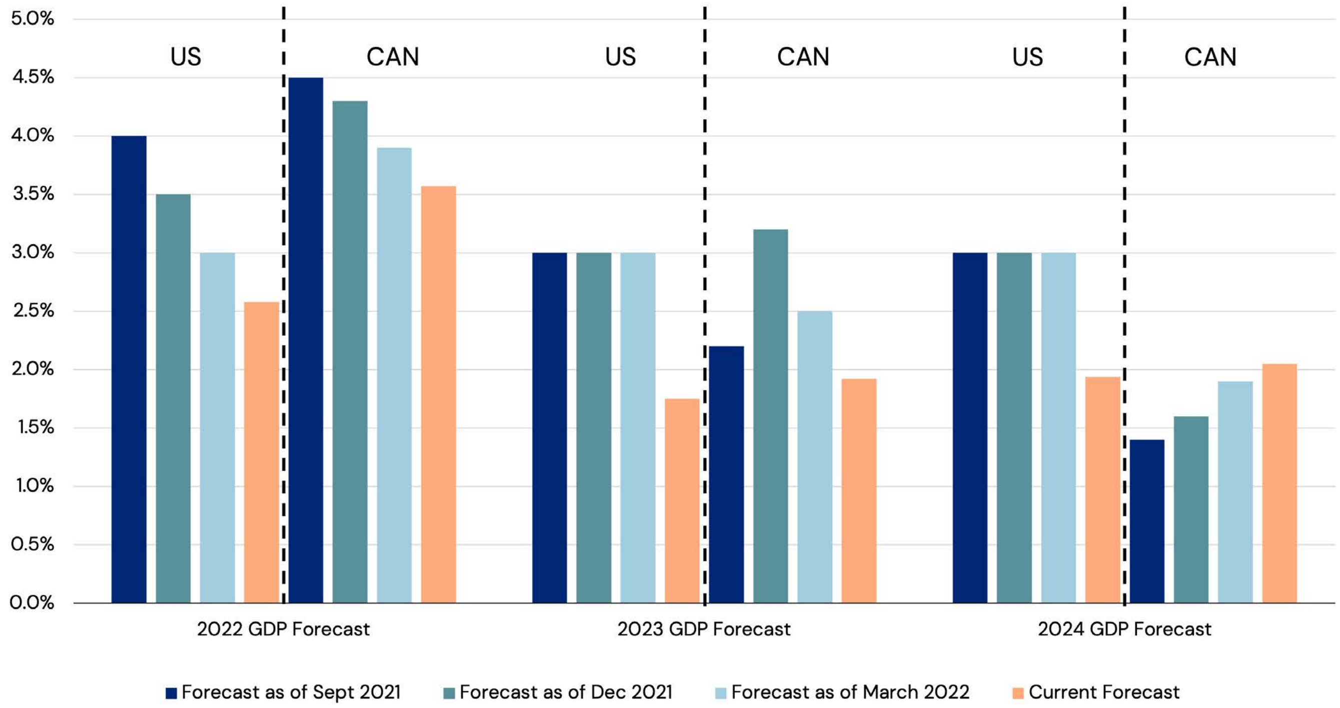
nominal rents mean a decline in real rents. The impact of inflation on expenses is more material for properties leased on a gross rent basis; for apartments, the higher expenses have been offset by rent increases, but higher expenses are eating into net operating income for offices when expenses cannot be passed on to tenants.

In summary, the impacts of inflation on cash flow have been neutral-to-positive for favored property types and negative for out-of-favor property types.

Real estate fundamentals are a lagging indicator and will likely not be impacted by slower economic growth until it is realized. Going into 2022, optimism on the economic outlook was very strong; and by and large, the opening months of the year were positive. But the outlook has dimmed (See Figure 4), and a sharper slowdown would have a more significant impact to real estate demand. The downward revisions in the outlook have been increasing and becoming more near-term through the course of the second quarter. At the close of the second quarter, there is a high degree of uncertainty, with the range of likely outcomes being between central banks to narrowly avert a recession with a "soft-landing" to economies dipping into a recession before inflation is contained.

For real estate, a mitigant to the dimming near-term economic outlook is how tight many segments remain. The markets with landlord pricing power today are expected to retain that even with slower near-term economic growth. But the slower the growth, the larger the risk is to real estate fundamentals. And recent real

04 GDP forecasts remain positive but growth outlook is being lowered



Source: Oxford Economics. As of June 22, 2022

estate pricing has been based not just on current rent levels, but also on expectations of strong future growth. Thus, even if rent growth continues but expectations of future growth are lowered, it could impact market values.

Past periods of negative economic growth quickly impacted commercial sectors. In this scenario, among the favored property types, we expect there will be more durability in the residential and self-storage sectors as consumer spending tends to swing less than business investment in a downturn. We expect that the low unemployment rate will provide some protection to the renters of institutional residential properties.

Industrial markets are somewhat protected by ultra-low vacancy rates, but tenant sentiment and growth outlooks would be impacted by an economic downturn, especially as reduced goods consumption is a likely to be part of an economic slowdown. This risk is higher in markets that have fewer secular tailwinds and more new supply. Many markets still have limited new supply or enough demand tailwinds from factors like migration or shifting supply chains to mitigate the impact of an economic slowdown. On net, for industrial, the impact of this potential recession seems like it would be greater than the COVID recession but not nearly the negative shock of the GFC.

Figure 5 summarizes our views on the relative impacts of various economic scenarios on key property sectors.

MARKET RECOMMENDATIONS

Both the US and Canada are large, geographically diverse countries. The US has a large number of metro markets with different characteristics for investors to choose from, with 56 metros of more than 1 million people and 223 with more than 250,000. Historically there has been an institutional investor bias towards the largest markets, sometimes known as Gateway markets or Super Six/Seven markets...which include some combination of New York, Los Angeles, Washington DC, San Francisco, Boston, Chicago, and Seattle. During the pandemic, some of these markets, which are more urbanized than other markets, were negatively impacted by migration towards the sunbelt and smaller markets.

As the impact of the pandemic wanes, the question is whether those migration flows will be sustained, slowed, or reversed. Our view is the rate of migration will slow, but not reverse. Thus, we recommend investors continue to diversify from the largest markets and consider a wider set of markets for investment. This is especially true for residential, medical office, and retail, but still holds for industrial. In Canada, immigration to the country hit a record of 405,000 (gross) in 2021, with the federal government increasing the 2022-2024 target levels to between 431,000 to 451,000 per year. The government is attempting to make up for the immigration flows lost in 2020 during the pandemic, as well as alleviate a labor shortage and record-high job availabilities. This will boost demand for apartments in the near term, and retail and

05 US sector tilts durable to negative economic scenarios we are watching

Sector and Base Case Weight	Higher Interest Rates	Higher Inflation	Slower Growth
Apartments (Overweight)	**NEGATIVE** Leveraged buyers common and low yields with potential negative leverage in initial years	**POSITIVE** Tight fundamentals and annual rent resets	**LESS NEGATIVE / NEUTRAL** Tight fundamentals limit impact
Industrial (Overweight)	**LESS NEGATIVE** Deep pool of unleveraged buyers; Low cap rates lead to negative leverage situations sooner	**SLIGHTLY POSITIVE** Tight fundamentals, though long-leased assets are more at risk	**MODERATELY NEGATIVE** Strong fundamentals, but demand linked to business cycle
Office (Underweight)	**NEGATIVE** Leveraged buyers common	**NEGATIVE** Weak fundamentals	**SIGNIFICANT NEGATIVE** Weak fundamentals cause further rent declines
Grocery-Anchored Retail (Equal Weight)	**LESS NEGATIVE** Higher cap rates and buyers use less leverage	**NEGATIVE** Flat grocery leases	**NEUTRAL** Long-term leases
Specialty Sectors			
Medical Office (Equal Weight)	**LESS NEGATIVE**	**NEGATIVE** Long-term leases	**NEUTRAL** Recession resistant demand
Life Sciences (Equal Weight)	**LESS NEGATIVE**	**NEUTRAL**	**NEUTRAL**
Self-Storage (Overweight)	**LESS NEGATIVE**	**POSITIVE** Same as apartments	**LESS NEGATIVE / NEUTRAL** Tight fundamentals limit impact
Single-Family Homes (Overweight)	**NEGATIVE** Homebuyers hit by higher mortgage rates	**POSITIVE** Same as apartments	**LESS NEGATIVE / NEUTRAL** Tight fundamentals limit impact

$\underbrace{\text{Higher Interest Rates} \quad \text{Higher Inflation}}_{\text{These two forces are likely to go hand in hand}}$

Source: LaSalle Investment Management

industrial in the longer term. The major markets of Toronto, Montreal and Vancouver will benefit, but high housing costs there will also push demand to secondary markets.

INVESTMENT RECOMMENDATIONS

In the 2022 ISA, we flagged the wide spread in returns between property types; and as expected, that spread has persisted. This increased the value of having conviction around sector weighting calls. Despite the dramatic market shifts in the first half of 2022, we still expect the same sectors to outperform. An underweight call on the office sector was the highest conviction call, and that remains true. Industrial and apartments remain favored. Price changes have made open-air retail slightly less attractive, despite a consistent outlook for steady fundamentals. The higher odds of a recession give us greater conviction for growing exposure to self-storage and medical office, which are more recession-resistant specialty sectors.

Higher interest rates are contributing to declining home sales and starts, with slower appreciation very likely and price declines possible in the US and Canada. While a negative for the overall economy (even a potential recession trigger), it could have some positive impacts for investment real estate. Less home construction would reduce upward pressure on commercial construction costs. Another impact would be on the single-family rental market, which accounts for a growing share of institutional residential investment in the US. As higher interest rates push up the cost of home ownership, that should support single-family rental demand and rents. Home price appreciation has out-paced rent growth for the last several years, but that relationship seems likely to reverse.

Based on market shifts, we are dialing back the recommended heavy tilt towards development. We still see development as attractive in many cases, but less so than six months ago. The shift is due to several factors. The first dynamic is the continued increases in construction costs and the uncertainty about how long those cost increases will persist. This is due both to the higher risk associated with development in an inflationary environment and also how higher costs can lower a yield on cost calculation. The second dynamic is higher market cap rates are narrowing the spread between the yield on cost and the stabilized cap rate. Even though this spread is narrower, it still produces attractive returns, but less so relative to stabilized asset returns versus six months ago. The negative impacts of higher costs could be offset by lower land values, but we expect land values to be sticky as long as sentiment remains broadly positive. It would take a material market downturn to see a capitulation among landowners to start selling land at a discount to recent trades. Land is one segment of the overall market where a bid-ask gap could develop. The final impact is just the impact that slower growth can have on the ability to lease properties.

RETURN OUTLOOK

In the second half of 2022 and beyond, we expect appreciation returns to slow considerably from the trailing 12 months, but it is not clear yet if they will follow market pricing and turn negative. We have expected a slowdown in returns, and it is coming even faster than we assumed at the start of the year. Our forecast of index returns is a judgment on both where appraised values are relative to peak market pricing and on the behavior of appraisers in a shifting and uncertain market environment. It is also based on an outlook that interest rates do not continue to rise from late June levels and a recession does not occur in the second half of 2022. While market pricing is already lower than at the peak during the first quarter of 2022, the give-back in pricing has only brought winning bids back to around their 3Q 2021 levels. Cap rates are higher at the close of 2Q than in the opening months of 2022 and will continue to move higher, but the impact on value will be mitigated by strong income growth. Another element that will impact index returns is the appraisal behavior we have seen in office and segments of retail, where there has been a reluctance to mark values down until there is irrefutable market evidence; and it is not clear yet if the changes in market values are sufficient to reach that threshold.

South Reno Medical Center
Reno, Nevada

CHAPTER 3

The present and future case for real estate at Mid-Year 2022

Inflation, stock market corrections, and lower bond prices in the first half of 2022 have highlighted the benefits of including real estate in a multi-asset portfolio. In this Chapter, we revisit the pillars of the case for real estate as a large, increasingly diverse, highly investible asset class which has typically stable returns, with modest correlations to other major asset classes and with the ability to partially offset the pressures of rising consumer prices. Still unproven, is real estate's contribution to an ESG approach to investing. Yet, early signals show that real estate may be able to track and reduce its carbon footprint in a manner that leads all asset classes in terms of transparency and asset-specific results.

The rising tide has turned for many major risk asset prices during the first half of 2022. The rapid change in asset market conditions, detailed in Chapter 1, has been pushed by a regime shift in growth and inflation dynamics, geopolitical shocks, and monetary policy makers' reactions to price pressures. The prices of stocks, bonds, and other risk assets have fallen from their peaks, in some instances into bear market territory.

Direct private equity real estate's performance has so far provided a stark contrast, staying true to its long-term characteristics. Over the first quarter of 2022, private real estate indices continued on their ascending path. Direct real estate indices have remained strong and positive over the last year. Charts 1 and 2 highlight property's

South San Diego Distribution Center
San Diego, CA

credentials as a stable and low-correlation alternative to traditional financial assets. That said, it would be reckless to conclude that real estate will emerge unscathed from capital market chaos or a slowdown in national economies. Private real estate performance has tended to lag public bonds and equities. Falling stock and bond indices will likely lead to less liquidity for all forms of private equity, including real estate. (Figure 1)

The retreat of highly-leveraged core buyers will ease pricing pressure for those with core capital to put to work.

Hongqiao Project China

01 Real estate's relative performance

Trailing period returns by asset class and country*

	To Q1 2022									To Jan 2022
Average Annual Total Return	Global Stocks[1]	Global RE Securities[2]	Global Corporate Bonds[3]	Global Gov't Bonds[4]	US Direct Property (NCREIF)[5]	UK Direct Property (MSCI/IPD)[6]	Canada Direct Property (MSCI/IPD)[7]	Australia Direct Property (MSCI/IPD)[8]	Japan Direct Property (IPD)[9]
1 Year	12.1%	20.1%	-4.6%	-4.3%	21.9%	19.9%	9.0%	11.4%	5.4%
3 Years	15.6%	8.8%	2.0%	0.4%	9.6%	6.3%	3.6%	6.4%	5.4%
5 Years	12.8%	8.5%	2.5%	1.2%	8.5%	6.7%	4.9%	8.0%	5.9%
10 Years	12.5%	8.9%	3.4%	2.2%	9.6%	8.2%	6.9%	9.5%	6.4%
20 Years	7.8%	9.4%	4.8%	3.3%	8.9%	7.5%	9.0%	9.8%	-

*Stocks, REITs, bonds, private real estate data through Q1 2022, Japan MSCI quarterly returns is through January 2022.

Notes on Sources

1 MSCI All Country Gross World Total Return Index in Local Currency.

2 S&P Global Developed Index in US Dollars.

3 Citigroup World Corporate Bond Index Total Return in US Dollars (Local Currency History Not Available Prior to 1999).

4 Citigroup World Government Bond Index All Maturities Total Returns in Local Currency.

5 US NCREIF Property Index Total Returns in US Dollars.

6 UK MSCI Quarterly Standing Property Total Returns in British Pounds, data prior to Dec 2001 is MSCI Annual. UK MSCI Quarterly Index used in all time periods available.

7 Canada MSCI Quarterly Standing Property Total Returns in Canada Dollars.

8 Australia MSCI Quarterly Standing Property Total Returns in Australian Dollars.

9 Japan MSCI Quarterly (Based on monthly index) Standing Property Total Returns in Japanese Yen.

20-year standard deviation data

Standard Deviation*	16.1%	20.7%	5.0%	3.7%	4.8%	6.4%	3.7%	2.8%	2.3%

*This standard deviation is based on quarterly returns over the past 20 years, then annualized (except in the case of Japan, where it is based on returns since inception). Note that appraisal smoothing contributes to the lower volatility of direct real estate indices.

Real estate's inflation-hedging abilities are being put to the test. The framework set out in Chapter 1 provides a roadmap for investors looking to navigate a higher inflation and interest rate environment. This same framework helps explain some of the recent healthy performance of the sector, particularly once we recognize that property is not a monolith, but rather an aggregation of various sectors and geographies with their own cyclical and structural characteristics. (Figure 2)

The role of international diversification in a real estate portfolio is also highlighted by the current environment, and significant differences in short-term returns across countries. Inflation and interest rates are on an ascending path in the majority of highly institutional real estate markets globally. However, there are important structural differences in the way that leases are structured around the world. Taking the office market as an example, Figure 3 below highlights the wide range in typical lease lengths and indexation practices around the world. The diversity of arrangements visible in offices is an illustration of the wide range of financial characteristics available to investors when considering real estate allocations on a global basis. It is also worth noting that the office sector has experienced a more muted impact from changing work dynamics in Asia Pacific and Europe than in North America. The uneven evolution of alternatives around the world provides similar diversification and portfolio construction opportunities. (Figure 4)

It seems likely that both core and non-core strategies will face headwinds and tailwinds in the second half of the year. Core investors face challenges from the less accommodative interest rate environment. Yet, the retreat of highly-leveraged core buyers will ease pricing pressure for those with core capital to put to work. Highly-leveraged investors are likely to face greater difficulties in securing debt at accretive interest rates. Meanwhile, exposure to higher construction costs (materials and labor) will play a part in determining how exposed various sectors and investment styles are to

02 20 year quarterly total return correlations

By asset class

Correlations- 20 Year Quarterly	Global Stocks[1]	Global RE Securities[2]	Global Corporate Bonds[3]	Global Gov't Bonds[4]	UK Direct Property (MSCI)[5]	US Direct Property (NCREIF)[6]	Canada Direct Property (MSCI)[7]	Australia Direct Property (MSCI)[8]	Japan Direct Property (MSCI)[9]
Global Stocks[1]	1.00	0.75	0.32	(0.46)	0.36	0.17	0.08	0.11	0.12
Global REITs[2]		1.00	0.46	(0.13)	0.49	0.25	0.13	0.18	0.11
Global Corporate Bonds[3]			1.00	0.48	(0.05)	(0.26)	(0.22)	(0.25)	(0.23)
Global Government Bonds[4]				1.00	(0.25)	(0.14)	(0.14)	(0.17)	(0.11)
UK Direct Property (MSCI)[5]					1.00	0.60	0.29	0.58	0.43
US Direct Property (NCREIF)[6]						1.00	0.62	0.83	0.76
Canada Direct Property (MSCI)[7]							1.00	0.62	0.48
Australia Direct Property (MSCI)[8]								1.00	0.81
Japan Direct Property (MSCI)[9]									1.00

Correlations between asset classes highlight the diversification benefits of property within a mixed asset class portfolio.

20 Year Quarterly Annualized Correlations to Q4 2021.

Notes on Sources

1 MSCI All Country Gross World Total Return Index in Local Currency.

2 S&P Global Developed Index in US Dollars.

3 Citigroup World Corporate Bond Index Total Return in US Dollars (Local Currency History Not Available Prior to 1999).

4 Citigroup World Government Bond Index All Maturities Total Returns in Local Currency.

5 UK MSCI Quarterly Standing Property Total Returns in British Pounds, data prior to Dec 2001 is MSCI Annual. UK MSCI Quarterly Index used in all time periods available. Unleveraged, pre-fee.

6 US NCREIF Property Index Total Returns in US Dollars. Data is unleveraged and pre-fee.

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8 Australia MSCI Quarterly Standing Property Total Returns in Australian Dollars. Data is unleveraged and pre-fee.

9 Japan MSCI Quarterly (Based on monthly index) Standing Property Total Returns in Japanese Yen. Data is unleveraged and pre-fee..

In Chapter 3 of our 2022 ISA, we highlighted three reasons we believed alternative and niche property types had reached a turning point in private investors' perceptions.

the higher rate and inflation environment. Given all the liquidity still in the system, it is hard to see distress manifesting until later in the cycle. Rather than tilting between risk profiles, more important considerations are underwriting and mitigating the relevant risks to each investment style.

THE RISING IMPORTANCE OF ALTERNATIVES AT MID-YEAR 2022

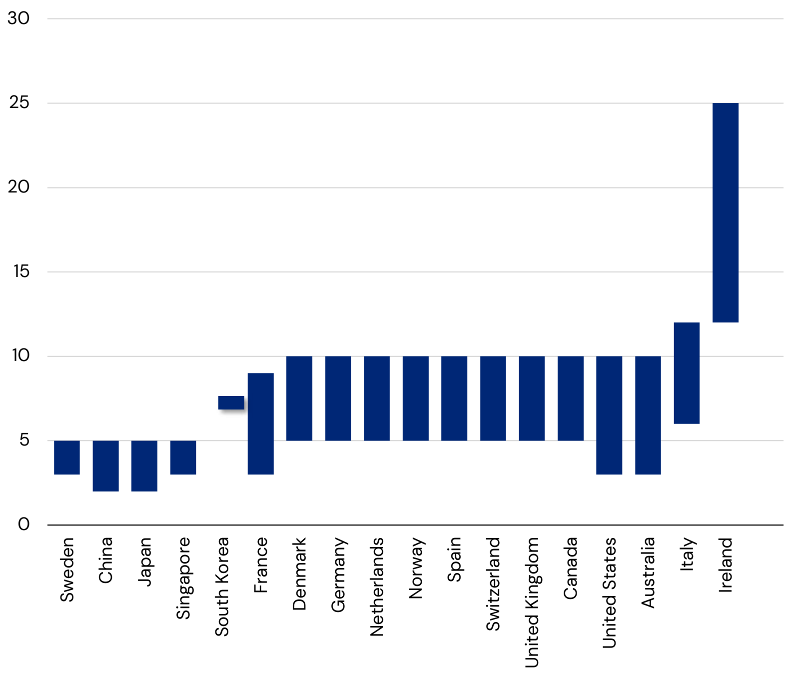
Real estate's ability to deliver the benefits of diversification, stability, and long-term income growth continue to be enhanced by the expansion of the institutional real estate universe. This expansion goes beyond absolute gross asset value – it takes the form of greater institutional penetration of medium and smaller markets and submarkets, as well as across property types. In Chapter 3 of our 2022 ISA, we highlighted three reasons we believed alternative and niche property types had reached a turning point in private investors' perceptions. First, the resilience and strong performance of many niches, like life sciences and storage, during the

03 Wide range of lease structures

Office lease length and indexation

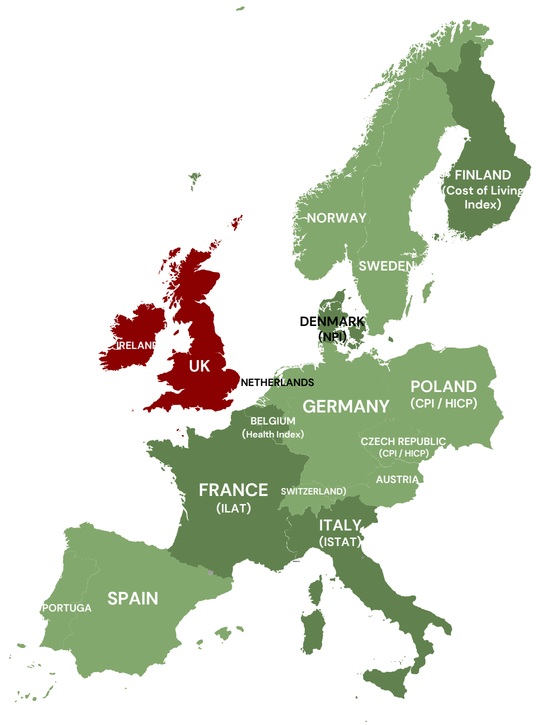
Typical range of office lease lengths

[years]



Rent indexation in Europe

[green = yes (dark green: index other than CPI); red = no]



Source: Typical lease length ranges and indexation practices for offices are estimates based on JLL data as well as LaSalle Research and Strategy adjustments as at June 2022.

pandemic has highlighted niche diversification benefits. Second, lower target portfolio allocations to the hard-hit office and retail property types led more investors to consider alternatives. Third, progress toward better market data transparency for many niches was making the strong relative performance of niches more apparent and asset-specific risks more measurable.

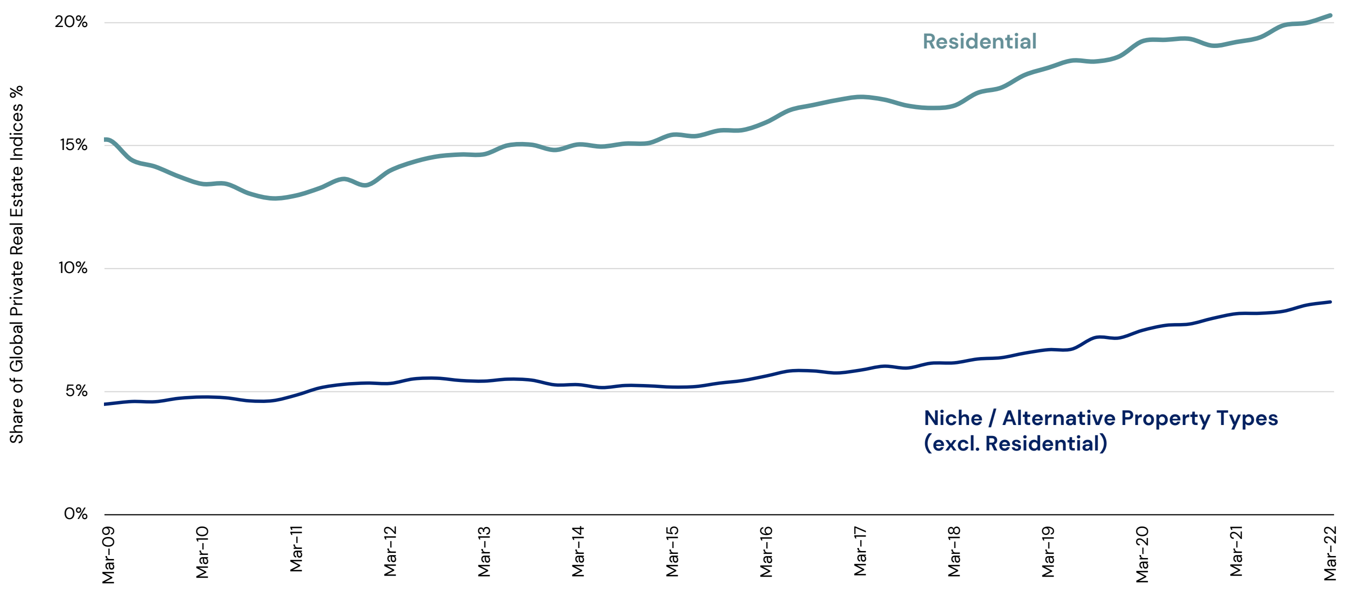
Events in the first half of 2022 have reinforced our conviction that these forces are moving real estate investment away from the short menu of three or four major property type allocations. The longer menu includes short lease duration property types that can keep up with inflation, notably storage and residential niches.

We have advised investors to consider a broader set of property types for many years, as part of a "going mainstream" investment thesis. Sometimes these were subtypes under the banner of established property types (e.g., truck terminals and cold storage under industrial). Other times they were standalone niches like self-storage and data centers. Between Q4 2022 and Q1 2022, global private real estate indices showed alternatives' index allocations grew from 8% to 9%.[1] The combination of alternatives and residential now accounts for 29% of private indices, up from 19% a decade ago. While there is utility in grouping niche property type types together to understand the broader trend, this is a major simplification of a complex landscape. Every niche property type offers its own distinct growth, cash flow, risk, and capital market profile in each market. This diversity has often proven an obstacle for new entrants, but there have been rewards for investors that have developed expertise in the winning niche property types.

1 This measure is based on LaSalle aggregation of the US NCREIF database and MSCI index quarterly data for the UK, Netherlands, Ireland, Pan-European core funds, Japan, Australia, Canada, and New Zealand (using all sources of quarterly data available).

04 Alternatives' allocations

Rising momentum continued in first half of 2022



Source: LaSalle Investment Management analysis of NCREIF and MSCI Data. Analysis includes properties in the US NCREIF database, MSCI UK Quarterly Property Index, MSCI Netherlands Quarterly Property Index, MSCI Ireland Quarterly Property Index, MSCI Pan-European Property Fund Index, MSCI/Property Council of Australia Index, MSCI Canada Index, MSCI Japan Index and MSCI New Zealand Index. Data as of Q1 2022. Note: Past performance is not indicative of future results. There is no guarantee that any trends shown herein will continue or that any forecasts shown herein will materialize as expected.

LaSalle is investing in a dozen niche property types globally, from single family rentals to data centers, and we have been active participants in the gradual acceptance by the capital markets of niche property types. LaSalle's investments in US medical office go back to 2001, and LaSalle's first Asia-Pacific cold storage investment was in 2006.

In APAC, institutional investors have become increasingly active in the multifamily rental sector. Institutional investors' share of multifamily rental transaction volume in the region increased from 65% in 2016-2018 to 75% in 2019-2021.[2] In China, institutional investors in the sector are mainly foreign funds, domestic listed developers and SOEs. The first domestic REIT backed by multifamily rental assets is anticipated to be listed within the next 1-2 years, helping to accelerate the institutionalization of the sector in the coming years in China.

2 Source: Real Capital Analytics, as of June 2022. APAC data include Japan, China, Hong Kong, and Australia, where there are active investors in the multifamily rental sector. Institutional investors include cross-border investors, domestics institutions, and domestic REITs/listed companies.

During the first half of 2022, strong fundamentals for niche property types continued to provide a strong tailwind for investment performance. While VC capital funding has cooled year-to-date, life science vacancy in the three largest US lab markets – Boston, the San Francisco Bay Area, and San Diego – averaged just 2.7% in Q1 2022. US single family rental (SFR) vacancy is even lower at 2.1%. Market rents for these property types, as well as self-storage, grew at a double-digit annual pace in the first half. In the UK, PRS strategies are showing a strong rebound, with improved leasing velocity and rental pricing power year-to-date. In Tokyo and Shanghai, occupancy rates of co-living (multifamily rental) remained high despite COVID-19 resurgences.

Another update to LaSalle's house view on alternatives so far in 2022 is LaSalle and JLL's just-released 2022 Global Real Estate Transparency Index. The survey covered 15 different niche property types across 94 countries. We added three new property types in this update: single family rentals (SFR), active adult / age-restricted apartments, and film production spaces – all niches where LaSalle is active. The index underscores the high degree to which alternative investments are concentrated in a few highly transparent countries. Even in these countries, however, market data on niche property types often lags the major property types. Improvements in market data – notable examples being JLL's deepening coverage of life sciences and better segmentation of index data – are providing further reinforcement to the virtuous cycle of rising portfolio allocations to alternative property types. JLL, for example, commenced data coverage for the co-living/multifamily rental sector in Shanghai.

Illumina
San Diego, CA

THE IMPACT OF INFLATION ON DIFFERENT REAL ESTATE INVESTMENT CHANNELS

The investment structures for investing (debt vs. equity, public vs. private, direct vs. indirect) in real estate will each respond to the regime shift in capital markets differently. These structures create different profiles of risk and return, liquidity, and control, all of them interacting with property type and market forces. The variety of combinations between structure, market, and asset is part of what makes real estate such a diverse asset class.

In this final section of the mid-year update, we take a closer look at how elevated inflation – and the end of the "low-low-low" era – interacts with both lease structure and investment structure.

Multi-asset portfolio analysts have sought to quantify the inflation-hedging potential of different investable asset classes, and in doing so have often drawn a distinction between 'expected' and 'unexpected' inflation. Expected inflation is the increase in prices that market participants or economic actors assume prior to the fact. Meanwhile, the differences between observed inflation and expected inflation can be thought of as the unexpected portion of price changes. In 2022, we have seen inflation both exceed and outlast expectations in Europe and the US, and an understanding of how different asset classes are impacted by both expected and unexpected inflation can help illuminate the role of real estate in the portfolio.

US government bonds and bills have historically hedged expected, but not unexpected, inflation.[3] In the academic literature, private residential real estate was shown to be a better hedge for both expected and unexpected inflation. Equity returns were negatively related to expected inflation – likely as a result of monetary policy expectations derived from expected inflation, with attendant consequences for discount rates.

3 Fama & Schwert, writing in 1977 and employing a multi-asset-class dataset covering an 18-year period with modest but rising inflation.

Logiport Huizhou
China

In Chapter 1, we set out some of the circumstances which can make real estate a better-performing inflation hedge, highlighting the importance of lease structure. Explicit inflation indexation of leases naturally allows for hedging of both expected and unexpected inflation, albeit with a lag – the lease is adjusted only once inflation is known. Shorter, unindexed leases can reduce lags, but likely introduce an element of inflation tracking error. Net leases have the effect of transferring some categories of inflation risk from the landlord to the tenant and may result in the landlord retaining an exposure which is less correlated to inflation overall – potentially desirable, but less functional as a hedge to inflation elsewhere in a multi-asset (or multi-asset-class) portfolio.

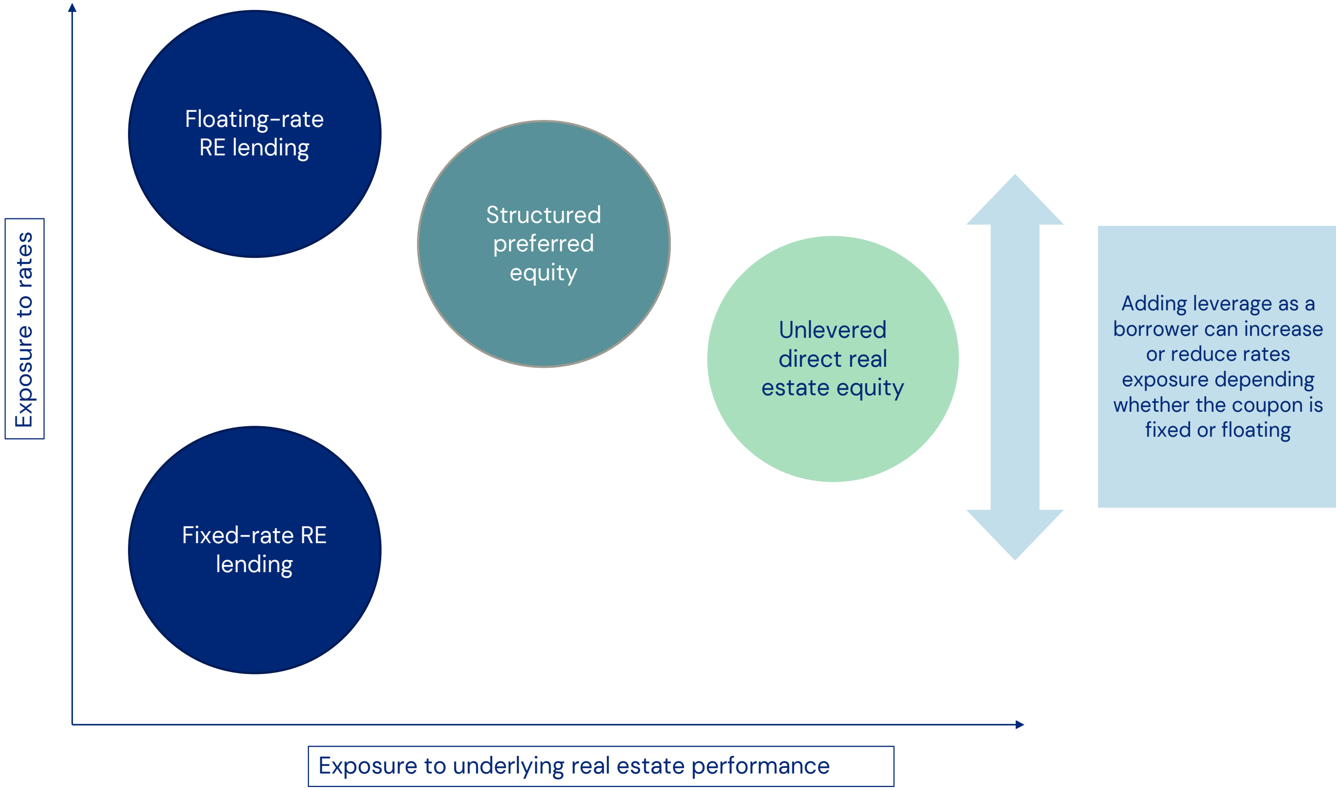
Diversifying across the capital stack

The impact of changing interest rate and inflation regimes is not only diverse across locations, sectors, lease types and investment styles. The impact is also likely to be diverse across the capital stack, providing further opportunities. The increase in all-in cost of real estate debt, while squeezing distribution yields and altering the composition of buyers for the sharpest-yielding property, offers opportunities to lenders of floating-rate real estate debt. Higher returns on floating-rate debt, for investors with a positive outlook on medium-term capital values for real estate, can be achieved by lending in junior or mezzanine tranches. Investors wanting to participate more fully in any appraised upside – but while retaining some of the fixed-income characteristics and downside protection of debt – may wish to participate in structured preferred equity transactions.

Figure 5 gives an approximation of how the relative exposures to interest rates and to real estate performance might compare for different investment structures. Similar to Figure 3.10 from the ISA 2022, which laid out the many vehicles available to gain exposure to the same underlying real estate positions, this diagram shows just some of the many structures available depending on the risk factors investors wish to avoid or retain.

Figure 5 shows how fixed- and floating-rate debt can vary exposure to rates for both borrowers and lenders – however, borrowers retain much greater exposure to the performance of the underlying real estate itself, assuming prudent levels of leverage are offered by lenders. Preferred equity investments can offer hybrid exposures, blending some fixed-income characteristics and downside protection with some ability to participate in the equity upside of successful real estate performance. An approach to real estate portfolio construction incorporating all levels of the capital stack can more comprehensively reflect an investor's overall view of rates and the outlook for property performance. In a rising interest rate environment, debt yields may rise above equity yields because lending markets react faster than real estate equity valuations. When this happens, the relative value of debt rises. Floating rate senior debt can be a strong addition to a portfolio, provided that the borrower's income stream can handle upward movements in interest rates.

05 Interest rate and Fundamentals Exposure for Different Real Estate Investment Structures



Source: LaSalle Investment Management

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