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ISA 2023 Outlook preface

Jacques Gordon
Global Strategist

Retrospective: A credit crisis led to a professional business

I joined LaSalle Partners in 1994. At that time, real estate was in dire straits. A mild recession in the United States (1991), overbuilding from tax-loss driven "accelerated depreciation" (1981-1986) and an uncontrolled savings and loan lending binge (1986-1995) pushed vacancy rates up to record levels in the late 1980s. As 1994 unfolded, there was still a hangover from the S&L debacle. From 1990 to 1993, the National Council of Real Estate Investment Fiduciaries (NCREIF) Property Index (NPI) had its worst four years since its launch in 1980 (including data back to 1978). In the UK, the situation was not any better. The new Investment Property Databank (IPD) monthly index registered a boom-bust pattern of returns in the early 1990s, swinging wildly from -18% in 1990 to +35% in 1994 and then plummeting again to zero in 1995 (based on the annualized numbers).

Out of this crucible came the first ISA, published in early 1995. My research colleagues and I explained that real estate was inherently cyclical. We pointed out that the institutionalization, securitization and globalization of real estate was still in the early stages. And that the professionalization of the investment management business, signaled by the integration of fundamental research, would bring acceptance of the asset class and reduced volatility.

Now, nearly 30 years later, we know that real estate recovered from these setbacks. In fact, it thrived. The modern REIT era was launched in 1994, which provided much-needed equity and transparency to what had been a clubby, opaque business. In the US, private equity real estate recovered and put together a string of 14 years of strong returns, which took a Global Financial Crisis in 2008 to interrupt. In the UK, the boom-bust years in the early 1990s settled down as the Bank of England realized that lending to property developers required oversight. The result was a golden decade for British institutional real estate between 1996 and 2006, with 11 straight years of performance above the long-term IPD average. Even more incredibly, over the next 15 years real estate gradually became accepted as a global asset class, alongside equities and fixed income.

Thirty years ago, the US and UK were the only two countries that had a decade of private equity property performance in a consistent and transparent manner. In the early 1990s, Australia and Canada were just getting their indices launched. Global REIT indices were still several years away and private equity indices in Japan, Germany and France were all still in the planning stages. The early 1990s also provided the launch pad for the first institutional-sized "opportunity funds," which got going wherever real estate debt was in default—which was just about everywhere. These opportunity funds along with the securitization of debt markets (CMBS) and equity portfolios (REITs) were all responses to the "credit crunch" that ensued after a series of rolling bank crises in the US, Canada, the UK and Japan.

Most discounted cash flow models were done on Excel, which had just arrived on the scene to eventually put Lotus 1-2-3 (owned by IBM) out of business. Realm software, which later became Argus, was first launched in 1985. Only a few firms were using it in 1990, but by 1994 its use started to explode and by 1998 it had started to "go global," gradually picking up market share from a handful of other valuation software options in other countries.

In sum, the early 1990s laid the foundation for the maturation of the asset class. Five pillars provided support:

1. **Capital market integration** as securitized sources diversified the supply and demand for real estate capital;
2. **Risk-return expansion** to broaden the range of investment styles available;
3. **Yield compression**, a three-decade journey that reduced the cost of capital for real estate;
4. **Rising transparency** as data on fundamentals, pricing and capital flows became ubiquitous; and
5. **Technology**, which has expanded every year as proptech applications have revolutionized the management and valuation tools used by practitioners.

Prospective: In the year 2025

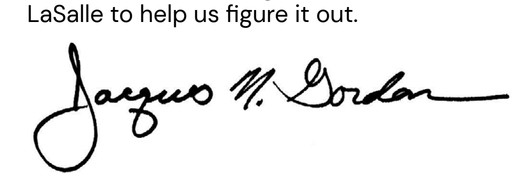
The lessons of the early 1990s are clear: real estate down-cycles do not last forever. Reflecting on the frightening memories of plummeting values, empty buildings, bankruptcies and the Resolution Trust Corporation (along with good bank/bad bank government interventions in other countries), suggests that the current round of credit tightening is likely to pale in comparison. The 2023 edition of LaSalle's *ISA Outlook* anticipates the impacts of the rising cost of credit, a stall in economic growth and a pause in the multi-decade pattern of real estate appreciation. However, it does not extrapolate these trends far into the future. The human tendency to latch onto a few pieces of information (usually the most current headline) and to expect that a narrow set of recent facts will shape future events is known as "anchoring bias." When investing in a long-duration asset class like real estate, a longer-term, holistic view is more valuable.

In 2014, the apocalyptic visions of German film director, Fritz Lang's 1927 masterpiece Metropolis were put alongside the 1960s rock song "2525." The irony of bringing together dark images from one era, while listening to music from another, through the technology of a more recent YouTube artist is symbolic of how imperfectly clever we are at predicting the future. The eerily weird Lang-2525 juxtaposition implicitly illustrates how resilient humanity can be, even while contemplating what seem like existential threats such as fascism, industrialization and robots in the 1920s; nuclear holocausts in the 1960s; financial panics in the 1990s and again in 2008-2010 and climate change and geopolitical conflict in the 2020s.

Josef Schumpeter is most well-remembered for popularizing the term "creative destruction." He is less remembered for his work on democratic theory. To Schumpeter, democracy is the mechanism for competition among political parties in a market-like framework. The process of voting legitimizes leaders and keeps them somewhat accountable, yet their manipulation of the electorate and ability to control policy severely limits their capacity to serve all people fairly once they gain power. Schumpeter's viewpoints were shaped by being an escapee of both the rise of fascism in 1930s Germany and of Soviet-style communism of the 1950s—regimes that came to power through sham elections. Like the 2525 video, reading Schumpeter reminds us how the past, present and future all intersect.

Geopolitical events in LaSalle's target countries are as difficult to predict as the idiosyncratic motivations of their leaders. As researchers, we cannot "know" the future, but we can help devise strategies to cope with whatever alternative futures may arise. The forces of nationalism, authoritarianism and a distrust of globalism may represent a temporary triumph of politics over economics. Over the long term, though, the power of open markets remains a force to be reckoned with and not to be underestimated. Likewise, well-constructed and well-located properties can thrive even during periods of great political turmoil. Successful real estate investing rests on identification of timeless attributes that are successful over the course of several cycles. These attributes must be appropriately priced and they must also adapt to trends in demographics, technology, urbanization and environmental factors. This triangle of timelessness, adaptation and fair value pricing forms the foundation for successful real estate investing.

As I hand over the reins of LaSalle's research to a new generation of researchers, I sense that the past, present and future will continue to intersect and to overlap. The awarding of the 2022 Nobel Prize in Economics was based in part on an analysis of the Great Depression of the 1930s. We have learned much about credit cycles and the role of banks in maintaining or losing confidence in market institutions. At the same time, the events of 2022 in Ukraine and elsewhere show how unpredictable the "course of human events" can be. The semi-predictable path of rising CO_2 levels is leading to weather volatility along with rising atmospheric and oceanic temperatures. How will all this play out for real estate? No one knows for sure, but the next generation of researchers, strategists and sustainability experts will be at LaSalle to help us figure it out.



Global Strategist,
Global Head of Research,
1994-2022

Global themes

A mix of cyclical, structural and secular factors

- **The global economy is experiencing an acute inflationary episode, which most central banks are aggressively fighting with tighter monetary policies. This is driving up borrowing costs and putting downward pressure on asset values. As of the time of writing, there were tentative signs that inflation may have peaked but many uncertainties remain.**

- **The prospects for the depth and duration of the economic downturn vary substantially across the globe, with Europe in the worst position. That said, in most key markets globally the balance of real estate supply and demand remains relatively benign, somewhat moderating the sizable drag on total returns from rising capitalization rates that exists in many markets.**

- **Performance divergences among property types are set to continue, but investment outcomes will increasingly also depend on other factors, such as asset quality, sustainability attributes and physical climate-risk differentials.**

Five global themes going into 2023

1

The math of spiking rates driving a repricing of real estate

2

The path of fundamentals will ultimately help determine where values settle

3

Beyond the sector chasm – other factors gaining in importance

4

Virtual vs. in-person balance close to a **post-pandemic steady state**

5

Moving from **climate** awareness to planning and **action**

The global economy and real estate markets are in the throes of an acute episode. Inflationary pressures were unleashed by pandemic-related supply chain challenges, the frictions of a stop-start reopening, vast fiscal stimulus and pent-up consumer savings. The impact of these is being exacerbated by a war on Europe's periphery that is creating havoc with commodity markets, especially those for energy, chemicals and basic grains.

Calls that inflation and rates were "peaking" or "transitory" proved wrong again and again; the rise in inflation has spread beyond volatile commodities into core parts of the economy (see Exhibit G.1). Wherever real estate occupational markets have been tight enough to give landlords pricing power, which mercifully is the case in many cities and sectors across the globe, real estate cash flows have benefited from inflation. However, this is a reminder that real estate can act as both a hedge for and a source of inflation; surges in residential rents and home prices have also contributed to higher inflation.

In response to high inflation, most central banks have raised interest rates. These tighter financial conditions have caused a decline in the prices of a wide range of financial assets. They are also clearly having an impact on private market real estate asset values in many markets, although transactional evidence is thin and uneven. Listed real estate leads the way in price declines, while private real estate index valuations lag and a bid-ask spread has emerged in many markets, causing a slowdown in transactions (see Exhibit G.2). Investors debate whether it is the public or private market valuations that are "correct" as the divide between them is so wide that both cannot be (see Exhibit G.3).

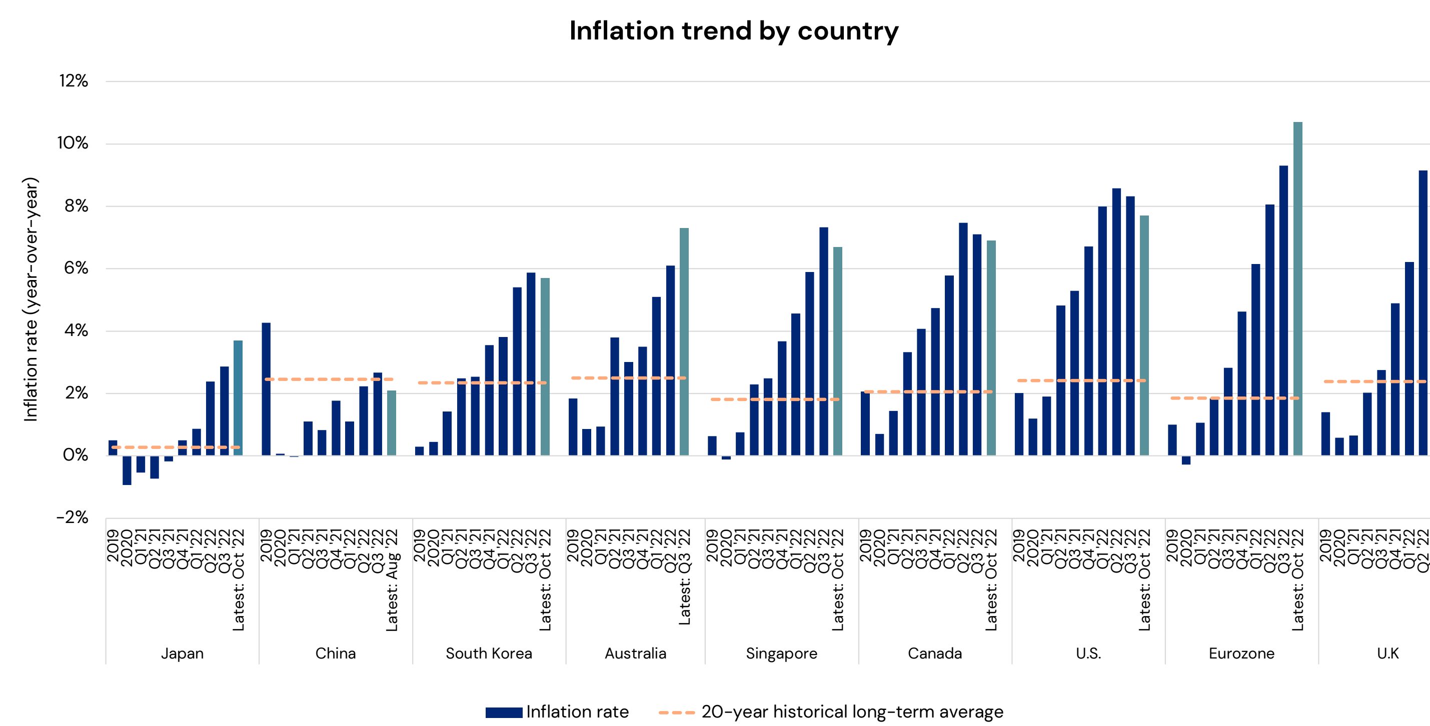
At times like this, it is important to remember that all crises go through phases. During the earliest phases of an acute episode, it tends to be difficult to look through to later phases. The human brain is conditioned to overweight and extrapolate "what just happened." This may have been a useful survival trait for pre-literate humans, but we have recorded history, learned experience and an ability to conceptualize and recognize patterns. Insights from all of these suggest that we will eventually transition to a more stable phase.

We have been here recently. In the *2021 Investment Strategy Annual*, we predicted that the acute phase of the COVID-19 pandemic would sooner or later

G.1

Inflation readings now highest in Europe

Energy prices hitting Europe harder than in any other region



Note: 20-year historical long term average inflation rate is the average quarterly inflation rate since Q3 2002.

Source: Oxford Economics data to Q2 2022; latest monthly data from Australia Bureau of Statistics, Eurostat, Singapore Department of Statistics, Statistics Bureau (Japan), Statistics Korea, National Bureau of Statistics (China), Statistics Canada, Office for National Statistics (UK), US Bureau of Labor Statistics. Latest data available as of November 28, 2022.

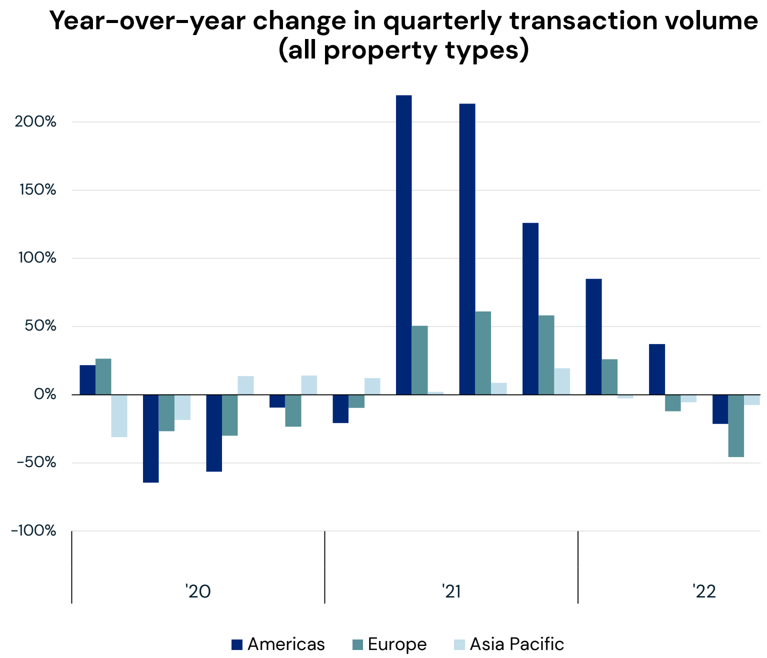
transition to a "living with COVID" period. We have reached that milestone in most parts of the world. The virus is no longer a major constraint on life in many countries. While some things have not returned to the way they were pre-pandemic, that has been due to other factors, such as shifting preferences, not infection counts and restrictions.

A year ago, key uncertainties surrounding our predictions for moving beyond the acute pandemic phase were around issues like new COVID variants and booster deployment. As for today's economic situation, key uncertainties include:

- How long will it take for inflation to come under control? How high must interest rates go in the meantime? There have recently been signs that inflation is peaking, but such hopes could prove fleeting.
- How severe an economic slowdown will be required to stabilize in inflation? Will the downturn be steep or shallow? Long or short in duration?
- Longer term, will inflation become "endemic," remaining sticky at a higher level than observed in recent decades?

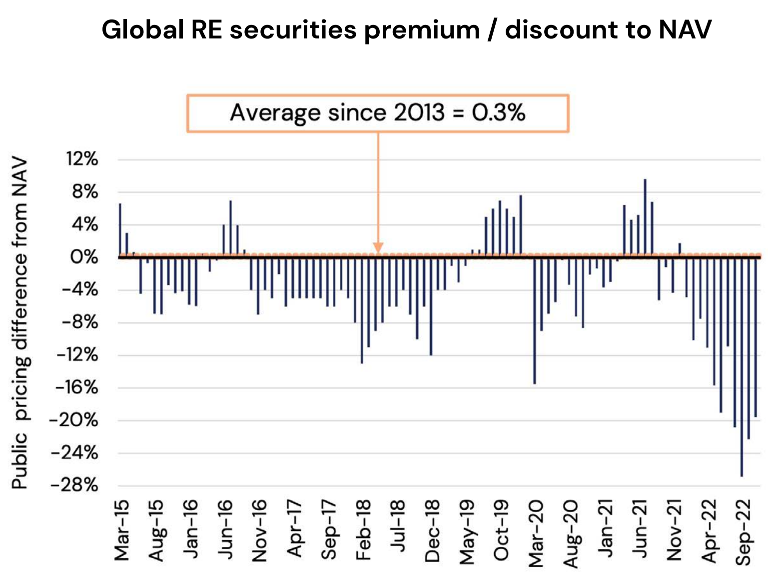
There are reasons for optimism. Labor markets across developed economies are in almost universally good health. Some of the initial triggers of this inflationary episode, such as supply chain pressures, seem to be resolving. Household and corporate balance sheets are reasonably healthy, although income statements are being hit by higher debt service costs wherever borrowing costs are not fixed. The typical culprit for a prolonged economic downturn is a "balance sheet recession," as during the Global Financial Crisis, but the conditions for such a prolonged slump do not appear to be met in most segments of the global economy. Real estate fundamentals remain healthy and vacancy rates are low across many property sectors. Meanwhile, expectations for subdued long-run inflation remain in place, with long-run breakeven inflation rates implied by the market suggesting only a moderate increase from prior levels (see Exhibit G.4).

G.2
Transaction volume down meaningfully
Most pronounced reduction in activity is in Europe



Source: MSCI Real Capital Analytics as of Q3 2022.

G.3
Deep global REIT NAV discount
EPRA/NAREIT global index down sharply in September

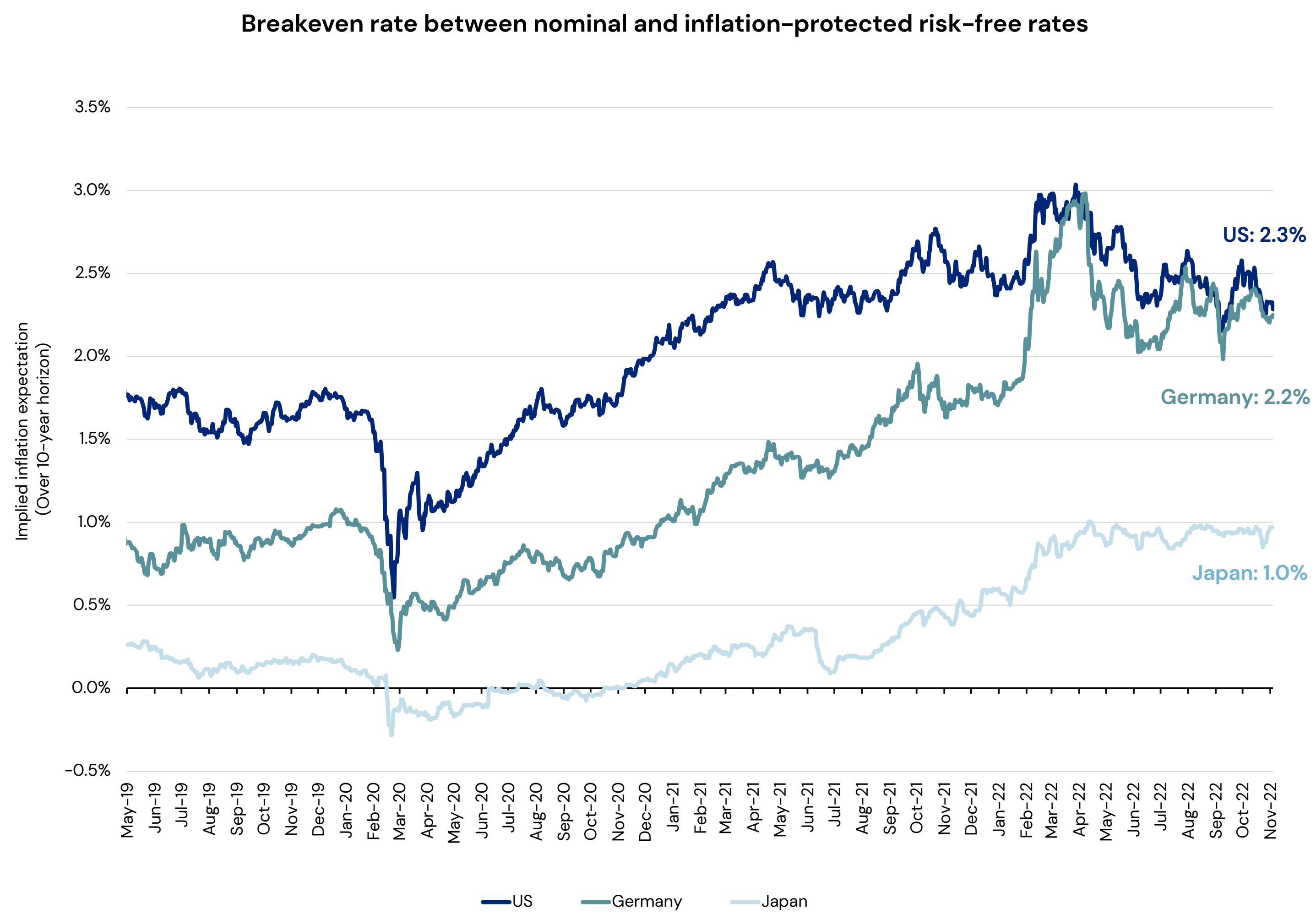


Source: EPRA/NAREIT, LaSalle Investment Management Securities. Discount to NAV data to November 29, 2022.

In this *ISA Outlook 2023*, we "look through" the current acute period of volatility and uncertainty to discuss our view of likely outcomes and scenarios to consider, key themes for investing and real estate strategy recommendations that we expect to be resilient across the range of conceivable macro environments. Inflation should eventually settle closer to central banks' target levels, allowing the longed-for "pivot" in interest rates. Bid-ask spreads in real estate capital markets will narrow, allowing activity to resume at an adjusted pricing level. The attraction of real estate as an asset class will endure, with variation around sectors, assets and geographies.

But just as it was with COVID-19, the transition to a more stabilized state is uncertain and likely to have unexpected twists and turns. We have identified five global themes that we think investors should keep in mind as we move through the acute phase of monetary tightening toward a more stable global economy.

G.4
Long-term inflation expectations remain subdued
Inflation-protected yields anticipating a deceleration of inflation



Source: Bloomberg. As of November 28, 2022.

1 The math of spiking interest rates is driving a repricing of real estate

In a completely efficient market, real estate pricing should be closely linked to that of the other asset classes that make up the broader investable universe. Investors should receive similar ex ante returns for similar risks, or else any "free lunches" will be arbitraged away. In practice, private market real estate pricing tends to be impacted by broader capital market shifts mainly when there are changes in the cost of real estate debt, since the marginal buyer of income-producing real estate is most often a leveraged buyer.

When debt costs rise, the market thins before price pressures are reflected in transactions. This tends to create a time lag between higher interest rates and declines in private equity real estate pricing. In most markets globally, we are now feeling the impact of more expensive real estate debt, which in many cases is no longer accretive to returns at current private market valuations.

The math of debt costs and going-in yields is relentless. When the yield starting point is especially low in absolute terms, modest increases in debt costs and yields as measured in basis points mathematically translate into big percentage changes in capital values. As such, evidence of the most significant repricing to date has been concentrated in the lowest-yielding sectors, where transactions have held up most. This has surprised some observers since these low-yielding property types are mostly the "winning" sectors of recent years and they continue to possess attractive growth profiles. That some of the largest recent value declines may be occurring in the most sought-after property types, such as logistics and residential, might come as a shock after years of banner outperformance, especially during the pandemic. Even so, these property types remain the strongest performers over longer trailing periods and values have also fallen in the less favored sectors, although such adjustments are masked by lower price transparency in these property types.

This repricing has been labeled "mechanical" by some because it is a function of exogenous debt assumptions increasing in investors' spreadsheets. An alternative way to look at it is that it is mechanical because debt pricing is a *mechanism* by which real estate is linked to the broader capital markets, through lenders' "cost of funds." Another such mechanism is the "denominator effect." This involves comparing real-time values from public markets to lagging valuation-based assessments of private market portfolios, causing some investors to conclude that they are suddenly overweight in the unlisted assets compared to their target allocation. Either way, the downward direction of the pricing pressure is clear and it will likely persist as long as the all-in cost of debt is dilutive to leveraged returns.

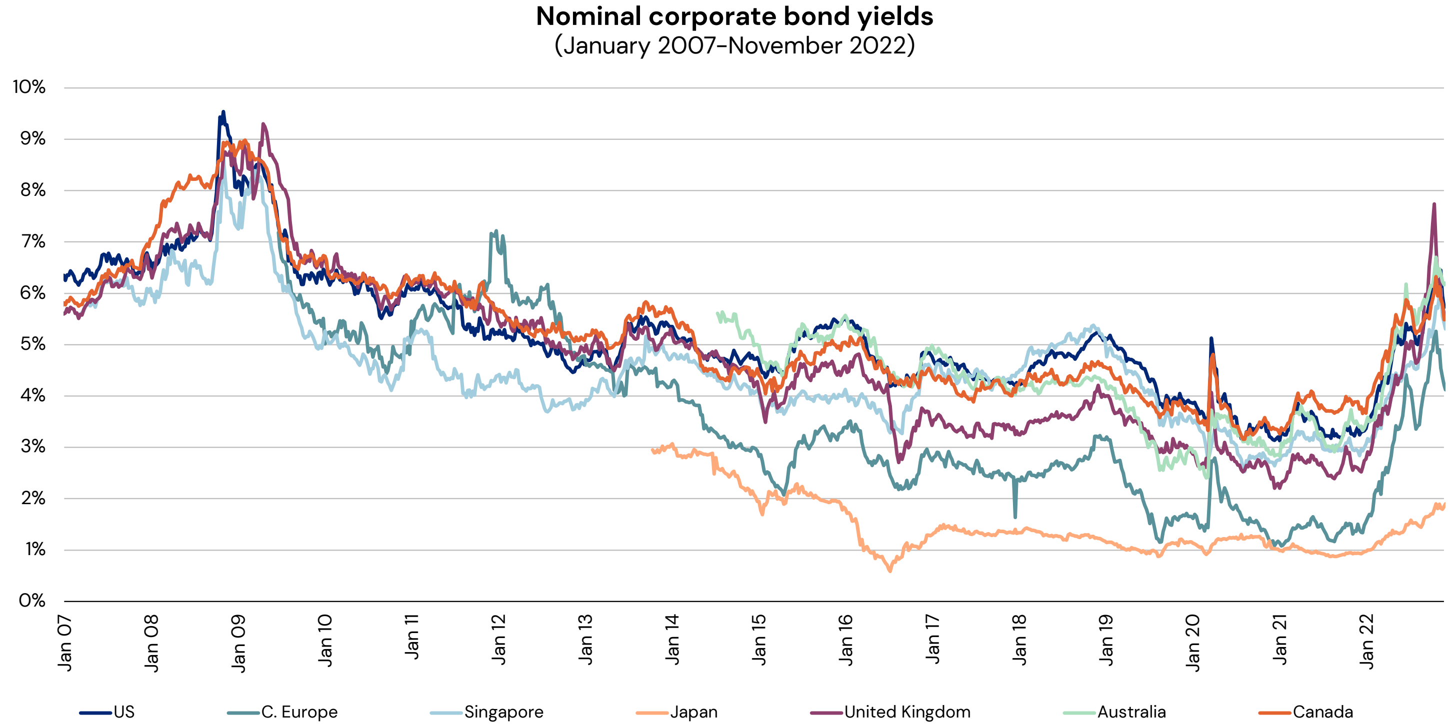
Given the same inputs, the math works the same way all over the world; but today those inputs to the math vary greatly, depending on local circumstances. In Japan, debt costs have moved far less than in other parts of the world, as inflation remains subdued and the Bank of Japan continues to exercise yield curve control (see Exhibit G.5). By contrast, Europe's real estate yield starting point was exceptionally low and market interest rates have moved up much more markedly, making the math that much more impactful.

Government policy also matters. As central banks seek to choke off inflation by tightening monetary policy, there is at least the reasonable expectation that some of that inflation will be passed into rents and thus property cash flows. But when governments employ long-term borrowing to bail out energy consumers in the short term, as is necessary in Europe, interest rates are pushed up further and the impact on property values may be more detrimental. As the UK's recent experience would suggest, credit markets can react swiftly to reflect changes in perceived debt sustainability.

G.5

Spiking rates drive rapid tightening of financial conditions

Cost of capital rising sharply in most geographies



Source: Bloomberg. As of November 30, 2022.

LOOKING AHEAD

- **The relentless math of higher interest rates will continue to weigh heavily on real estate values, at least until interest rates stabilize as inflation begins to subside. The bid-ask spread for private real estate should eventually close and transactions will resume in earnest at a rebased level.**
- **In the meantime, investment styles that are less sensitive to volatility in values should be contemplated, such as floating-rate lending with a comfortable cushion from lower loan-to-value ratios. Debt investment can be attractive at times of uncertainty, as investors tilt toward contractually certain income and away from an uncertain upside. Portfolio aggregation strategies with smaller asset sizes that lend themselves to "averaging-in" with diversified timing of entry points represent another way to cope with volatile and uncertain values.**
- **The inputs to the math are not changing to the same degree in every part of the world. Wherever rate spikes are less intense, or the prospects for rental growth are clearest, transaction activity and prices have been less impacted.**
- **In addition to debt costs, investors should also consider the trajectory of cash flows, which depend on economic fundamentals and real estate occupier market conditions. The differential prospects for real estate cash flows are the subject of the next section.**

2 The path of fundamentals will ultimately help determine where values settle

Early in 2022, we framed the impact of rising inflation and interest rates on values as a race between debt costs and net operating income (NOI) growth, as we anticipated that higher inflation would translate into higher rents in some sectors. Currently, it seems that debt costs are mostly "winning" the race. Ultimately, however, valuations are the result of the interaction between higher debt costs and the path of real estate fundamentals, the prospects for which vary widely across sectors and geographies.

Tracing back real estate cash flows to their drivers is to follow a chain of causation back to basic variables like population, GDP, industrial production, consumer spending and employment. All of these interact with real estate factors, such as the balance of property supply and occupier demand, to influence property cash flows. Secular megatrends and structural features like legal and contractual constraints also matter. Going into 2023, there is increased uncertainty in many of these variables, especially the economic ones, given the pace of economic expansion is expected to be weaker or negative. This will have a cooling impact on property NOI growth, but nuances remain given that the transmission of macroeconomic conditions to real estate is a winding path.

Starting with the underlying economic fundamentals, we are seeing a great deal of variation globally. In addition to the dimensions of depth and duration, a key uncertainty surrounding the coming downturn is how widespread it will be. Europe faces especially severe challenges stemming from an energy price shock, with ripple effects of unknown global scope.

The dominant driver of inflation in the US, Canada and Singapore is that their economies are robust and operating close to full capacity. Demand-led inflation is relatively benign compared to inflation from a supply shock, but the central banks in these countries must still raise interest rates, either to manage their domestic economic situations or because their monetary policies are linked to the US Federal Reserve (as in Hong Kong). Rising interest rates create clear risks to economic growth, with housing markets already being impacted by higher mortgage rates.

Europe's employment picture is also solid, but in addition to home-grown inflation, it is coping with a severe, energy-driven supply shock caused by the Russia-Ukraine war. This, along with the resulting cost-of-living crunch, places Europe's economy in a weaker position than elsewhere. Its governments have been forced into crisis mode, devising legislation to absorb the burden of surging energy costs for households and businesses into government deficits and, if not paid for through increased taxes, higher national debt. A recession is almost certainly already underway across Europe.

Meanwhile, national economic factors continue to dominate in Japan and China. In Japan, inflation remains low compared to many other countries and the Bank of Japan continues to keep interest rates close to zero and unchanged since 2016. China is introducing easing measures to address its economic slowdown. We see these markets as "marching to their own drummers," at least for now, but they are not entirely immune to global forces.

Macroeconomic variation translates into variable demand for real estate, with layers of additional influence from a range of property market factors. For example, structural and secular factors, such as the growth of e-commerce and the rise of life sciences research, may prove strong enough to offset the drag from slower cyclical growth for logistics and life science real estate, respectively. There are also potentially countercyclical demand drivers for certain assets, such as student housing, which can benefit as people go back to school in a weak job market. Some relatively cycle-resilient property types, such as US medical office, single-family rental and self-storage are less likely to be linked to underlying economic growth.

As we explained in the *2022 ISA Mid-Year Update*, real estate can be an effective inflation hedge, but the pass-through of inflation is uneven and incomplete. Real estate performs better when and where landlords have pricing power. In other words, inflation tends to flow through into rents when real estate

The path of fundamentals will depend heavily on local and sectoral variation that unfolds in 2023

Economic divergences matter:

Linked to global rates cycle	**Supply-side energy shock victims**	**Marching to their own drummers**
Mix of tight labor markets, supply chain issues, global factors	Additional challenge of energy subsidy costs absorbed into government debt	National factors dominating global forces (at least for now)
US Canada Singapore Australia	UK Continental Europe	Japan (yield curve control) China (easing)

Real estate fundamentals matter:

Undersupply drives landlord pricing power	**Oversupply gives tenants upper hand**	**Structural obstacles to cash flow growth**
Supply-constrained logistics Unregulated residential and living sub-sectors High quality and net zero carbon office outside US	US office Commodity office in Europe Low-quality malls	Regulated residential (mostly Europe) Long leases with no or capped indexation

demand is in balance with supply, or even better, when demand exceeds supply.

The prospects for landlord pricing power are brightest in logistics and various residential strategies across the three regions we monitor, including US single-family rental and European student housing. We also see an acute shortage of high-quality office space that is aligned with net zero carbon goals in many markets. We are least optimistic about the office sector in the US and low-quality malls almost anywhere.

Obstacles to rental growth, many of which were not evident at previously low levels of inflation, must be considered. For example, despite a favorable supply/demand balance in many European residential markets, regulations prevent rents from keeping pace. Likewise, inflation-linked leases are hitting nominal indexation caps that nobody ever expected to reach. The economic and property market conditions in North America, Europe and Asia Pacific are covered in greater depth in the regional sections of this *ISA Outlook*.

Logiport Huizhou
China

LOOKING AHEAD

- **Close attention should be paid to evidence of worsening contagion from Europe to other global markets. Investors in Europe should be positioning for the buying opportunities that will eventually arise.**
- **Investors should "look through" the current economic uncertainty to evaluate which sectors and markets are likely to deliver strong fundamentals despite a likely downturn of unknown depth, duration and scope. We remain reasonably bullish about the path for NOI in many logistics and residential or residential-adjacent assets across the globe.**
- **Capital markets often paint with a broad brush. Smart investors can be more discriminating and take advantage of the "herd mentality" typical of the capital markets. Investors should adopt a risk-adjusted approach, such as the proprietary fair value model that LaSalle uses, to assess whether strong (or weak) rental growth expectations are already priced into asset valuations.**

3 Beyond the sector chasm – other factors gaining in importance

In past editions of the *Investment Strategy Annual,* we made the case that sector selection had become a powerful driver of portfolio performance. The divides between property types have come to dominate the impact of asset selection, quality and micro-location, which had been more salient in the past. While sector divides remain, other factors are gaining in relative importance.

Winning sectors like residential and logistics have consistently posted stronger returns than pandemic-challenged sectors like retail or hotels (see Exhibit G.6). In both public and private markets, the data show that the dispersion between the strongest and weakest performing sectors is exceptionally wide.

While the supportive growth dynamics ("the path") underlying the industrial and residential sectors remain in place globally, "the math" means that rising debt costs are hitting capital values hard in lower-yielding sectors. For example, the share prices of listed apartment companies in developed markets have fallen by 30% since the beginning of 2022 until November 25, 2022, versus 19% for the rest of the listed real estate market.

It is tempting to suggest that such value hits for favored sectors may signal that sector differences are close to fully priced and that the performance gaps between property types will narrow going forward. Intuitively, this feels like it should be the case at some point; assuming an efficient market, we should not expect to see a single "factor" (such as sector) drive persistent outperformance over many years. However, our proprietary fair value analysis suggests that, for the most part, the favored sectors retain strong relative value.

That said, we are also seeing widening gaps within sectors, some granular and others glaring, that we expect will also drive divergent performance going forward. Because of these divides, investment traits beyond the property type—like location, asset quality, covenant strength and supply barriers—are thus likely to rise in relative importance for investors' portfolios in 2023.

For example, a likely economic slowdown means it will be necessary to get granular about land constraints in favored sectors. This is definitely the case in industrial. We are most upbeat about logistics markets that face barriers to new supply, such as urban submarkets in Europe, cities with greenbelt restrictions like Toronto and markets with near-zero vacancy rates and dwindling land supply like Sydney. Even in a softer macroeconomic environment, landlords are likely to face upward pressure on rents in segments with acute supply barriers.

Moreover, asset quality divides within sectors are rapidly gaining in significance. This is in part due to evolving expectations of the role of real estate. Working and shopping from home are often preferred, unless the in-person alternative is sufficiently compelling for the end user. Tellingly, the term "experiential retail" has recently been joined by "experiential office," describing a sufficiently uplifting work environment to attract employees out of their home offices and to foster collaboration. If less aggregate office and retail space are needed, it is reasonable to expect demand to be concentrated in the best properties and locations.

Merryfield Row
San Diego, California

Considerations around energy efficiency, net zero carbon and other green credentials are fast becoming the new frontier of the quality divide within sectors. Both tenants and investors are more focused on these traits than ever before. The improving transparency on sustainability matters, as highlighted in the JLL/LaSalle Global Real Estate Transparency Index (GRETI)[1] suggests that the chasm is likely to widen between assets that deliver and those that do not.

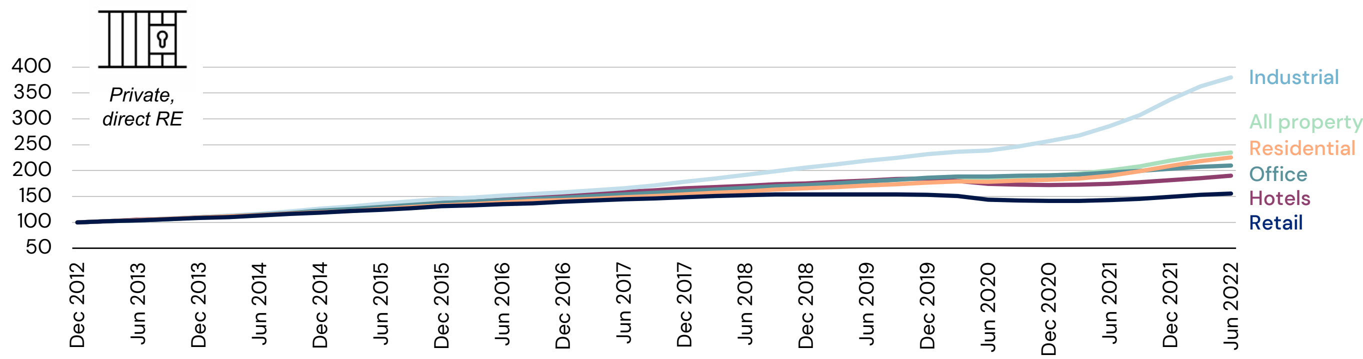
We expect the best and most "green" assets to be easier to let and command higher rents, while also remaining more liquid over the long term. This pattern is likely to affect all property types, but at the moment attention seems particularly focused on the office sector. As a result, we expect that the best office buildings—in terms of both location and building specifications—will perform more strongly than others. Not all regions will move at the same pace in this arena, with Europe leading the way.

Looking beyond basic sector labels also reveals potential sources of strength. Investors should keep in mind that umbrella groupings like office, retail, industrial, residential and niche/alternative are far from monolithic and are subject to unique market conditions that vary by location and property subtype. For example, research lab space, medical office buildings and more traditional office space should not be grouped under the same crude umbrella term of office space. The supply and demand fundamentals affecting each of these have become highly polarized, especially in the US. We are much more confident in the prospects of grocery-anchored retail in the US and Asia Pacific, or outlet malls in the UK, than we are of the broader retail markets in these geographies.

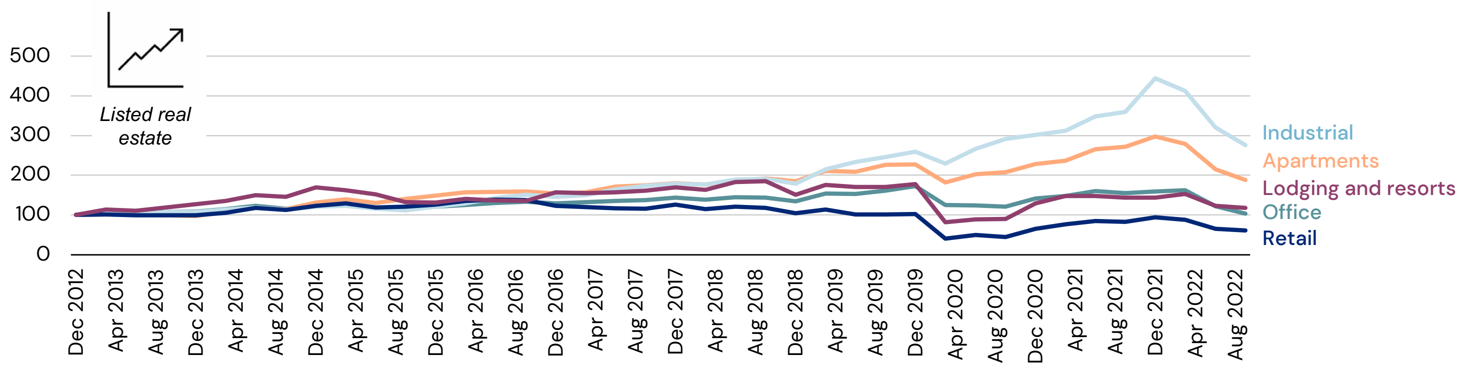
1 JLL/LaSalle Global Real Estate Transparency Index (GRETI), July 2022

G.6
Wide sectoral divergence has narrowed, at least in listed markets

MSCI Global Quarterly Property Index by sector
(Index December 2012 =100)



EPRA global composite return by sector
(Index December 2012 = 100)



Source: MSCI, EPRA, LaSalle. Data through November 30, 2022.

LOOKING AHEAD

- **Our analysis suggests that sector selection will continue to matter, but other asset and strategy traits are rising in importance. We expect quality divides to widen everywhere as the balance of power tips in favor of tenants and structural trends to accelerate the obsolescence of less modern and less green assets.**
- **While rising sustainability and net zero carbon pressures will drive a divide between the best and the rest across all sectors, we expect the dispersion to be widest in the office sector. This is because the outlook for offices in many markets already faces challenges from both an occupational and capital market perspective.**
- **The uneven impact of a return to physical offices in the "living with COVID" phase of the pandemic shows that investors should avoid projecting their own country's view of a sector too far away from their home market. For example, office fundamentals remain relatively healthy in Asia and Continental Europe, while they are particularly weak in the US.**

4 The balance of virtual and in-person interaction is close to a **post-pandemic steady state**

Most parts of the world have reached the "living with COVID" phase of the pandemic. One sign of this is that the language around vaccinations has changed. No longer do we talk about being "fully vaccinated" or not, but about whether we are up-to-date on our seasonal boosters. Case counts continue to ebb and flow, but the incidence of serious health outcomes has fallen precipitously given widespread vaccine-based and natural immunity in most populations.

As a result, COVID restrictions have been largely eliminated around the world. In the US and Europe, it is becoming rare to see anyone wearing a mask. Barriers to travel, such as quarantines, have been dropped even in places that once had strict constraints on entry, such as Hong Kong. The big exception to the removal of restrictions is mainland China, where periods of normalcy are interrupted by temporary lockdowns. But even in China, there are signs of change as public health policies continue to evolve.

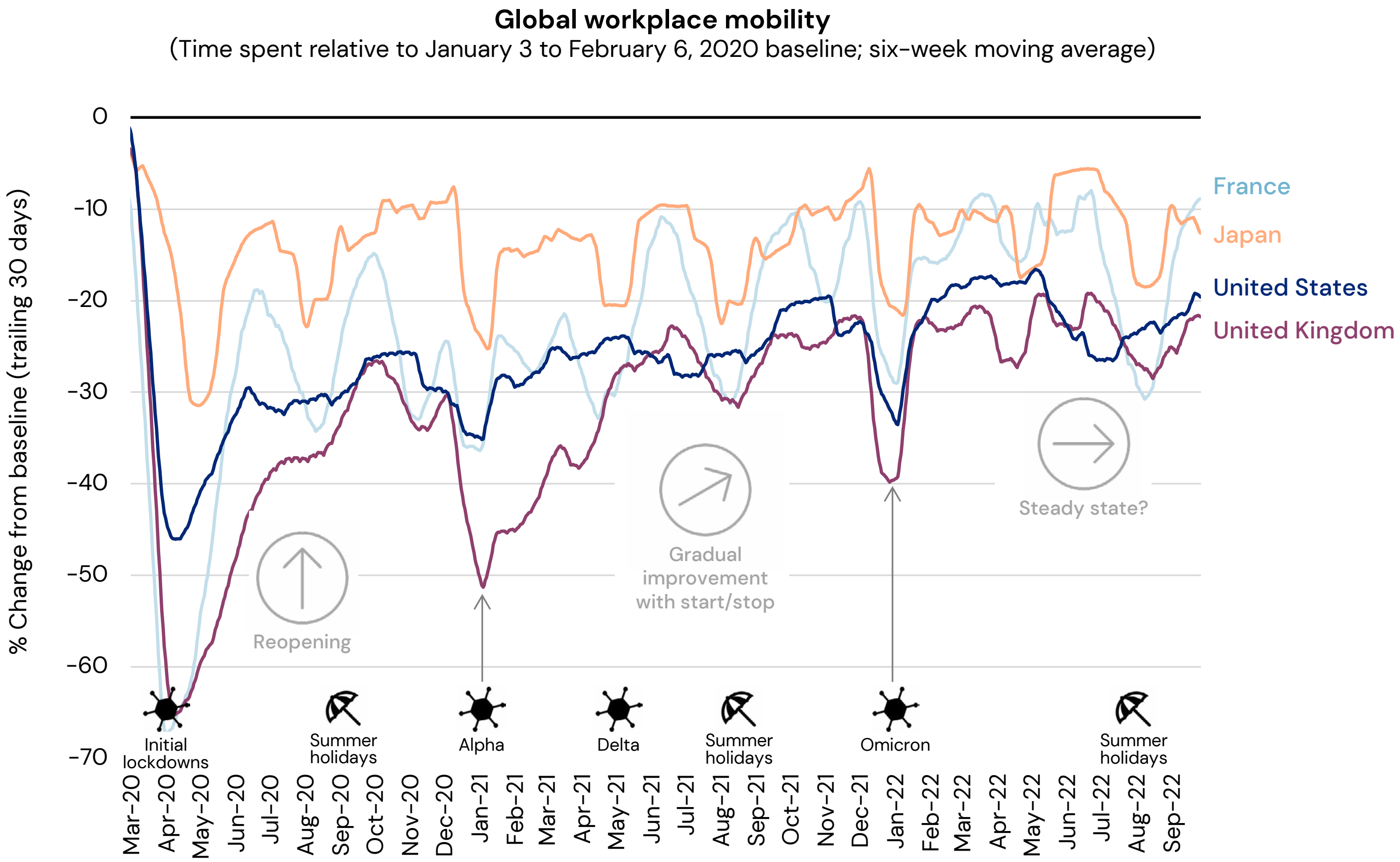
We follow a wide range of data sources to evaluate how close to pre-pandemic normalcy we are. These include Google mobility figures, office keycard entries, seated diners, airline enplanements and public transport ridership. These data indicate that despite a lack of restrictions, the degree of reversion to pre-pandemic norms is incomplete and uneven by activity and location. We divide our observations into work, play and live:

- **Work**: Office attendance remains significantly lower than pre-pandemic levels in many geographies, especially the US, where weekly total keycard entries to office buildings are only 48% of pre-pandemic levels as of November 21, 2022. Office usage is meaningfully higher in Europe and quite close to pre-COVID levels in much of Asia, relativities that are in line with our predictions on the "Future of Office" from the *2021 ISA*. One widely followed indicator of return to normalcy has been attempts to track companies' return-to-office (RTO) policies. In the US, these generally show a pattern of continued extension of remote and hybrid working arrangements as employees resist full RTO.
- **Play**: In contrast to in-person work, in-person play is booming almost universally. Seated diner data from OpenTable point to more people dining out than before the pandemic. Nightclubs are bustling across the world. These trends are evident in public transport usage too, which in many places has recovered most strongly on weekends, in contrast to weaker trends during the business week. Leisure travel has also recovered robustly.
- **Live**: It was feared during the pandemic that work-from-home would mean "work anywhere/live anywhere." Evidence for this was out-migration from city center apartments into suburban or even rural locations. More recently, a return of residents to cities has been observed, as some people have moved back to vibrant locations for opportunities to work and play. The new

G.7

Virtual vs. in-person balance close to a post-pandemic steady state

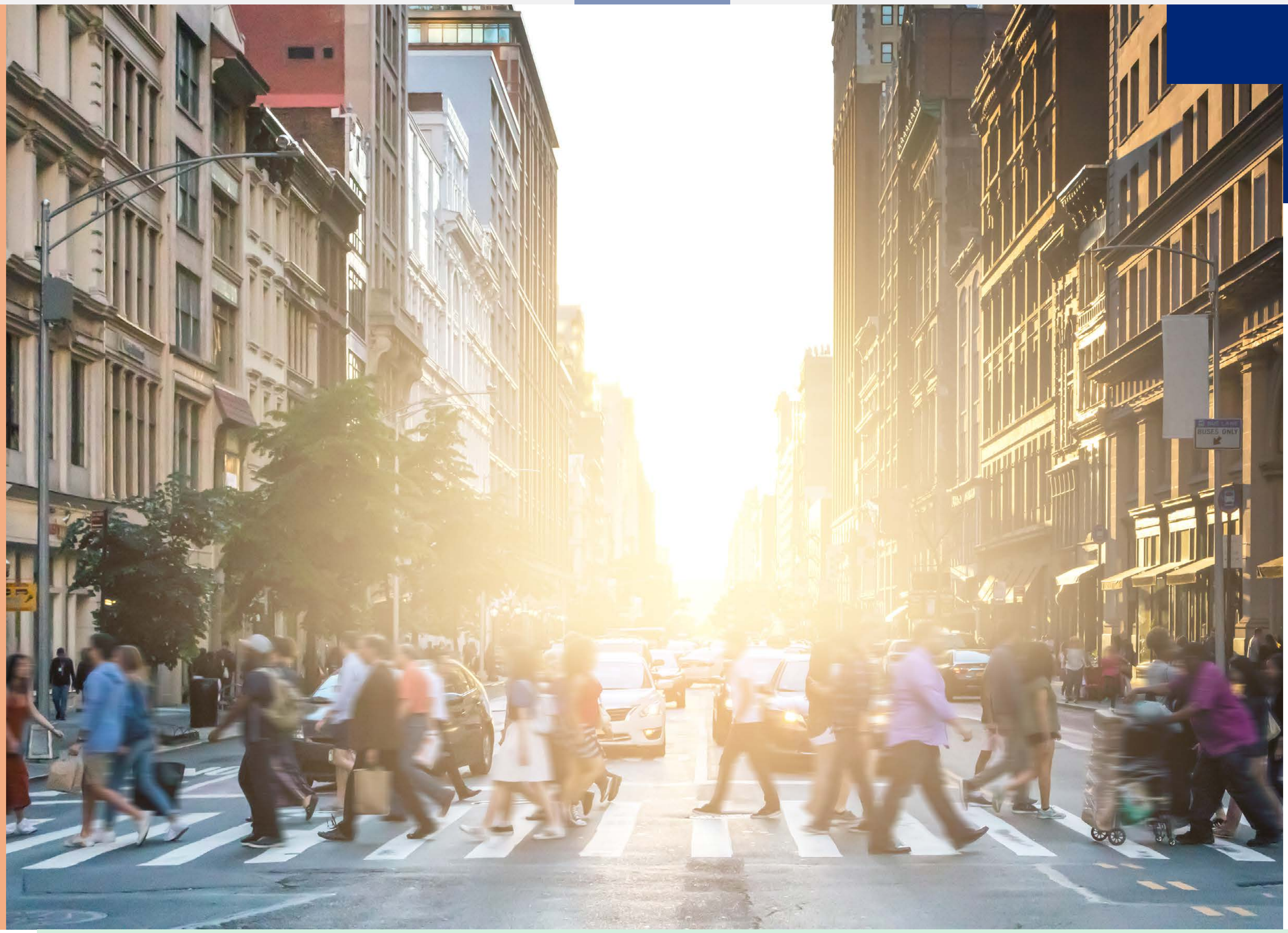
Improvement in office attendence has mostly stalled



Source: Google Mobility data to October 15, 2022.

pattern might be termed "work anywhere/ live *somewhere*," with urban places that offer a strong quality of life, a good amenity base and a sense of place remaining resilient. City living might not be everyone's ideal, but it has come back into favor for part of the population. Meanwhile in Asia, home to dense cities that integrate live, work and play into mixed-use settings, it never really fell out of favor.

Perhaps the most important observation about the balance of in-person and virtual interaction today is that it appears to have reached a steady state, at least for now. Dining out seems to be stable at a high level. Office usage indicators like workplace mobility and keycard entries, however, are stuck at a more moderate, if globally variable, level. They had been characterized by a broad trend of gradual improvement interrupted by variant-related setbacks, but leveled off as of mid-2022, as shown in Exhibit G.7. Given that COVID-related restrictions are mostly gone, further normalization in the balance of in-person and virtual modalities will have to rely on changes in company policy and the possible influence of a recession on workplace culture. Exceptions include international travel in Asia Pacific and cross-border migration, which still have robust intrinsic recovery potential.



LOOKING AHEAD

- **Further large changes in the balance between in-person and virtual interaction are probably unlikely. This does not preclude any cyclical changes to discretionary spending that respond to the economic situation, such as a potential reduction in travel and going out because of squeezed real incomes.**
- **It is probably wishful thinking to expect further large gains in office attendance anywhere in the world. This is most significant for the US, where office use is lowest. That said, a weakening of the labor market could tip the balance of power away from employees as employers mandate a return.**
- **While the balance of in-person and virtual modalities may have reached something close to a steady state, occupiers are in the early days of reconfiguring workplaces to match the new "living with COVID" world. Companies are likely to focus more on collaborative spaces and less on rows of desks, with implications for space demand. The key questions have shifted from the amount of in-person work, to the precise amount and type of space needed to facilitate interaction and collaboration.**

5 Moving from **climate** awareness to planning and **action**

Different parts of the world are moving at different speeds regarding awareness, regulation, market reaction and policy action on climate change and real estate. Depending on the jurisdiction, the focus varies from the narrower goal of hardening against physical risk, to full decarbonization. European countries are moving at different speeds, but all in the same direction. Policies in US states are diverging based on political dynamics. In Asia Pacific, the trend is mixed. Despite this variation, the events of 2022 have dramatically reinforced the need for action on climate change, both at the macro level of governments and industry and at the micro level of property-specific resilience and futureproofing. Investors should continue to plan and take action to adapt portfolios to evolving climate-related risks.

Weather over the past year has almost certainly caused the pile of catastrophic insurance losses to keep mounting (see Exhibit G.8). Hurricane Ian was the fifth-strongest hurricane to make landfall in the United States and may prove to be the costliest in history. Severe damage, including complete destruction, has occurred to real estate in the storm's path. Even properties that were relatively undisturbed were left cut off from road access, power, internet, water and even mobile service due to damaged infrastructure.

A forceful hurricane season in 2022 was preceded by a sweltering summer in the Northern Hemisphere. Europe and China recorded their hottest-ever summers since recordkeeping began in 1880, according to NOAA's National Centers for Environmental Information. Meanwhile, Japan and the US recorded their second- and third-hottest summers, respectively. Knock-on economic effects included the pausing of railway service in Britain and the disruption of goods traffic on rivers in Europe and China due to low water levels.

Events such as these reinforce how critical it is that investors evaluate the extent to which physical climate risk hazards may directly impact real estate portfolios and "harden" buildings to make them resilient to climate change. Unfortunately, the range of tools to measure and predict climate events remains immature.[2] Despite inconsistencies in the data, there is no time to waste. It is critical to move beyond data collection and dashboarding, to incorporating climate risk into investment and portfolio decisions.

2 When we reviewed multiple data providers, we found considerable inconsistency in how metrics are defined and wide variation in risk scores for the same hazard at the same property. Our recent report, "How to Choose, Use and Better Understand Climate Risk Analytics," researched and written in partnership with the Urban Land Institute (ULI), is an excellent overview of the challenges faced by first-time consumers of climate data. The paper outlines physical climate risk basics, identifies differences between data providers to be aware of and raises a call to action to standardize the outputs in ways that are most meaningful and useful for real estate, with transparency that enables apples-to-apples comparisons across models.

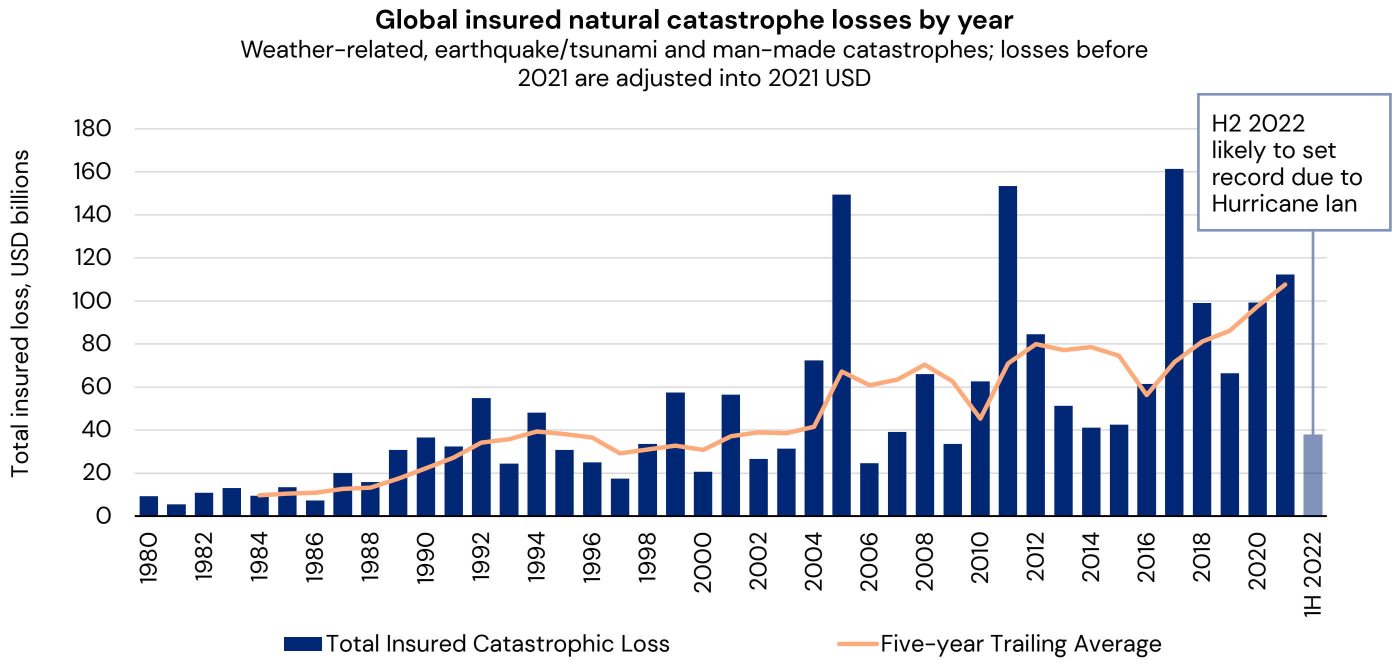
Not all of 2022's dramatic events were meteorological; some were geopolitical. The shutdown of natural gas flows from Russia to Europe drove a severe spike in energy prices in that region. European commercial tenants have begun to put pressure on landlords to address increasing energy expenses passed through to them under net leases, asking them to cap service charges, defer contractual rent increases and improve the buildings' energy efficiency.

Occupiers in Europe now actively shop for space looking for an acceptable total occupancy cost, including both rent and energy costs, putting direct downward pressure on rents for energy-inefficient buildings. This exposes landlords to energy costs as if the lease contracts were gross leases, no matter what the lease may actually say. Efficiency improvements, electrification and on-site power generation are cornerstones of decarbonization strategies. They also help ensure asset competitiveness and energy security at the building level.

The energy crisis has caused the merging of the various rationales for reducing the carbon intensity of real estate, especially in Europe. Motivations for reducing carbon emissions include reputation-building, marketing, regulatory compliance, meeting tenant and investor climate pledges and doing the right thing to reduce global warming. In a moment of crisis, these rationales have converged with the basic objective of delivering real estate that is affordable to its users.

G.8

Evidence mounting of accelerating costs from climate change



Source: Swiss Re Institute. Data to H1 2022. Latest available as of September 26, 2022.

LOOKING AHEAD

- The European energy crisis shows how quickly energy efficiency can move from being "nice to have" to an economic imperative. The rest of the world is not in the same situation as Europe, but its experience shows that conditions can change quickly and it is better to prepare for the future than to be simply reactive.
- Physical climate risk must be managed at two levels: at the portfolio level, through assessment of exposure concentrations and consideration of how climate risk informs overall portfolio construction strategies; and at the property level, through evaluating both existing and potential new hardening strategies to be more resilient against particular hazards.
- Incremental investments in hardening against physical climate change, increasing energy efficiency and installing on-site renewables may, in certain situations and especially for existing portfolio assets in Europe, offer one of the most attractive risk-adjusted returns on capital available today.
- The transition to a decarbonized world also brings nonphysical transition risks that tend to be specific to local markets. These include changes in insurance availability and costs, regulations, taxes, incentives, and changes in tenant and capital market demand.
- For a deeper dive on the energy transition and how it relates to real estate strategies, have a look at LaSalle's November 2022 report "Decarbonization and the Evolution to Net Zero Carbon Real estate."

Asia Pacific

Relative strength and absolute diversity

- **Asia Pacific contains tremendous diversity in the extent to which global economic trends are being felt locally. Its two largest economies, Japan and China, are seeing stable or loosening monetary policies as the rest of the world tightens. Meanwhile, monetary conditions in the smaller economies in the region closely resemble the dynamics in Western nations.**
- **Key uncertainties include whether the Bank of Japan can continue to keep long-yields low and the prospects for China ending its COVID-Zero regime.**
- **Real estate capital market activity in the region has remained relatively resilient, owing to the dominance of intra-regional and domestic capital flows.**
- **Post-pandemic changes in ways of working and living are modest compared to other parts of the world, which suggests that the persistent sector divides observed elsewhere are likely to be less severe in Asia Pacific.**

The outlook for major Asia Pacific economies is relatively benign in the global context. The developed economies of the region are experiencing inflation rates running below those of the West, although these economies are not immune to tightening financial conditions and slowing global economic growth. The odds of a recession in the next twelve months are increasing, but are still below those of other regions, especially Europe. However, if global inflation persists longer than anticipated, central banks would need to hold interest rates higher for longer and it could take either a severe recession or an exogenous shock to bring down inflation. Under this scenario, the relative economic strength of Asia Pacific could diminish.

Asia Pacific is remarkable in that the policymakers of its two largest economies, China and Japan, are implementing monetary policies that are distinctively different from those of other major central banks (Exhibit AP.1). China has implemented monetary easing to support the economic recovery and offset some of the negative impacts of its COVID-Zero policy. Monetary easing, combined with various supportive home purchase policies, could be the catalyst for the housing market in China to bottom. The pace of the housing market recovery will depend on the government's efforts to ensure the delivery of unfinished properties by defaulted developers and the direction of the COVID-Zero policy. Public health restrictions in China are likely to fluctuate under the influence of case resurgences. While the timing of China fully unwinding the policy is uncertain, the end of COVID-Zero, if and when it takes place, would bring a welcome upside to regional and global demand. Furthermore, signals from the 20th National Congress of the Communist Party that concluded on October 22, 2022 pointed to a stabilizing domestic environment and

the G20 Summit that ended on November 16, 2022 hinted at easing tensions between the US and China. Economic growth in China in 2023 should be below historical averages, but strong enough to make it one of the fastest growing large economies.

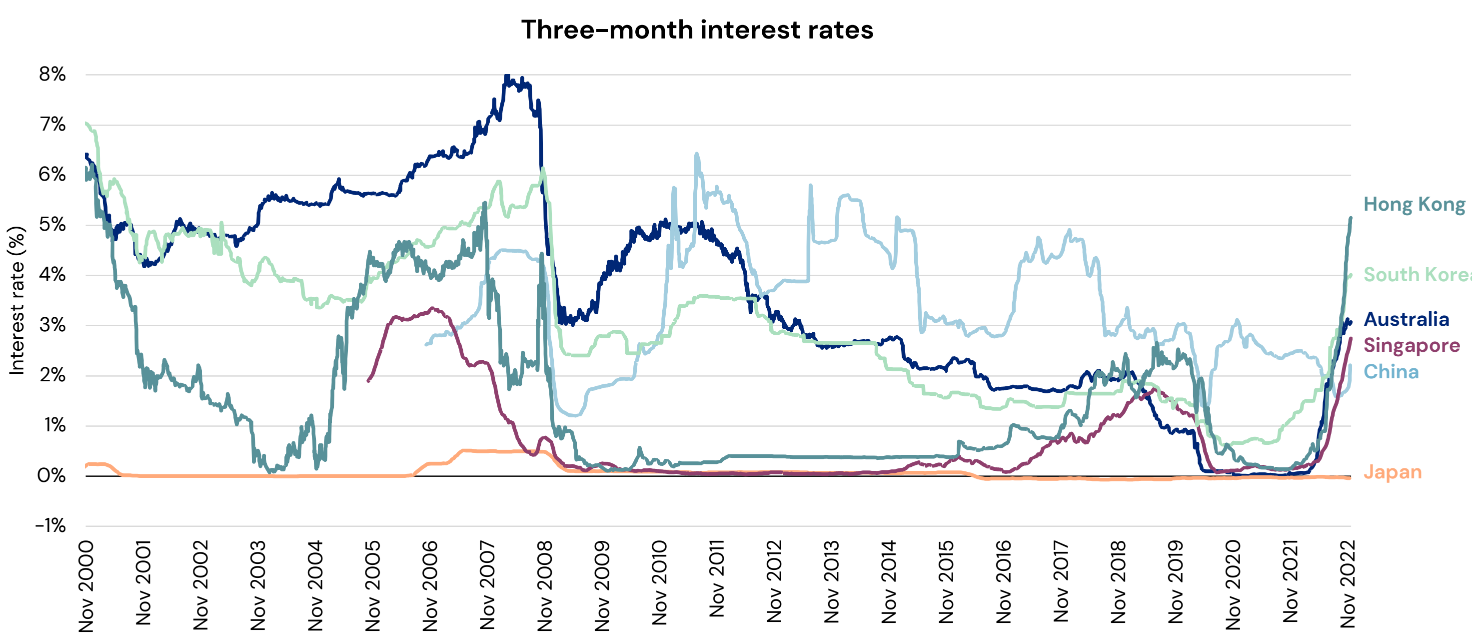
In Japan, yield curve control comes at the cost of a weak yen. If the Bank of Japan (BoJ) remains committed to keeping interest rates near zero, currency intervention, such as yen-buying to prevent further depreciation, could be on the table again. However, currency intervention has rarely been successful absent the cooperation from other central banks. Any changes to the yield control approach are likely to come after BoJ Governor Haruhiko Kuroda's term concludes in April 2023. Nonetheless, most of the challenges Japan is facing are externally driven, while domestic-driven fundamentals remain relatively healthy.

Australia, South Korea and Singapore are the most directly impacted by rising interest rates in the West. The outlook of these economies is likely to follow the trends in the West, albeit to varying degrees. The Monetary Authority of Singapore manages monetary policies through the foreign exchange markets, given that for a small and open economy, the exchange rate has a much stronger influence on inflation than the interest rate. That said, the magnitude of interest rate hikes in Singapore has been less than that of the US. Additionally, an increasing number of firms are pivoting to Singapore for their regional headquarters due to its geopolitical stability. All of these are adding to the relative strength of Singapore's economy.

The weakness of Asia Pacific currencies is mostly a story of US dollar strength. Nevertheless, uncertainties over the macro outlook and the dispersion among regional economies could lead to the continuing divergence of real estate market performance in the next 12-24 months. The diverse economic and real estate market trends within the region have the potential to contribute diversification benefits to institutional investors' global portfolios.

AP.1

Diverging monetary policies in Asia Pacific



Note: Australia's interest rate refers to the Bank Bill Swap Rate (BBSW), China's interest rate refers to the Shanghai Interbank Offered Rate (SHIBOR), Hong Kong's interest rate refers to the Hong Kong Interbank Offered Rate (HIBOR), Japan's interest rate refers to the Tokyo Overnight Average Rate (TONA), Singapore's interest rate refers to the Singapore Overnight Rate Average (SORA), South Korea's interest rate refers to the Certificate of Deposit (CDC). All rates for three-month duration.
Source: Bloomberg, as of November 21, 2022.

Diverse, domestically-driven capital markets

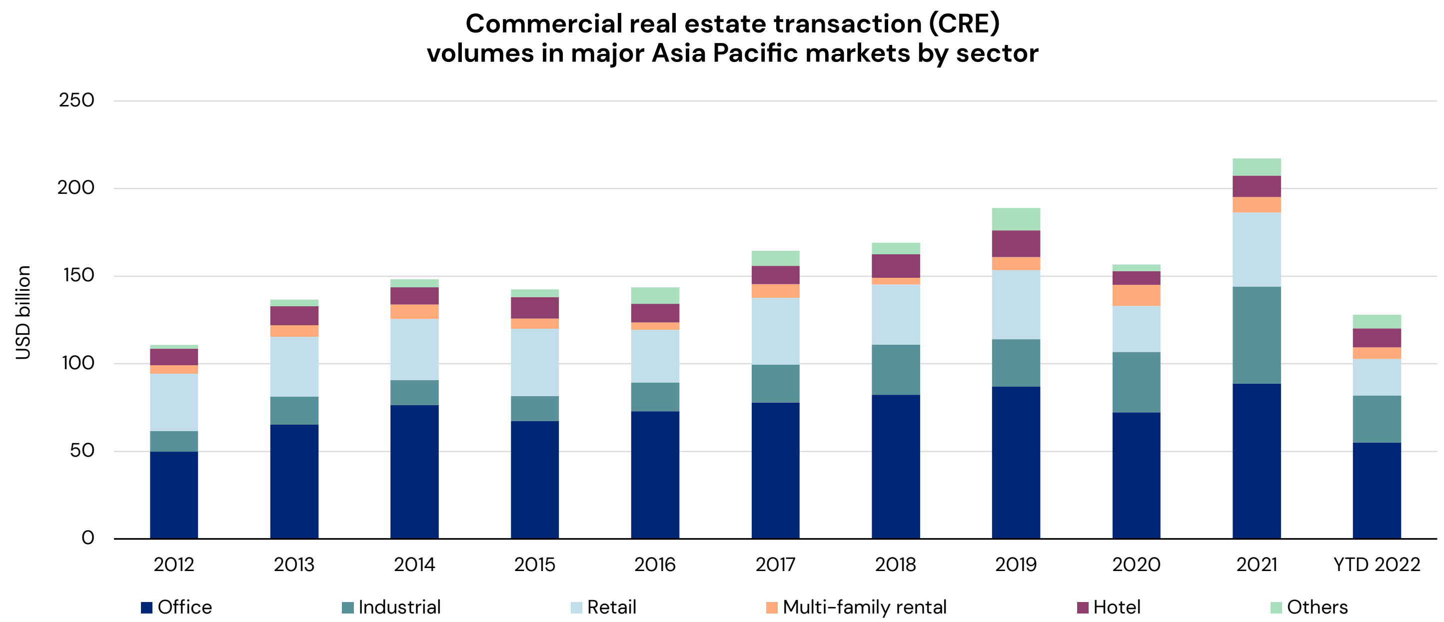
Commercial real estate transaction activities in Asia Pacific during the first nine months of 2022 came off 2021's record highs (Exhibit AP.2), primarily driven by rising interest rates in South Korea, Australia and Hong Kong, as well as COVID-19 lockdowns in China. There was also some impact from Western investors withdrawing liquidity due to home-country denominator effects. Although we have observed shrinking pools of bidders and widening bid-ask spreads, particularly for large-sized assets, there has not been clear evidence of price corrections in most Asia Pacific markets except South Korea. Indeed, recent transaction activity has highlighted pockets of strength in some parts of the region's capital markets, particularly for assets in Singapore and multi-family rental across major markets. We also observe some early signs of investor appetite returning to hotels in countries that have re-opened or are re-opening.

The Asia Pacific office sector has traditionally accounted for a significant allocation in most Asia Pacific investors' real estate portfolios (Exhibit AP.4), and that is expected to continue. A share of liquidity reduction for office assets in the region can be attributed to unfavorable views towards office assets in investors' home countries, particularly the US. The reduction in logistics transaction volumes has been primarily driven by high prices and lack of product for sale, as the occupier market outlook remains healthy in most markets. In 2023, rising interest rates are expected to put upward pressure on capitalization rates in markets with rising supply and for assets with weaker rental growth prospects.

Capital market conditions vary significantly across the region. South Korea was the first developed market in Asia Pacific to experience material liquidity constraints. In addition, financial conditions have been tightening in Australia since May 2022 and are now as tight as those in South Korea. Australian REITs are likely to be more vulnerable to rising interest

AP.2

Transaction volumes slowing from 2021's peak levels



Note: YTD 2022 transaction volumes are as of YTD Q3 2022. The finalized data for Q3 2022 were extracted as of November 15, 2022.
The above transaction volumes include office, industrial, retail, hotel, multi-family rental and other deals above USD 10 million, excluding development deals.
Major Asia Pacific markets included in the above exhibit are Australia, China, Hong Kong, Japan, Singapore and South Korea.
Source: MSCI Real Capital Analytics, as of Q3 2022

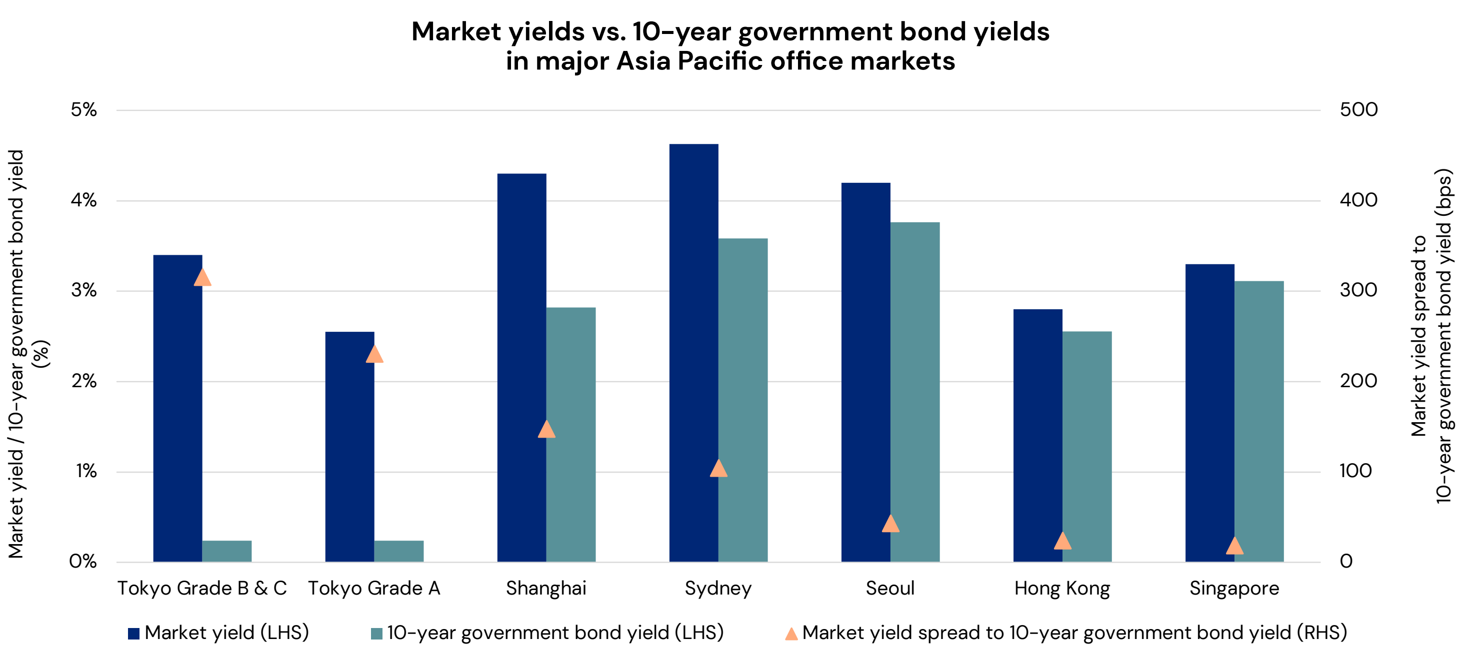
rates than REITs in other listed markets in the region due to their relatively high exposure to floating rate debt. Financial conditions in Singapore are expected to fare slightly better than those of South Korea and Australia, as Singapore benefits from strong investor appetite due to its relative economic strength and geopolitical stability.

Although uncertainties remain, monetary easing, the rise of RMB funds, the rapid development of domestic REITs in China and the gradual relaxation of COVID restrictions in Hong Kong could offset some downside risks in these two capital markets. In Japan, yield spreads between real estate and 10-year government bonds are expected to remain the widest among major real estate markets in Asia Pacific (Exhibit AP.3), even if the BoJ is under pressure to increase interest rates slightly in the near term. We expect Japan to remain attractive to investors, primarily supported by its accommodative monetary policy and stable political environment.

In theory, weak currencies offer attractive discounts for cross-regional investors, but Asia Pacific real estate capital markets are traditionally dominated by domestic and intra-regional capital. In this cycle, most of these capital sources should remain well-capitalized with little financial pressure to sell. The structural dominance of domestic and intra-regional capital is expected to continue to support the real estate capital markets in the region. The probability that this cycle will end with a systemic dislocation like the Global Financial Crisis is still low, despite the short-term volatility. If the global environment of high inflation and interest rates lasts longer than anticipated, there could be meaningful price corrections in the region.

AP.3

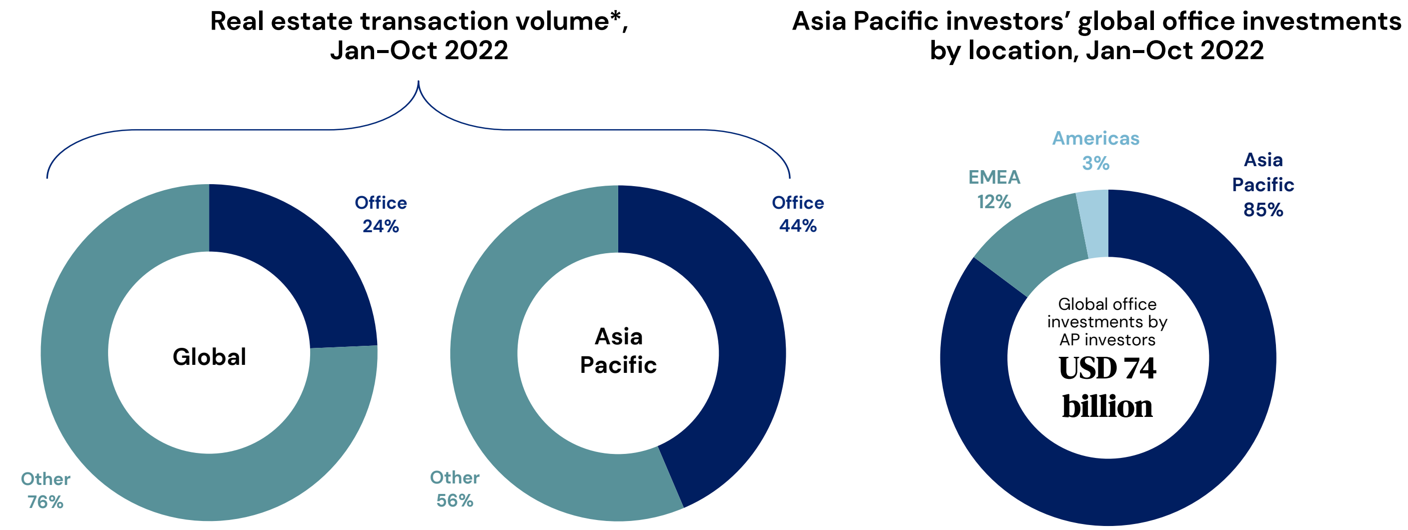
Yield spreads in Japan remain attractive



Note: Market yields are based on these office markets: Grade-A and Grade-B and Grade-C offices in the Tokyo Central 5 wards, CBDs in Shanghai, Seoul, Singapore and Sydney and Hong Kong Central.
Source: JLL REIS (all except for Tokyo market yields), as of Q3 2022, LaSalle Investment Management (Tokyo market yields), as of Q3 2022, Bloomberg (10-year government bond yields), as of November 21, 2022.

AP.4

Relatively strong investor appetite for Asia Pacific offices



* The real estate transaction volume data include office, industrial, retail, multi-family rental, apartment, and hotel deals above USD 10 million but excluding development deals.
Source: MSCI Real Capital Analytics as of November 22, 2022.

Market and submarket selections are increasingly important even among favored sectors

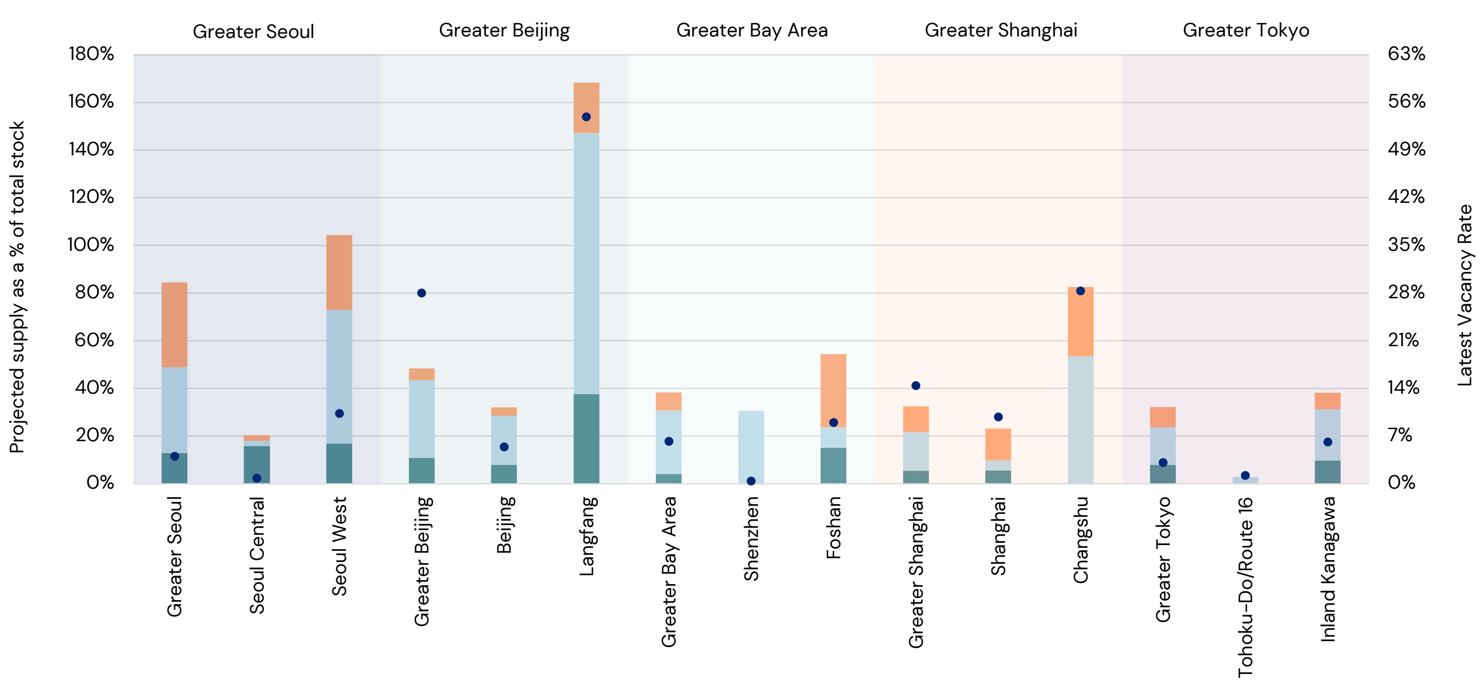
The **office** sector recovery continues to be uneven across the region, although Asia Pacific's post-pandemic office demand rebound has been relatively fast by global standards. Flight-to-quality has been the primary demand driver in major office markets, particularly in Australia and Japan. Tenants continue to favor high-quality offices in locations with strong work-live-play attributes (e.g., central or CBD fringe locations). In addition, sustainability credentials are increasingly essential for tenants and lenders, particularly in Australia and Singapore. We therefore expect the dispersion of office performance to widen, even for assets within the same submarket.

In 2023, we expect office markets with diversified tenant bases, low vacancies and limited supply pipelines to outperform. Singapore leads in LaSalle's Asia Pacific Office Target Market Analysis, which ranks the outlook of major office markets in the region over the next three years. Tokyo remains highly ranked among major office markets, primarily due to its low vacancy rates, although some upward pressure on vacancies and downward pressure on rents are expected in Tokyo as supply increases over the next two to three years. The Sydney and Melbourne office markets are well positioned within Australia but are expected to remain weak by their historical standards, while the Shanghai office market could take time to recover. Micro-location selection will be more important than before the pandemic, as office performance widens in the region.

Over 80% of Asia Pacific investors' global office investments in the first ten months of 2022 were within the region (Exhibit AP.4), supported by its relatively strong re-opening momentum and high return-to-office ratios. As financial conditions tighten, small office transactions (less than US$200 million) have been attracting larger pools of buyers than big office assets. The favorable home bias among Asia Pacific investors is expected to continue to support capital values for high-quality office assets in strong locations, even in times of financial tightening. We continue to favor value-add

AP.5

Bifurcation across Asia Pacific industrial markets and submarkets



Note: The latest vacancy rates and the total stock numbers used for the availability calculation are as of July 2022 for Japan markets and as of Q3 2022 for other markets except Foshan. The data for Foshan is as of Q2 2022.
Source: Ichigo Real Estate Service (Japan), as of July 2022; JLL REIS (all other markets except Japan), as of Q3 2022.

strategies for Grade B offices in major office markets in Japan, but we remain highly selective on location.

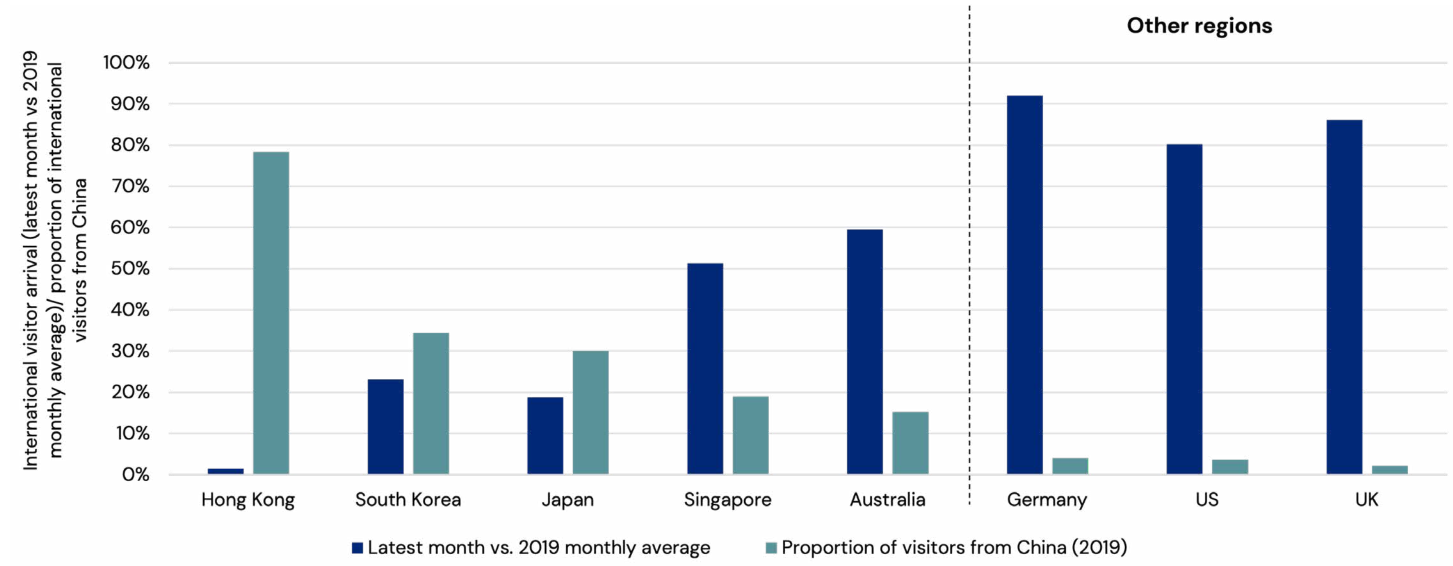
The **logistics** sector in the region remains resilient, with low vacancy rates and positive rent growth in most markets; exceptions include several Chinese Tier II markets and a few satellite cities of Tier I markets, as well as some high-supply submarkets in Greater Seoul. Supply is projected to increase in major logistics markets in the region, although rising construction and borrowing costs could lead to some cancellations or delays.

Rising interest rates in most markets, except China and Japan, are expected to weigh on returns in 2023. Logistics rent growth is projected to continue, albeit at a moderating pace, driven by rising supply, slowing economies and rising occupier operating costs. The performance bifurcation across markets and submarkets within the same market is expected to widen. We expect submarkets with low projected availability (Exhibit AP.5) and strong and diversified tenant bases to outperform.

Logistics demand in Sydney and Melbourne, where vacancies are near zero, is expected to be supported by retailers' shift from brick-and-mortar retail to the omnichannel model. We expect upgrade demand in Greater Tokyo and Greater Osaka to continue over the next two to three years. Although the pace of take-up could slow in these two markets, vacancy rates are expected to remain among the lowest in the region. We also expect continuing strength in Singapore and select markets in China (e.g., Beijing, Shanghai, Huizhou, Wuxi and Jiangmen),

AP.6

Asia-Pacific travel and tourism highly dependent on Chinese visitors



Note: The latest month international visitor arrival for UK is as of June 2022, for US is as of August 2022, for Australia, Hong Kong, South Korea and Germany is as of September 2022 and for Japan and Singapore is as of October 2022.
The proportion of international visitor arrivals from China for all countries is as of 2019 except Germany which is as of 2018.
Source: Statista (China visitors to Germany), as of 2018; UK Office for National Statistics, as of June 2022; US Department of Commerce, as of August 2022; Australian Bureau of Statistics, Hong Kong Tourism Board, The Korea Tourism Organization, CEIC (Germany international visitor arrival), as of September 2022; Japan National Tourism Organization, Singapore Tourism Board, as of October 2022.

where tenant bases are diversifying beyond 3PL/e-commerce tenants. As logistics tenants are facing elevated transportation and labor costs, we expect outperformance from assets with high-efficiency designs and a balance of favorable accessibility to end users and reasonable rents.

Retail fundamentals continue to be affected by e-commerce disruptions, as well as rising inflation and interest rates. Non-discretionary retail in the region is expected to continue to outperform discretionary retail since it is less vulnerable to e-commerce disruptions. Based on our framework for assessing the impact of e-commerce disruptions on brick-and-mortar retail, retail assets in Japan, particularly those catering to non-discretionary spending, could be a relative winner in Asia Pacific in 2023. An aging population lacking digital skills, the hurdle of digital payment implementation and consumers' preferences for physical shopping experiences are expected to continue to support brick-and-mortar retail in Japan.

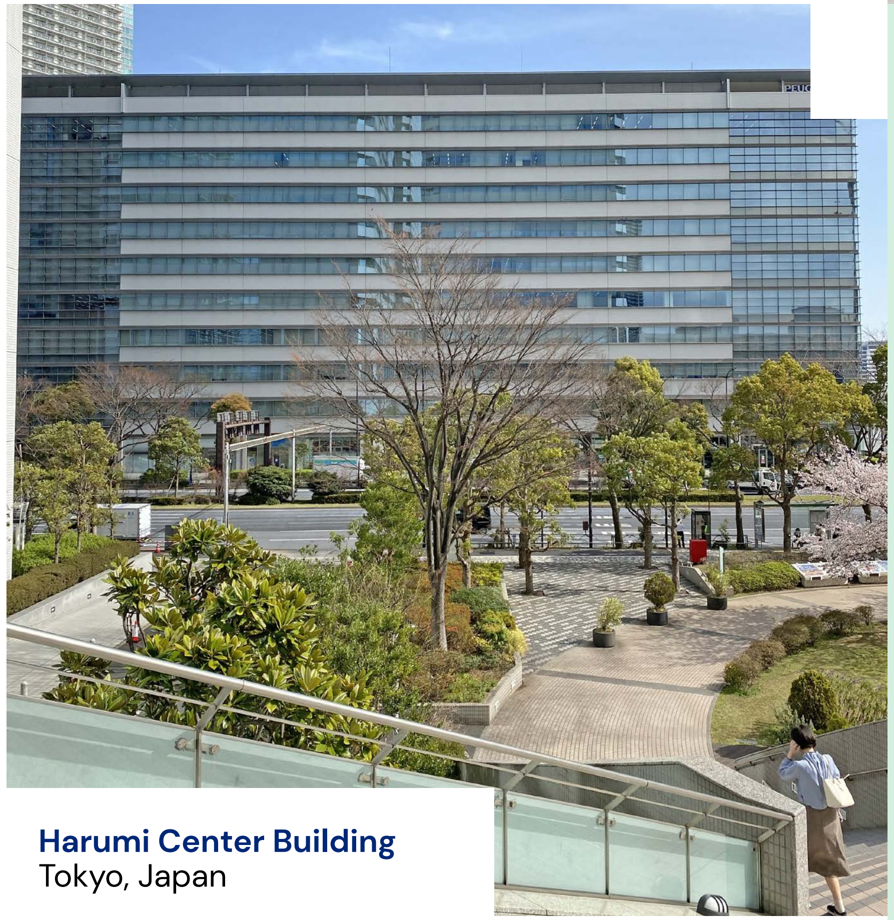
Being an unfavored sector, retail bidding participation and transaction volumes have decreased drastically in markets where interest rates have increased. Although we have not observed sizable price adjustments, retail capitalization rates in major Asia Pacific markets could be more vulnerable to upward pressure than those of other major property types in the near term.

The **multi-family rental** sector held up well in the region in 2022, except in Shanghai where the lockdown in the second quarter caused a temporary vacancy rate increase. The transition of COVID-19 to an endemic state in Japan is expected to support positive migration trends, particularly to large metros such as Tokyo, which could boost demand for rental apartments in the near term. Rising mortgage rates in many Asia Pacific countries, low housing affordability and uncertain economic environments may encourage some households to rent rather than own. Multi-family rental supply in China and Australia is expected to increase in the next two to three years. Rising supply could also help to bridge the gap between demand and supply in China but is unlikely to cause oversupply in the near term, given the high occupancy rates and a healthy demand outlook. In Australia, supply is expected to increase, but from low levels of existing stock. We expect the sector to remain an outperformer, especially in the context of macroeconomic uncertainty.

Multi-family assets have been historically favored by investors due to their resilient market fundamentals and the natural inflation hedge of rents in most markets. We expect the liquidity of multi-family assets, especially in mature markets like Japan, to be less impacted by tightening financial conditions than unfavored sectors, such as retail and office assets. In China, the nascent domestic REIT market could provide increasing liquidity for multi-family assets, while the liquidity of Australian multi-family assets remains untested as the sector is still emerging.

Hotel revenue per available room (RevPAR) has improved in markets that are more advanced in re-opening and have seen material increases in international visitors, such as Australia and Singapore. In markets where travel restrictions have been lifted, quality hotels have outperformed, as visitors are willing to upgrade their accommodations due to COVID-related concerns (i.e., hygiene). International visitor volumes in Japan and South Korea are expected to rebound in 2023, given further easing in travel restrictions from October 2022. In China, the return of international visitors remains highly dependent on the trajectory of the COVID-Zero policy. International visitors to most Asia Pacific countries are unlikely to return to their pre-pandemic levels until Chinese visitors, a significant source of visitor demand, return (Exhibit AP.6). Hotels targeting leisure travel are expected to lead the recovery compared to those targeting business travel.

Hotel operating margins could be under downward pressure in 2023, even if demand recovers. Hospitality operating expenses have increased due to operating cost inflation and labor shortages. Rising inflation and interest rates and the withdrawal of government fiscal support are expected to weigh on the profitability of hotel owners, which could prompt some to sell. For investors with a high risk tolerance and flexible investment horizons, there could be highly selective leisure hotels in the key gateway cities of Australia, Japan, Singapore and South Korea, if attractive pricing discounts emerge.



Harumi Center Building
Tokyo, Japan

Hongqiao Project
Hong Kong, China

LOOKING AHEAD

- **The math of rising interest rates in many Asia Pacific markets (except China and Japan) is expected to weigh on returns. In this environment, we recommend going back to basics. Supply-demand dynamics are critical in the context of a slowing economy with rising tenant operating costs. Market, submarket and asset selection are key, even in the favored sectors. Focus on asset management to achieve return targets instead of counting on market growth.**
- **Japan remains an attractive diversifier for institutional investors' regional and global real estate portfolios, due to the relative resiliency of its occupier and capital market fundamentals, its stable geopolitical environment and divergent monetary policies.**
- **In China, easing monetary policy and the rapid development of the REIT market are expected to support real estate market liquidity, particularly from domestic investors.**
- **Tightening financial conditions, especially in South Korea and Australia, could create opportunities for higher return strategies. For investors with a higher risk tolerance, we recommend preserving dry powder and monitoring for pockets of price adjustment. It is time to be a "patient opportunist"—waiting and watching for attractive discounts if dislocation occurs in this region.**

Europe

In a bind, yet tethered together

- **Europe's challenges are especially acute, owing to Russia's invasion of Ukraine and the ensuing sudden, forced rotation away from Russian fossil fuels. The region's mix of inflationary forces go beyond the usual supply chain pressures and tight labor markets, to include the more detrimental impact of exogenous shocks.**

- **As of the time of writing, European energy costs were trending down due to warmer weather and full natural gas storage facilities going into the winter months. But Europe remains vulnerable and will have to invest rapidly to reduce its energy vulnerabilities over the coming years.**

- **Property fundamentals remain reasonably benign in most European markets, cushioning some of the blow from a significant upward adjustment in yields that is being hidden from view by a wide bid-ask spread and decline in transaction volumes.**

Europe is beginning to adapt to a new economic and political reality. It is experiencing a severe negative energy shock on top of the normalization of fiscal and monetary policies that is occurring across other Western nations. There are deep geopolitical changes underway, including a shift away from Russian fossil fuels, with opportunities for a step-change in the adoption of renewable sources of energy. There will likely also be lasting ramifications for the project of European integration, with outcomes depending on whether European nation-states decide to share the burden or go it alone. It may also reset relations between governments and their people, whose expectations for state intervention to avert negative economic outcomes have rarely been higher.

Sharing challenges like inflation, climate change, currency stability, Russian aggression, refugee relief and energy policy may realign UK and EU policies to a greater degree than at any time since the Brexit vote. In real estate terms, the major markets of Europe are highly varied. Yet, when viewed from a global perspective, they are quite like one another in terms of their focus on green building policies, reliance on public transport, cautious approach to new supply and their proximity to an armed conflict.

An unwelcome external shock

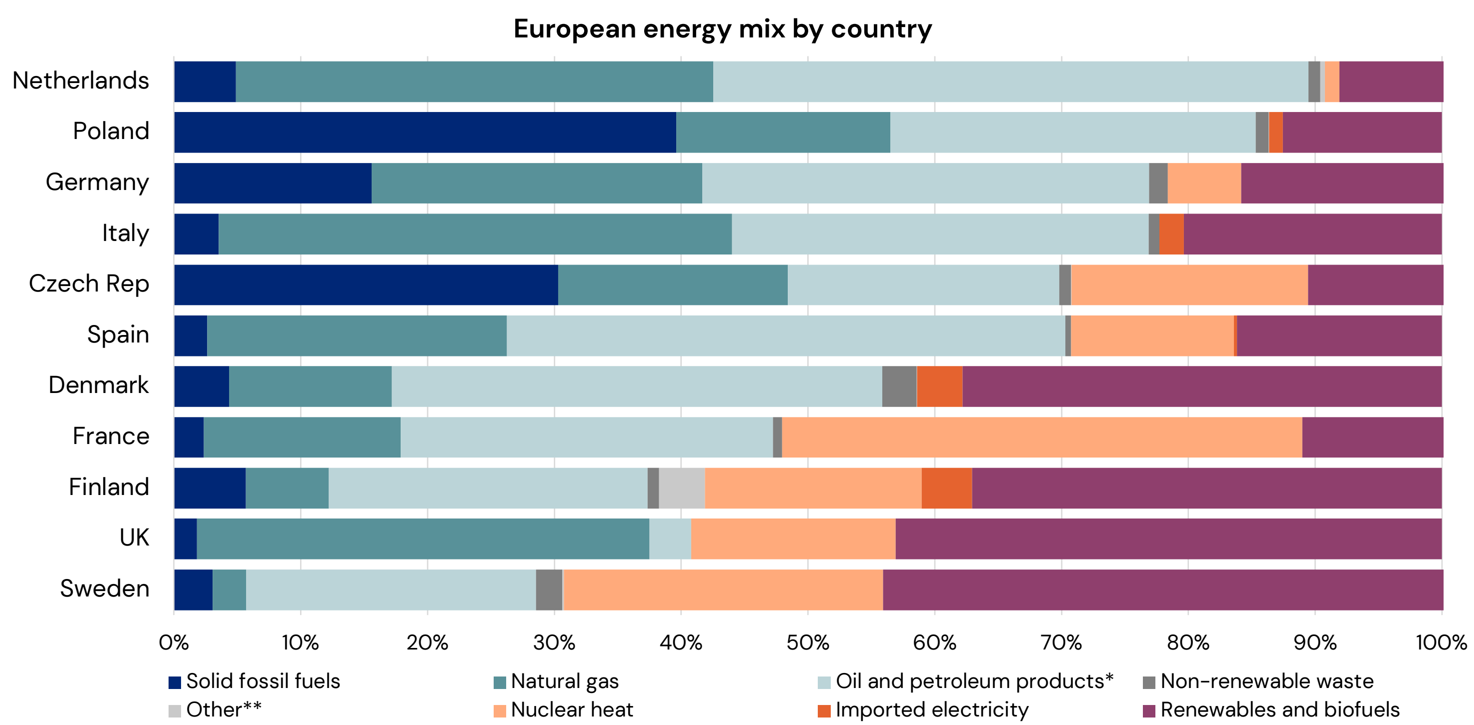
Russia's invasion of Ukraine came at a time when Europe was already embroiled in an economic struggle on multiple fronts. The COVID-19 pandemic necessitated huge government fiscal interventions to support consumers and businesses through periods of mandated closure. These came on the heels of a decade in which sovereign debt crises and austerity had already seen productivity growth stagnate without meaningfully improving sovereign balance sheets in peripheral Europe. Reopening as the pandemic entered the endemic phase saw supply chain stresses and uneven demand patterns drive shortfalls in the availability of goods and labor. The energy supply crunch resulting from European support for Ukraine added a huge exogenous cost shock to the existing global and regional price pressure, driving European inflation readings to the highest level in the world by the end of 2022, on top of the future costs of new commitments to defense spending.

The war in Ukraine will eventually end, but barring an unexpected change in Russian leadership, the deflationary impact of its cheap natural gas to heat homes and power industry will not return. Political divisions within the European Union, long oriented around tensions between budget surplus economies like Germany and the fiscally fragile periphery, have begun to realign across energy fractures. States reliant on Russian gas, including Germany and Italy, are increasingly at odds with countries that have diversified sources of supply or significant domestic production capacity, such as Spain, France, Portugal, the Nordics and the Netherlands (see exhibit EU.1).

The future of European fiscal integration will depend on the extent to which the bloc decides to pull together on inevitable large energy subsidies versus going it alone. The solo path may better reflect national market realities, but at the potential cost of being seen to beggar one's neighbors. Sources of energy supply can be adapted and the successful efforts to fill storage over summer saw European gas prices fall ahead of winter. Germany and the Netherlands have added significant liquified natural gas (LNG) onshoring capacity, in addition to extant

EU.1

European countries vary greatly in their dependence on fossil fuels



* Oil and petroleum products exclude biofuel.
**Other = Manufactured gases + Peat and peat products + Oil shale and oil sands + Heat.
Source: Eurostat, ONS as of 2020.

infrastructure in Spain, Portugal and the UK. However, gas pipelines are expensive to build and modify and the patience of fixed-income investors for sovereign debt balances is not infinite.

Indeed, the short-lived government of Liz Truss in the UK, which advanced ideologically driven tax cuts in addition to considerable fiscal largesse on energy bills, has given the country a keener sense of the maximum level of fiscal irresponsibility that international sovereign bond markets will tolerate. This is on top of the fact that sovereign bond market patience will be robustly tested by central bank efforts to scale down balance sheets bloated by quantitative easing (QE).

Tough math

One of our global themes for 2023 is the "relentless math" of debt costs; and in Europe, the rebasing of property prices is especially significant. Europe's yields at the end of 2021 were as low as anywhere in the world given its low natural rate of interest. But lacking Japan's more subdued inflation picture, the European Central Bank (ECB) and the Bank of England (BoE) have had little choice but to follow the US Federal Reserve by raising interest rates and running down QE stocks of government bonds. However, unlike the US, the major driver of European inflation is an exogenous energy price shock, rather than rampant domestic demand. The ECB and BoE will continue to raise interest rates to defend currencies to avoid importing more inflation and to manage the inflationary effects of Europe's tight labor markets. However, with core price pressures less pronounced than in the US and weaker long-term demographic drivers of inflation in Europe, it is likely that both the peak level and equilibrium rate of monetary policy will be lower in Continental Europe than in the US.

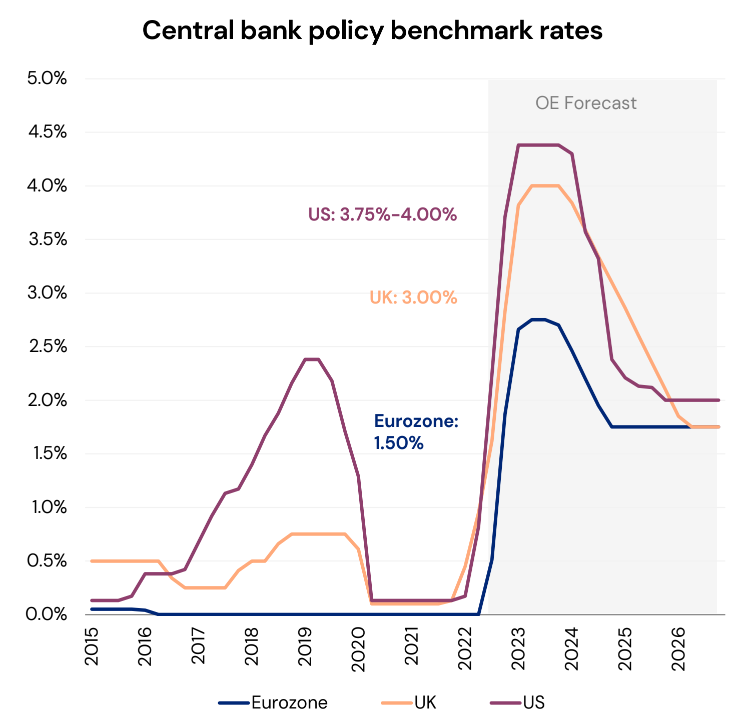
Nevertheless, for the moment the repricing pressure on Europe's lowest-yielding property sectors is profound. Buyers not using leverage have an opportunity to set pricing at the margin and they have been among the few active players. However, the opportunity cost of doing so given the returns on offer in other asset classes, such as fixed income, means that real estate capital markets will likely stall until bid-ask spreads narrow further. Capitulation is more likely to come from sellers than buyers.

Value-add capital may find opportunities to take advantage of dislocation, given that many highly leveraged positions face a newly uneconomic cost of debt and open-ended funds facing redemptions may need to sell assets. For lenders, the need to refinance at higher rates and the opportunity to take floating-rate positions at newly raised levels make returns in debt strategies attractive in this environment. While there are opportunities for equity funds with dry powder, for funds currently invested, a series of adverse revaluations is likely. Index values declined in the third quarter, but valuation yields remain above tradeable market capitalization rates. However, the current widened bid-ask spread should give way to a normalization of capital markets from new rebased values, likely in the second half of 2023.

As central banks become increasingly concerned about economic fundamentals, hiking cycles will also come to an end (see Exhibit EU.2). Surprises in this area may already be over, with equilibrium policy rates having probably already been priced into swap markets. Policy rates still must get to these stabilized levels, but further upward shocks in rates now seem unlikely, with the possibility for some positive surprises and relief rallies if equilibrium rates end lower than expectations. However, a return to the yield levels of 2021 for European property seems inconceivable, so investor business plans must take the new reality of higher capitalization rates into account.

EU.2

European monetary policy sharply tighter



Source: Oxford Economics as of November 25, 2022.

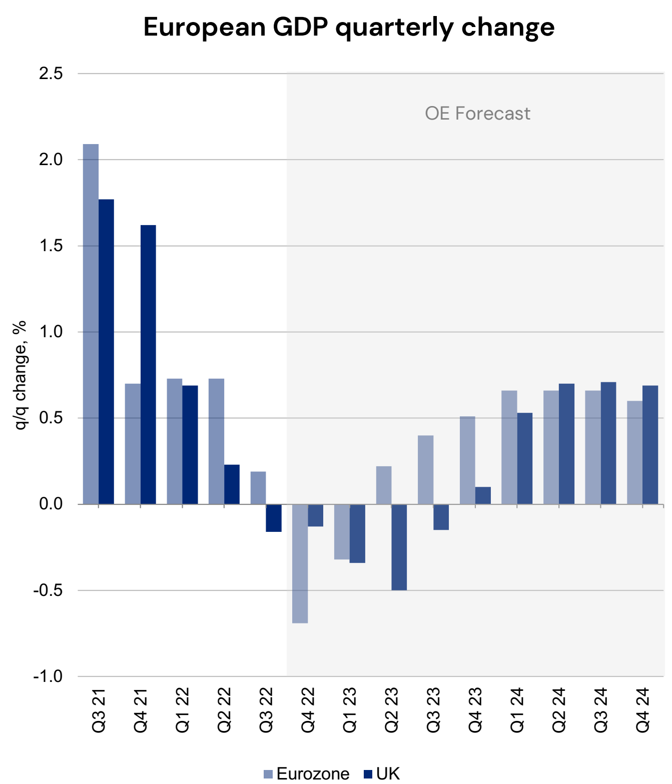
Recession today, hope tomorrow

As volatile expectations of monetary policy continue to drive shifts in yields, a further key uncertainty for European real estate values is about fundamentals—"the path," as we call it in our global themes. A recession in early 2023 is inevitable in Europe. The cumulative effect of mortgage rate increases and the higher price of goods, services and energy will leave European households and corporates weaker than elsewhere. Weakened currencies could help European exports, but most other economies are slowing too, so it is unlikely to be a salvation for European companies (see Exhibit EU.3.)

Although households and corporates have higher expectations of government support than at any other time in history, conditioned by experiences since the GFC and the pandemic, sovereign balance sheets are less able than ever to sustain such support. This situation will be even more pronounced in the UK, with its faster time frame for quantitative tightening (QT) allied to its recent chastening by bond markets. The ECB, even once it begins QT of the main balance sheet, will still maintain a spread-control tool allowing for selective purchases of peripheral government debt to set a channel around eurozone sovereign borrowing rates.

The relatively limited capacity of European government coffers to support productivity-enhancing investment does, however, offer an opportunity for private sector investors. The removal of the interest rate distortions that were the objective of QE will allow capital allocators to better assess investment projects, hopefully allowing for growing the capital stock rather than inflating speculative asset bubbles. Although the return to more historically typical levels of interest rates will be jarring, the equilibrium state is potentially benign. Europe's structural demographic profile suggests a relatively low growth, low inflation, low interest rate long-run equilibrium is in the offing.

EU.3
European recession all but certain



Source: Oxford Economics as of November 25, 2022.

Cheshire Oaks
Ellesmere Port, UK

Europe has an opportunity to accentuate its already world-leading position in climate-driven infrastructure. Though diversification among fossil fuel suppliers is certainly an objective, diversifying energy sources to further incorporate wind, solar and hydroelectric will pay dividends for the bloc's attempts to meet net zero carbon goals. These activities will also support specific real estate investment opportunities, such as incorporating on-site renewables.

Real estate fundamentals holding up

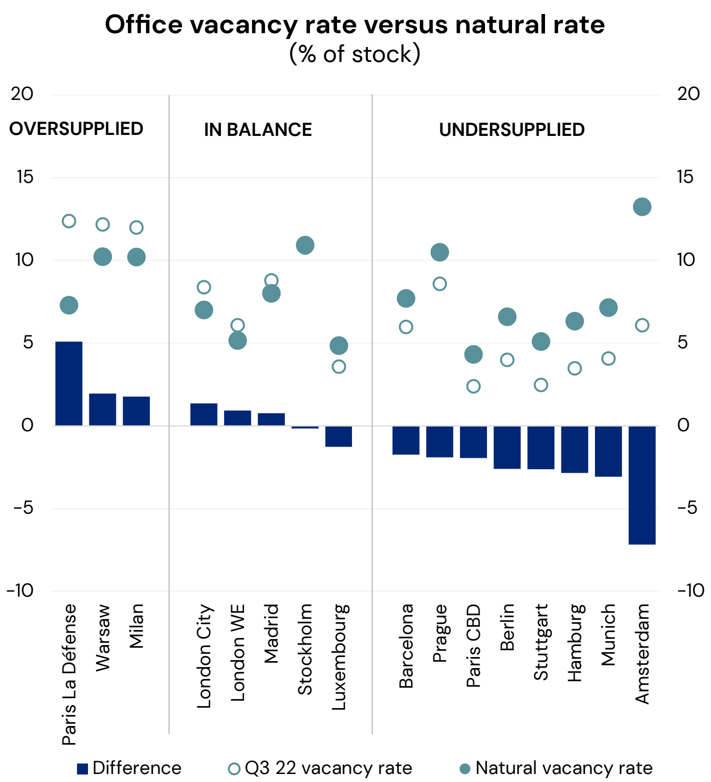
Capital markets stresses, not the lack of demand from occupiers to relocate, expand or upgrade their space, define the current crisis. Despite the extensive market uncertainty, many European occupier markets continue to show surprisingly robust activity, at least so far. The key to this has been a combination of occupiers playing catch-up post-pandemic, long-standing shortages of certain kinds of stock, tightening limitations on land use and supply discipline driven by developers and their lenders.

Office take-up in the first three quarters of 2022 has been 6.7% above the five-year average, according to JLL. European office vacancy rates have remained below the long-term average of 7.5%, with many markets posting vacancy rates still comfortably below their "natural" rates of vacancy (the level below which real rent growth tends to kick in), as shown in Exhibit EU.4. Sentiment can turn quickly, however. Office users continue to contend with uncertainty around how much and what sort of space they will require in the long term. As we suggest in the global section of this report, a stable balance of in-person and virtual interaction may have been reached, but long leases and wait-and-see attitudes mean we do not yet have clarity on sustainable levels of office demand. One aspect of occupier demand that is clear is that many European office tenants want to occupy buildings that are on a pathway to net zero carbon, which remain few and far between. The owners and developers of the best quality, low-carbon office assets can achieve rents higher than even so-called "prime" rents.

In the **logistics** sector, aggregate demand is on pace in 2022 to record the second strongest year on record—a remarkable result for a region that includes an active war zone. The scope for continued catch-up in European e-commerce penetration suggests the strength in the logistics sector should be sustained in 2023. Construction remains constrained by land availability and mounting environmental regulations across Europe that limit the conversion of green space into paved tarmac. Most new developments remain owner-occupied or pre-let, contributing to single-digit market vacancy rates, in many cases representing all-time lows and driving spikes in rents (see Exhibit EU.5). While logistics fundamentals should remain sound in 2023, one potential concern is that logistics tenants face increasing labor and transport costs, combined with higher energy prices that could pressure last-mile business models and the profitability of third-party logistics providers.

Already hard-pressed by the pandemic and e-commerce, the **retail** sector faces the additional strain of squeezed real consumer incomes. At least the sector has not seen developments of almost any scale in years and has already seen significant repricing that leaves it less vulnerable to the math of higher rates. In 2023, the prospects are brightest for convenience-driven retail schemes, retail parks that act as hybrid multi-channel distribution nodes and outlet centers that offer deep value to stretched consumers. Department stores and many malls remain in crisis.

EU.4
Most European office markets not facing oversupply



Source: LaSalle, as of October, 2022

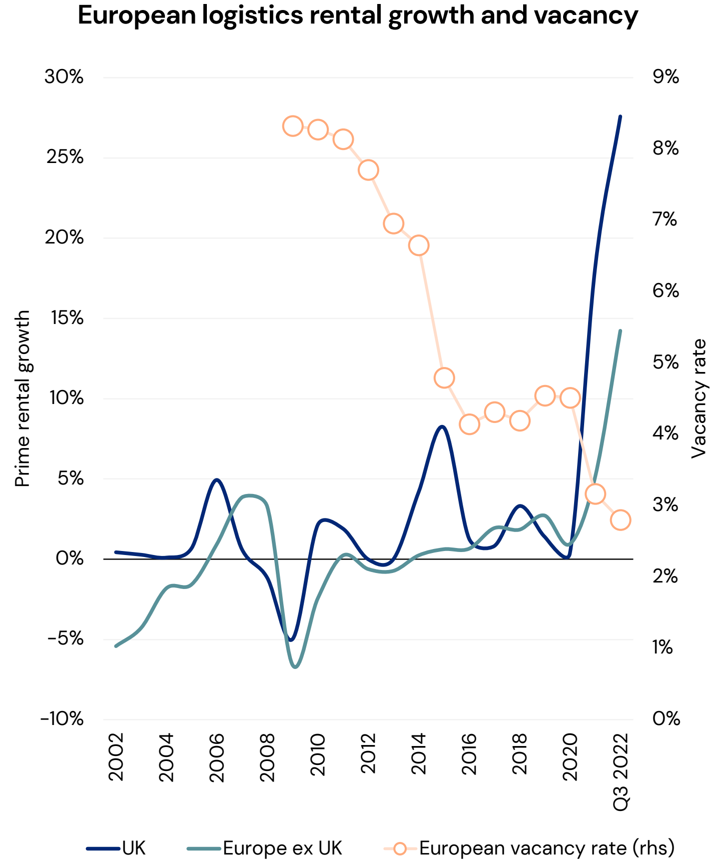
The outlook for the **residential** sector is defined by a contradiction. On the one hand, the fundamental imbalance of supply and demand continues to keep vacancy at very low levels, exerting upward pressure on market rents across geographies. But in most of Europe, regulations limit the ability of landlords to capture this growth into net operating income. Regulatory systems in continental nations like Germany and Denmark have tended to allow low and steady single-digit percent income growth rates and still do so, but this looks unattractive in an environment of nearly double-digit inflation. Moreover, rent controls are getting tighter, as governments look for ways to relieve pressure on households. In 2023, the handful of unregulated markets, such as the UK, are set to fare much better.

The more **niche living sectors**, such as student housing, senior housing and co-living, typically benefit from longstanding demographic trends, supporting occupier demand. They also tend to offer a yield premium to traditional residential and do not generally face limitations on rent increases. As such, they represent an attractive alternative to traditional residential, even in markets where mainstream apartments are heavily regulated.

When it comes to geographical selections, LaSalle is guided in part by our proprietary tools for location targeting, such as the European Cities Growth Index (ECGI) and the LaSalle European Human Capital Index (LEHCI), which quantify secular themes and highlight regions best placed to benefit from them (see Exhibit EU.6). In this analysis, London ranks as number one thanks to its scale, closely followed by Paris, Europe's key innovation and technology hub. Munich, Madrid and Amsterdam are also consistently strong despite the headwinds, due to their employment growth prospects. The essence of our approach is to focus on regions whose strength is driven by the skills and creativity of their workforces, as well as the level of investments made in R&D and the technology sector. These are attributes we believe are key to a location's success and therefore demand for real estate in the future.

But as noted above, new factors are coming into relevance. The medium-term prospects for a country with an energy mix not dependent on Russian natural gas, such as self-sufficient Norway or LNG importer Spain, are brighter than for gas-dependent Germany. In the longer term as non-carbon energy sources come to the fore, nuclear-rich France is well-positioned, as are countries with easy access to renewables, such as Norway and the UK.

EU.5
Shortage of logistics space has driven long-anticipated rent spike



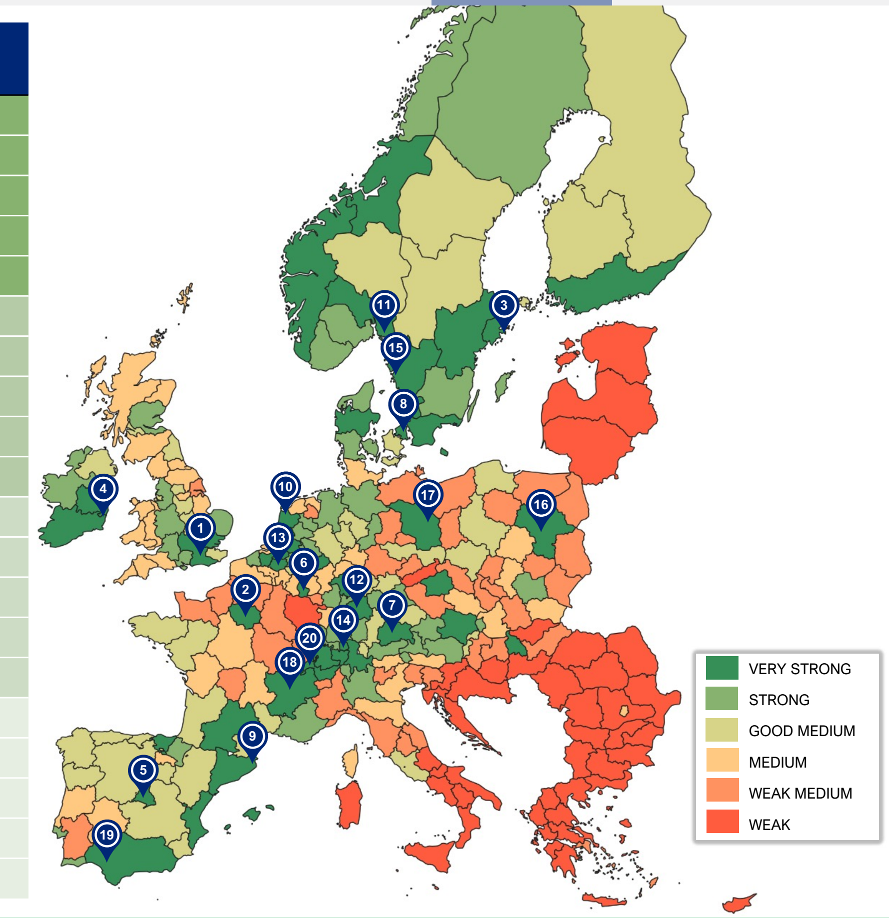
Source: JLL as of October 2022.

Lacus Quartier
Berlin, Germany

EU.6
Key European cities remain strong

European Cities Growth Index 2022

ECGI 2022 Top 20 Cities
London
Paris
Stockholm
Dublin
Madrid
Luxembourg
Munich
Copenhagen
Barcelona
Amsterdam
Oslo
Stuttgart
Brussels
Zürich
Gothenburg
Warsaw
Berlin
Lyon
Seville
Geneva



Source: LaSalle as of October, 2022

LOOKING AHEAD

- **A painful transition to higher interest rates will produce buying opportunities to capital positioned to take advantage of dislocation, as market liquidity falls. Investors should be patient but prepared to act as opportunities materialize. In the meantime, floating rate debt investment at defensive loan-to-value ratios represents an attractive strategy. Debt re-pricing is nearly instantaneous, while equity re-pricing takes time.**
- **The equilibrium state of monetary policy will require more private capital to participate in the construction of productivity-enhancing infrastructure, such as life sciences facilities, logistics and decarbonizing the value chain. Governments can ill afford another lost decade, but neither can they borrow at scale to finance large infrastructure spending.**
- **Focus on a narrower group of cities, rich in human capital, which will do better economically thanks to tech-heavy industries and services, light manufacturing and tourism. This is not confined only to large cities but includes stand-out secondary markets such as Bristol in the UK and a range of innovative university cities.**
- **Prospects for income growth will be strongest for the best-located assets of a given type—for example, offices in vibrant mixed-use zones or logistics assets on crossroads of multiple trans-modal routes—and for assets with strong green credentials. We anticipate high levels of bifurcation within property types based on quality.**
- **We recommend prudence through building in an additional risk premium and/or taking comparatively lower risks in terms of income security, at least for lower-yielding assets in locations with less certainty over future rental growth. Do not confuse traditional indicators like lease length for true income resilience, which may be greatest in nominally short-let sectors, such as unregulated beds.**

North America

Higher inflation and interest rates dominate outlook

- **Although a recession in the US and Canada in 2023 is our base case, the North American economy remains surprisingly strong. The lagged impact from tighter financial conditions appears to finally be feeding through, with preliminary signs that inflation is cooling. But many uncertainties remain.**

- **Higher borrowing costs have flipped the impact of debt to negative on a leveraged cash yield basis, but solid NOI growth prospects in some sectors mean that debt continues to be accretive to holding-period IRRs in many cases. Reduced asset values are most evident in the logistics, multi-family and niche sectors, property types for which continued transaction activity provides pricing evidence.**

- **The outlook for the US and Canadian office sectors is uniquely weak in the global context. In-person office attendance remains substantially below that of other regions, with limited prospects for near-term improvement.**

The US and Canadian economies and real estate markets are dealing with the global challenges of high inflation, higher interest rates and dimming economic growth outlooks in similar ways. Both also enter 2023 with economies that are still growing and real estate fundamentals largely in balance. There are challenges, but the medium- to long-term outlook remains brighter than the outlook for the near-term. Real estate investors need strategies that are resilient to an expected volatile environment in 2023 and take advantage of the opportunities emerging from volatility.

Stubbornly high inflation

The root cause of market challenges heading into 2023 is elevated inflation. The US Federal Reserve and the Bank of Canada have both made lowering inflation their top priority, but it remains stubbornly high in both markets. This led to policy rates increasing from effectively zero to over four percent by year end. The increase in policy rates has been mirrored in long-term rates and in real estate borrowing rates. The impact has been a dramatic shift in the direction of property values, from a rapid rise in 2021 and early 2022, to a fall in the second half of 2022.

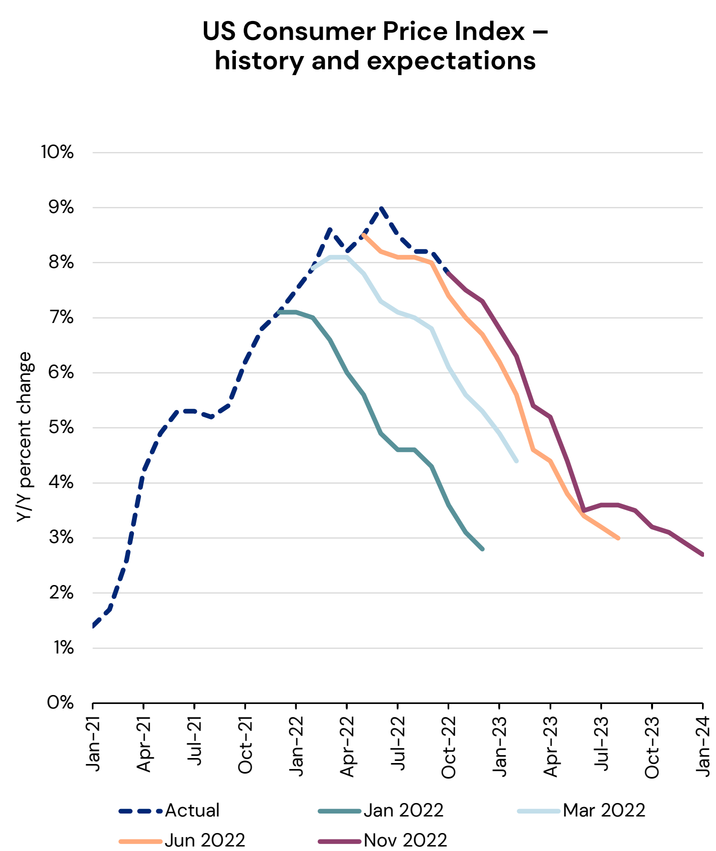
With inflation the root cause of market challenges, the logical questions are: When will inflationary pressures abate? And what happens after that? After almost two years of inflation above target levels, it is difficult to believe base case forecasts that inflation will quickly decline, especially when forecasts of such a turning point have repeatedly been proven wrong (see Exhibit NA.1). But finally, we are seeing signs that upward inflationary pressures are moderating and some indicators are showing disinflation. Commodity prices are down in recent months, supply chain pressures are easing, inventories are rising and the pace of wage increases is less than recent inflation rates. In the real estate realm, home prices are falling and the pace of residential rental rate increases has slowed. These are signals that inflation could subside further in 2023 and we might even see some deflationary pressures. However, this comes at the cost of an economic slowdown that we think is likely to tip the US and Canada into recession in early 2023 (see Exhibit NA.2).

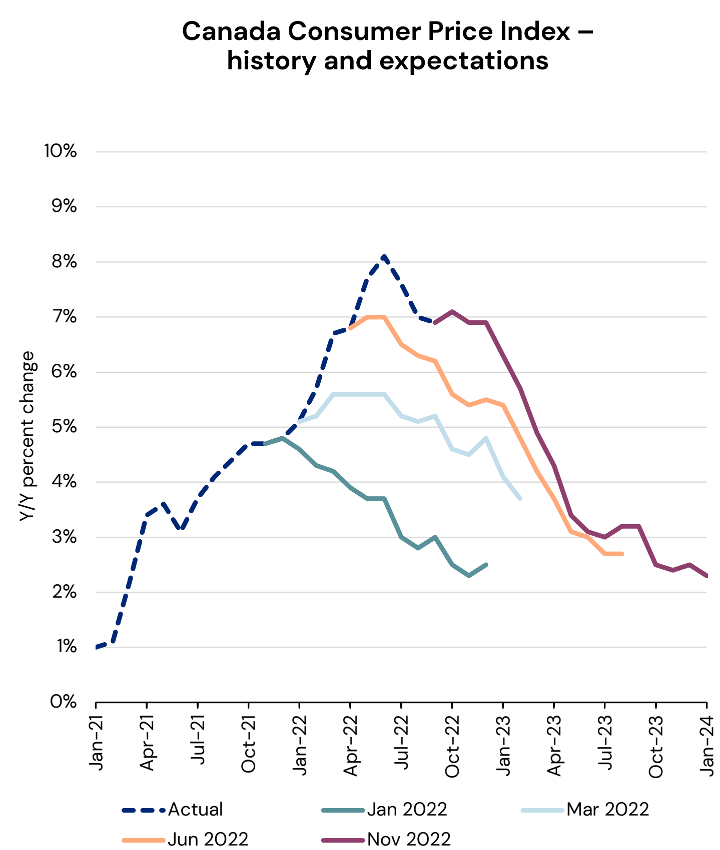
Our expectation is that in 2024 and beyond, the US and Canadian economies will return to growth rates more in line with pre-pandemic norms than the 2021 pandemic recovery. This will allow real estate performance to move beyond cyclical dynamics and again be driven by secular themes, such as migration and technological change. There is greater uncertainty

NA.1

Forecasts continue to expect lower inflation

Consistently in 2022 forecasts that inflation was peaking were proven wrong



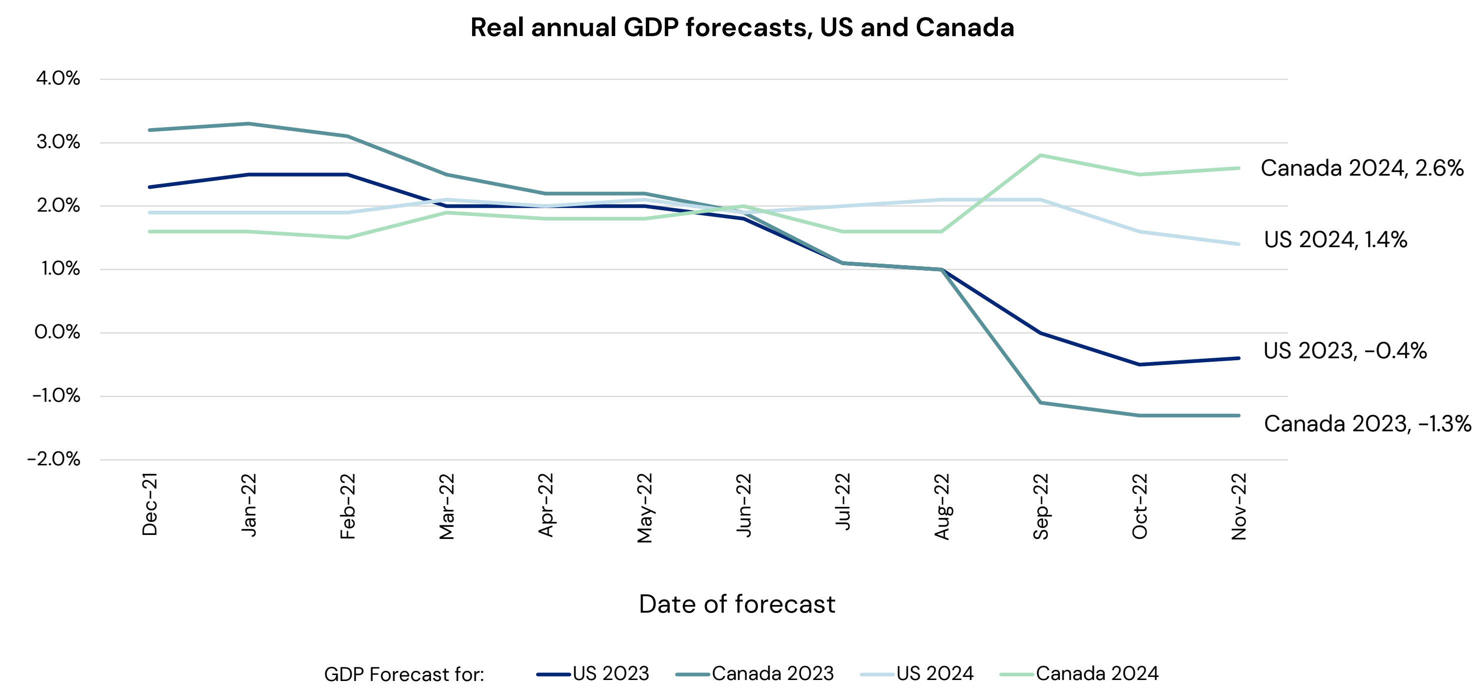


Source: Consensus Economics. Historical data through October 2022 for the US and September 2022 for Canada. Data most recent as of November 15, 2022.

NA.2

2023 GDP outlook shifts negative

Persistent inflation and higher interest rates in 2022 have dimmed the outlook for 2023; 2024 is expected to be a year of modest recovery from a weak 2023



Source: Oxford Economics, as of November 16, 2022.

around long-term interest rates and pricing than around near-term economic growth and real estate fundamentals. We are reluctant to make investment decisions based solely on a view of future interest rates, but acknowledge that real estate pricing is linked to future interest rates. Given this dynamic, we recommend investors consider a range of interest rate scenarios (see Exhibit NA.3).

Interest rate increases and the "relentless math"

Each time interest rates ticked higher since the GFC, the question of when higher debt costs would impact real estate values was asked. It was a speculative question, with the underlying assumption that rate increases thus far had not yet impacted values. Regardless of the answer then, it became very clear in 2022 that the "relentless math" of higher borrowing rates was having an impact on leveraged returns and asset values (see Exhibit NA.4). The boost investors were getting from borrowing has shifted to a drag on a cash basis, but with unleveraged internal rates of return generally above borrowing rates, leverage is still marginally accretive on a total return basis. However, with less lift from borrowing, leveraged buyers are largely out of the market (or at least only willing to invest at much higher unleveraged returns).

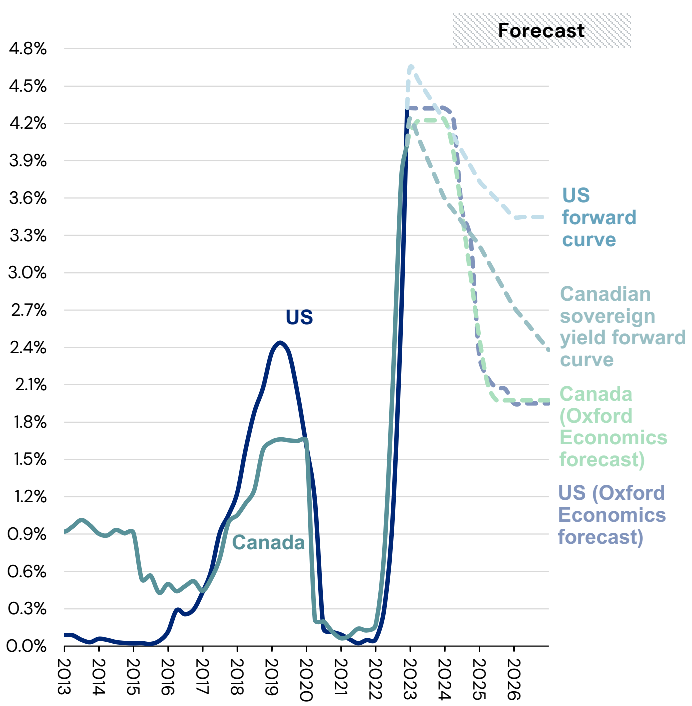
Higher borrowing rates are a function of both higher indices and increased borrowing spreads. Lending volume is down significantly and lenders are becoming more conservative. The supply of debt capital from large money center banks is down due to large positions taken in the first half of 2022 coupled with stress testing. The Commercial Mortgage-Backed Securities (CMBS) market continues to be impacted by volatility and life companies are looking into 2023 until fresh allocations become available. Demand is also down, with transaction volumes lower and borrowers less eager to refinance given the higher interest rates and reduced proceeds.

NA.3

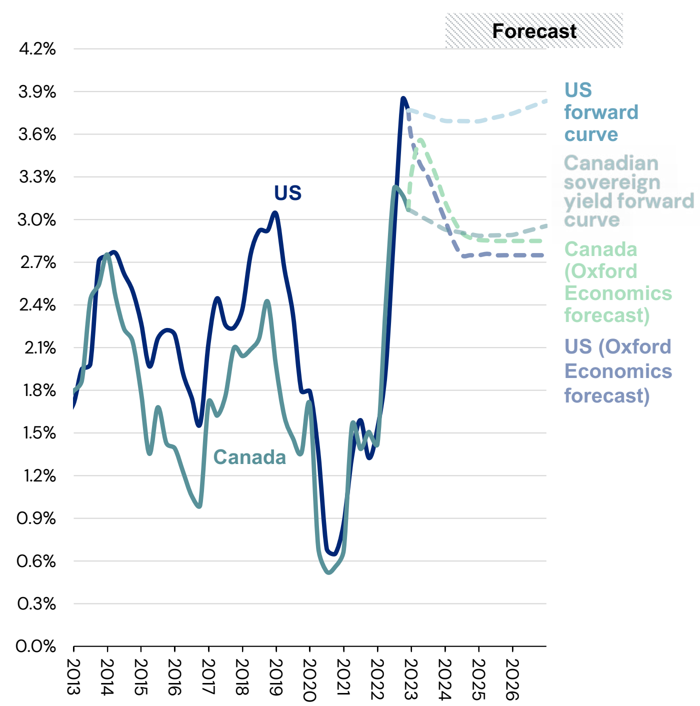
Interest rate outlook uncertain

Interest rate outlook is critical for financing strategy and future real estate values

Three month interest rates – history and forecast



10-year interest rates – history and forecast



Source: Bloomberg, Oxford Economics, Economy.com, LaSalle Investment Management.
Treasury forward yields as of November 10, 2022; Oxford Forecast as of November 8, 2022 for Canada and November 10, 2022 for the US.

While unleveraged buyers are not directly impacted by higher interest rates, they are also shifting their pricing and buying activity. They are adjusting their cost of capital in response to the broader capital markets, and unleveraged or low-leverage buyers are capital constrained as well. Higher interest rates have hurt the value of investors' broader investment portfolios, triggering the so-called "denominator effect," contributing to less competitive and less aggressive pricing for real estate.

Private real estate pricing will adjust most quickly to the reality of higher interest rates in the sectors with the greatest investor interest (e.g., apartments and industrial across the US and Canada). The price discovery process will be much slower for sectors already seeing fewer transactions, such as offices.

When "new" pricing is established, it will provide market evidence to help brokers supply accurate opinions of value and enable sellers to have realistic pricing expectations. But until that occurs, properties will be offered on the hope that aspirational pricing targets anchored on peak levels will be achieved and a bid-ask gap will persist. Our expectation is that transaction activity will be below average in 2023, but start to recover in some sectors later in the year.

The post-pandemic steady state: implications for offices, retail and hospitality

The real estate implications of North America having moved into a post-pandemic steady state balance of in-person and virtual interaction are most prominent for hospitality, retail and office, but in different ways. The rebound in **hospitality** has been spectacular, but in North America this remains a non-core property type in our view. Lending, REIT investments and opportunistic strategies are preferred ways to access the strong operating fundamentals in this sector.

Retail is bifurcated, with some centers rebounding from pandemic challenges while others struggle with continued occupancy challenges. Investors need to identify the types of retail properties positioned to outperform. Investing in retail requires a micro-focus—looking at tenants and trade areas to determine which properties are positioned to excel. That can involve thinking beyond the current use to consider future improvements, such as adding density or tenancy that will generate superior long-term value. In Canada, we believe urban or infill retail properties with excess land density for multi-family development represent attractive opportunities.

For the **office** sector in North America, the new "steady state" balance between in-person and virtual interaction is not a positive outcome. Before the explosion in remote working during the pandemic, offices were already a challenged property type with elevated vacancy and high capital requirements

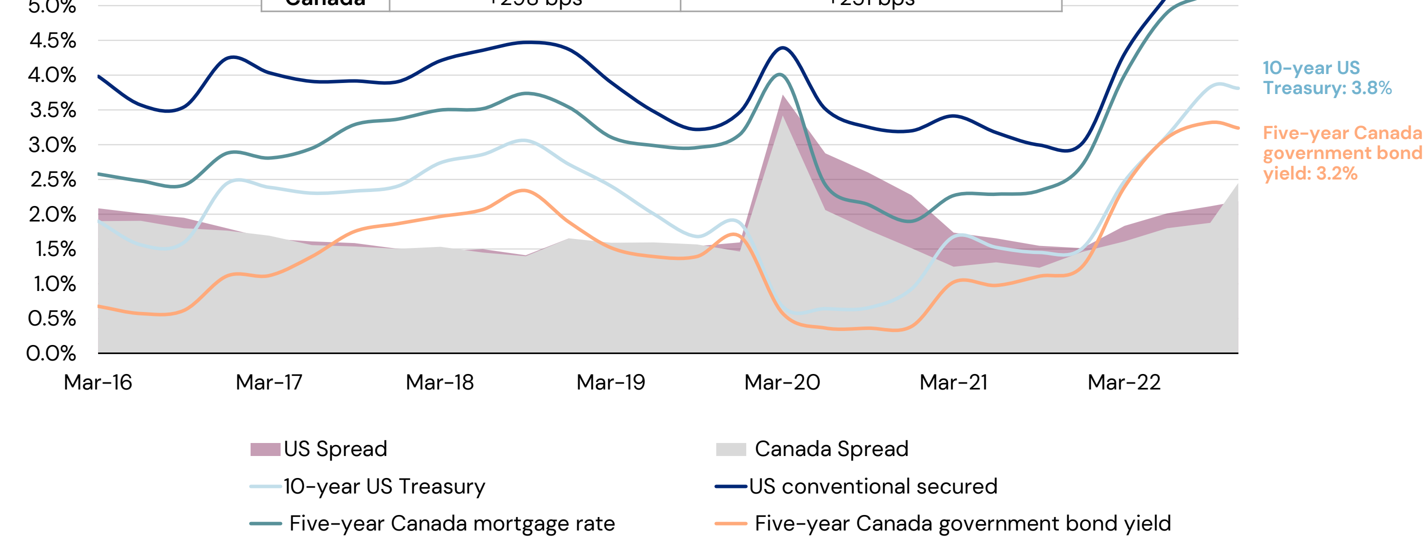
NA.4

Real estate borrowing rates up in 2022

Higher interest rates and only slightly higher spreads driving major market impact

Commercial real estate debt – interest rates (end of quarter)

	2022 YTD increase in borrowing rates	Current borrowing rate spread to average since 2016
US	+298 bps	+204 bps
Canada	+298 bps	+251 bps



Notes: US borrowing rates are representative of 10-year loans; Canada borrowing rates are representative of 5-year loans.
US data through October 28, 2022; Canada data November 7, 2022. US data reflects interest rates at the end of quarter Q1 2016-Q3 2022, as well as the latest.
Sources: Green Street Advisors, CBRE, CREFCOA, Cushman & Wakefield, RBC Capital Markets, Bank of Canada, LaSalle Investment Management.

eroding cash returns. Those characteristics are still in place, and market sentiment toward offices has also changed as the risks are more broadly recognized. Lenders are materially raising spreads (in some cases 200-300 bps wider than favored sectors) and limiting loan proceeds. Moreover, there are few active core buyers, as most have substantial office allocations and have a dim view of the risk-return outlook for the office sector. These factors should lead to equity losses for many office owners and the expected emergence of distressed transactions. We expect office demand to recover slowly, as obsolete buildings are removed due to conversion of use or demolition. Fundamentals and rents will eventually recover, but that is likely years away.

Healthy fundamentals sustain many sectors through economic weakness

The sector chasm referenced in the global chapter has produced a variety of winners in the North American market. These include **industrial** and **apartments** and in the US, **single-family rental** and **self-storage**. These sectors are still experiencing the same interest rate math that is driving up borrowing rates, raising required returns and resulting in lower transaction prices. However, despite the negative near-term economic outlook, we still expect these sectors to generate positive rent growth in 2023 and beyond. To be clear, our view is that rent growth will be closer to long-term averages than during the inflation-fueled spike of 2021 and 2022. But vacancy rates in these sectors are still well below long-term averages, giving a cushion before pricing power shifts towards tenants (see Exhibit NA.5).

Weaker demand and still-elevated new supply will shift vacancy rates up in 2023 and lead to a slowdown, but not stagnation, in rent growth. And metros with more new supply will see a greater slowdown and even some rent declines. In 2024, we expect a swift recovery as lower levels of new supply and recovering demand enable declines in vacancy.

Limited new supply is expected beyond 2023 due to dramatic shifts in the attractiveness of development. Land prices and construction costs are likely to be sticky at high levels, construction financing is both scarce and expensive and equity investors are raising their exit yield assumptions. In our view, only the best development situations, with lower land bases and top tier sites, still make economic sense. The challenge should not be leasing up new developments but reaching a yield-on-cost at a sufficient spread to the higher interest and capitalization rates.

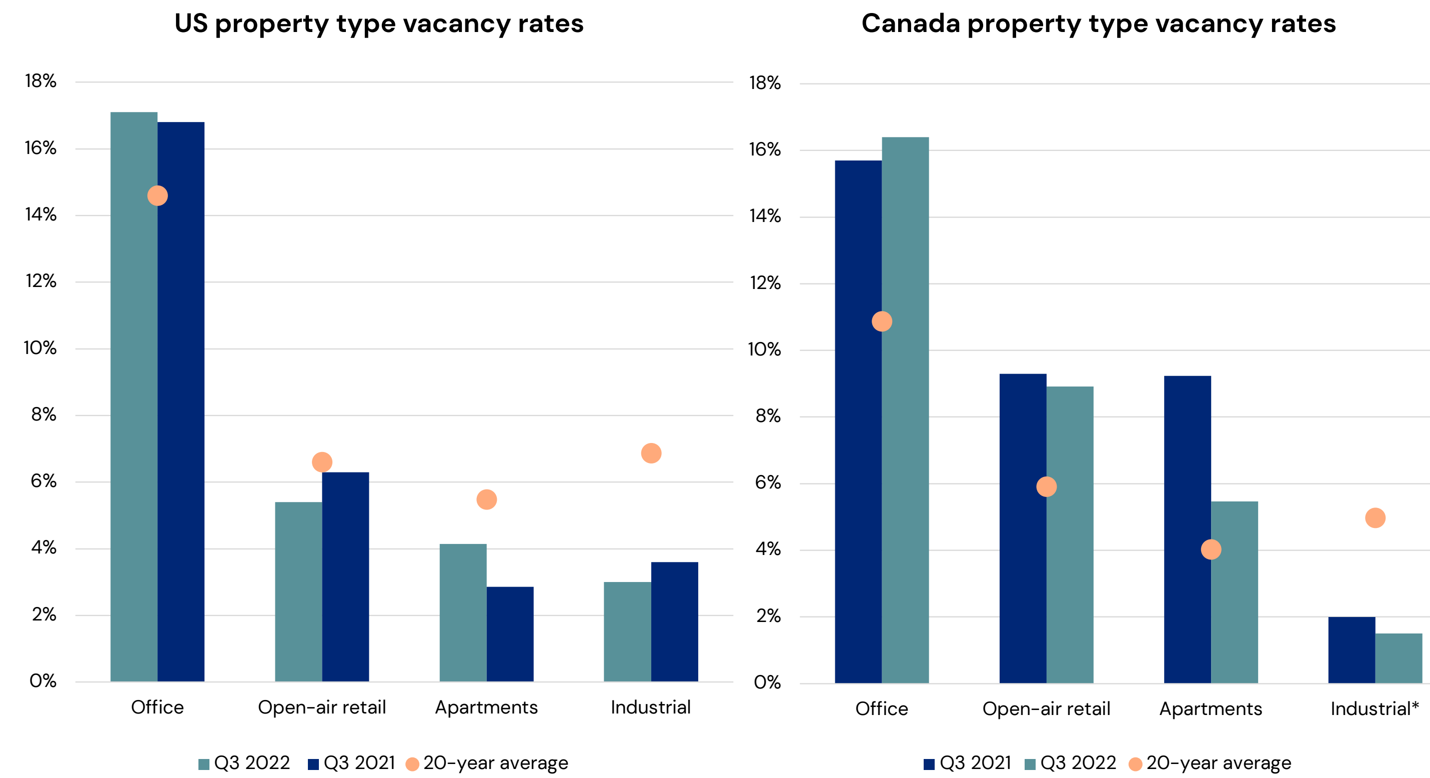
In the US and Canada, higher interest rates are hurting house price affordability. As buying becomes out of reach for more households, this will boost residential rental demand. This is likely to be most beneficial for single-family homes for rent and suburban apartments and less impactful on urban apartments. But across the board, we see this as helping sustain residential rental demand against the cyclical headwinds of a slowing economy.

Sage on Palmer Ranch
Sarasota, Florida

NA.5

US vacancy rates largely improving or at healthy levels

Office sector is the exception with high and moving higher vacancy in both the US and Canada



Source: Realpage (US apartments), CBRE EA (US and Canada industrial and office), CoStar (US open-air retail) and MSCI (Canada retail and apartments). Data to Q3 2022 - latest available as of November 2022. *Industrial data shows availability rate.

Moving beyond sector selection

In the US, sector selection is likely to remain important to investors due to the uniquely dim outlook for its office market. But investors can still develop an edge by identifying the best markets and strategies within sectors. There are a wide range of metro areas in North America for an investor to sort through to identify the best targets and there is no shortcut around doing the work to identify the best-positioned markets. The rent growth outlook, in combination with pricing and market risk factors, remain paramount in this selection process.

An additional lens we are putting into that market selection process is exposure to climate change risks. Hurricane Ian was a reminder of the exposure that many Gulf of Mexico and Atlantic Seaboard metros have to tropical cyclones, and these storms are getting stronger and more frequent with rising ocean temperatures. A collaborative project between LaSalle and the Urban Land Institute highlighted the challenges of working with data providers to assess this element of asset and market selection.[1] Many data providers estimate that the greatest risk to value associated with climate change comes from tropical cyclones and coastal flooding. These data providers tend to focus on future risks but are less focused on current risk, so we worked with historical data from FEMA to input current risk into our market selection framework.

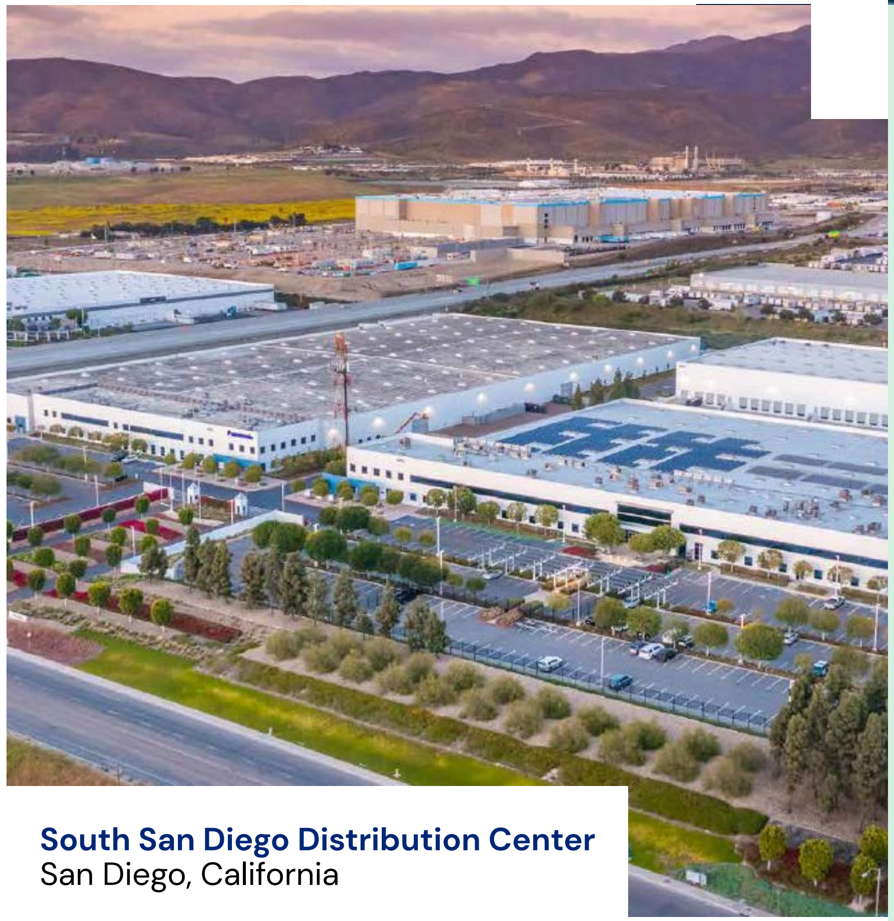
1 "How to Choose, Use and Better Understand Climate-Risk Analytics", published by ULI and LaSalle September 2022.

Avoiding and taking advantage of volatility

A well-tested strategy for investing during a period of economic weakness and negative market sentiment is to identify assets that will be durable against disruption. In the US, this often points towards **medical office**. This sector has steady demand that is largely uncorrelated with the economic cycle. **Long-leased properties** in other property types, such as industrial, can also cushion the impact of economic disruptions and provide stable cash flow, but valuations can still move with rent volatility and changing capital market assumptions. **Grocery-anchored retail** properties can also provide cash flow durability, but the level of stability depends on the share of the income from the grocer anchor and the health of its business.

On the flip side, volatility can create opportunities through changing—and even uncertain—pricing. This requires investors to have a clear guide on value, outlook and flexibility. The idiosyncratic nature of private real estate means pricing is never completely transparent, but active market participants often have a good sense for property value based on past trades. However, historical comparables have less meaning when pricing is shifting. This means that investors must have an internal view on value, either through a required return/fair value framework, comparisons to replacement costs, absolute return targets or a combination of all of these. Sellers also lack a clear guide to value and might be motivated to sell even when a bid does not meet expectations. An informed investor can bid decisively when attractive value opportunities emerge, even in out-of-favor sectors.

Volatility can also create opportunities for investors across real estate quadrants and into capital stacks of assets. The return premiums and valuation gaps between private equity and public REITs or between debt and equity can fluctuate in volatile times. This creates tactical opportunities for generating superior risk-adjusted returns. Investors need to balance short-term opportunities against long-term portfolio objectives and risk tolerances. Opportunities may emerge to invest in assets with strong long-term value but short-term capital needs. Investors who create alignment through structured transactions can do better than what is offered in the normal transaction market. These take time to emerge, putting a premium on relationships that may be years in the making.



South San Diego Distribution Center
San Diego, California

South Reno Medical Center
Reno, Nevada

LOOKING AHEAD

- **Real estate pricing in North America will adjust to higher interest rates at varying speeds across sectors depending on the level of liquidity, strength of the ties to the fixed income/equities markets and the motivation of sellers. For core real estate investors, a long-term view on interest rates is as important as the near-term trajectory of central bank policy rates.**
- **Shifting pricing will create opportunities for flexible investors. Pricing uncertainty can enable investors to achieve superior deal-specific value. Pricing gaps can also emerge between quadrants, with the rapid pricing changes in public equity and debt sometimes creating value and deal-specific elements creating value in private equity.**
- **Denominator effects and higher borrowing costs will keep a meaningful fraction of core and higher return buyers on the sidelines, especially at the start of 2023. For well-capitalized buyers, this creates opportunities to deploy capital in a less competitive market and will allow investors to add strategic targets to diversified portfolios.**
- **Sectors with strong fundamentals entering an anticipated recession in 2023 are positioned to escape without sharp rent declines. There will be pockets of challenges where supply is particularly elevated. Beyond 2023, many markets should benefit from much lower new supply levels as new development is a much less attractive strategy than it was a year ago.**
- **Office investments in the US will face significant challenges in 2023 as lenders and core buyers view the sector as particularly risky. Highly leveraged buyers with loans coming due–and in many cases their lenders–will face hard choices on how to proceed. In the US, transaction activity could become dominated by distressed sales later in 2023. In Canada, distressed sales will be less likely given the higher concentration of institutional ownership in the office market, much of which is unlevered.**

Global strategy summary

Investing in an uncertain time

Throughout the *ISA Outlook 2023*, we have highlighted that many (but not all) real estate sectors and markets across the globe are experiencing significant ambiguity surrounding asset values. This is due to widened bid-ask spreads and reduced transaction activity. Investing in such an environment requires a mix of approaches focused on mitigating uncertainty, structuring around it or taking advantage of it.

Strategies that **mitigate uncertainty** focus on identifying assets for which the path of fundamentals is expected to be strong enough to compensate for the downside end of the range of plausible repricing scenarios. Sectors supported by structural and secular trends, such as residential and logistics, are most likely to fit the bill, especially in markets with a degree of transactional evidence. But as we have noted in this report, we are seeing divides within sectors widen and joining the divides between sectors—so care in selecting the right locations and markets is essential.

Investment approaches that **structure around uncertainty** are those where the investor acknowledges value uncertainty, but the investments have characteristics such that outcomes are not dependent on resolving that uncertainty in a specific way. Senior and junior lending at defensible attachment points are thus attractive today, especially given the widening in debt pricing and if in floating-rate constructs. Structuring contractual features into equity investments that insulate investment outcomes from key uncertainties can also be effective.

Finally, investors are wise to identify strategies that **take advantage of market dislocation**. For example, we see opportunities in the heavily repriced listed real estate markets and expect to see them in the indirect space as secondary fund interests find price discovery. We also recommend positioning to acquire assets at distressed pricing in markets being hit most by capital pricing and availability challenges, such as Europe.

	North America	Europe	Asia Pacific
Strategic recommendations	Logistics	Logistics	Logistics
Strategic recommendations	Selective suburban apartments Single-family rental	Position for distress Top-quality NZC office Non-regulated Living	Singapore and Japan office Japan and China multi-family rental Position for distress in South Korea and Australia
Strategic recommendations	Floating-rate debt	Floating-rate debt	
Strategic recommendations	Climate hardening and decarbonisation	Climate hardening and decarbonisation	Climate hardening and decarbonisation
Strategic recommendations	Listed real estate	Listed real estate	Listed real estate
Caution	Office	Regulated residential Commodity office	For-sale residential in China, South Korea and Australia

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