Hines Global Perspectives

PROPRIETARY RESEARCH

2023 Outlook Navigating the Labyrinth

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CONFIDENTIAL AND PROPRIETARY

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A Letter from the Global CIO

NAVIGATING THROUGH THE LABYRINTH

> "Know what you own,
> and know why you own it
>
> **- Peter Lynch**

Looking back on 2022, we can see how events unfolded with surprising speed. In January, many countries faced renewed forms of lockdowns as COVID continued to rage. Inflation was a growing concern, but the central banks of the world believed it would fade as the well-publicized supply chain issues worked themselves out. Russia appeared poised to take Ukraine, but conventional wisdom suggested a peaceful solution would be found. We all know what happened as the year unfolded – perhaps the lesson is we should invest our time and energy into managing risk, rather than trying to predict it.

The Widely Anticipated "Surprise"

Of all the turmoil that transpired in 2022, arguably the most significant for real estate was the Fed's abrupt about-face on interest rates. Ironically, everyone knew that zero interest rate policy could not remain the law of the land indefinitely. This event was anticipated by nearly everyone in finance – only the timing was in question. Economist Fredrick Hayek wrote in "The Road to Serfdom" that distortions in interest rates can cause "clusters of errors" causing businesses to unwittingly miscalculate at the same time. In other writings he argued while low interest rates can stimulate the economy, they can also interfere with economic calculations and make poor projects look profitable. Pension fund obligations and capital-intensive projects are at high risk for these types of miscalculations.

So, the risk of rates increasing has certainly been on investors' minds for years. The larger question is how did the market ride the wave of declining interest rates and cap rate compression by investing in projects that should not have been funded in the first place? While the interest rate environment gave way to a fixation on Beta to the neglect of the hard work of Alpha generation, I believe the real estate industry overall has learned the lessons from previous cycles. Consumer demand has changed, leading to the wrong type of product in the office and retail sectors, but we are unlikely to face significant over-supply of new product. We have a great deal of older supply, which will need investment to become relevant again.

Back to Normal?

The cost of capital has repriced, and while it does mechanically impact pricing, the reality is we are much closer to a normal interest rate environment than many market participants want to admit. Reset your expectations - it's time to roll up your sleeves and really work your existing portfolio. But it is also important to pivot and quickly move on from what is not going to work. Today, there are attractive opportunities to redeploy that capital.

The Good News

Negative headlines will likely continue into early 2023, so it is critical to be sober-minded. The good news – we are in the opening innings of a new chapter of investing, not the final ones of the last cycle. Opportunities will abound this year, which we can confidently pursue thanks to our financial flexibility. However, real estate is going to look different, and being able to separate the winners from the losers will never be more important. We see quality outperforming lesser properties, and customers will value simplicity and flexibility. The tightening of bank lending standards also favors well-established, vertically integrated managers like Hines. Looking ahead, we are keenly aware that decarbonization remains a blind spot for the market, one that we intend to take advantage of as it gradually becomes top-of-mind. We believe those investors with the skills, expertise, and insight to recognize customer desires and address their pain points will be uniquely rewarded.

2023 Perspectives

Every year our team has been analyzing market data (using our proprietary research tools) to handicap the existing landscape and prepare for the year ahead. There are many variables that contribute to the evaluation of real estate investments. In this research report, we examine the relationship between three: transaction volume, debt availability, and asset pricing.

If you're an investor simply waiting and hoping for rates to change, that may prove to be a poor strategy. The market is correcting, and now is likely the defensive time to shore up assets. While it is difficult (and probably too early) to call a bottom, cost averaging down has proven a successful strategy during previous downturns. Eventually, more accretive opportunities are likely to emerge. The global economic discord may persist longer than we prefer or expect. At times, it may even feel like we're stuck in a confusing labyrinth without end.

But like expansions, downturns always end, and the path back to strong performance typically prevails for patient investors.

Thank you for your continued trust in Hines. We truly look forward to what lies ahead.

DAVID STEINBACH
Global Chief Investment Officer
Co-Head of Investment Management, Hines

2023 Outlook: Navigating the Labyrinth

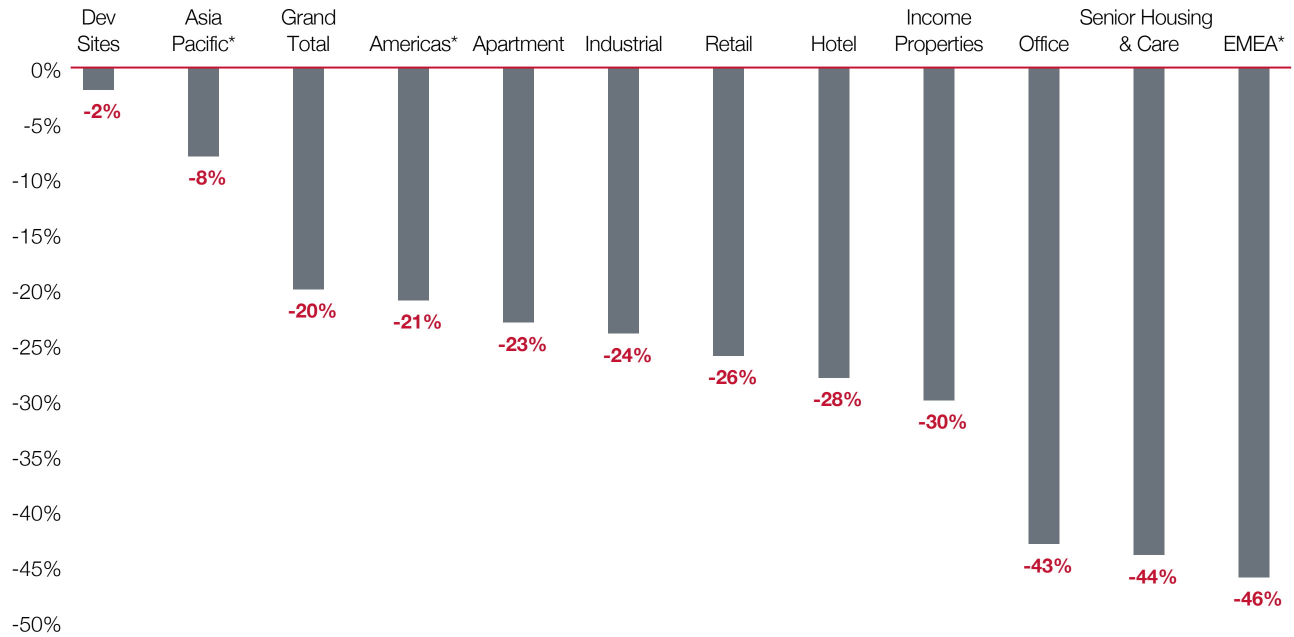
Market Realities

As 2022 ends, it is increasingly clear that residential and commercial market conditions have changed in many countries around the world. The impact is particularly clear in the capital markets where higher financing costs have impacted the price buyers are able or willing to pay to generate the returns they desire. To date, there has been little pressure on sellers to transact at these lower offers. As a result, transaction volume is decelerating across regions and asset classes, albeit to varying degrees. However, when sellers do adjust to the current pricing realities we will be ready to take advantage.

As of the third quarter 2022, global transaction volume fell 20% year-over-year across asset classes on a dollar basis according to Real Capital Analytics, with European volume down a bit over 45%, Americas volume down 21%, and Asia volume off 8%. By asset class, volume in the office and senior housing & care sectors fell 43% and 44%, respectively, while the apartment, industrial, and retail sectors experienced annual volume declines in the mid-20% range per RCA.

Exhibit 1: Declines in Transaction Volume Often an Early Sign of Softening Market

Annual Change in Q3 Transaction Volume



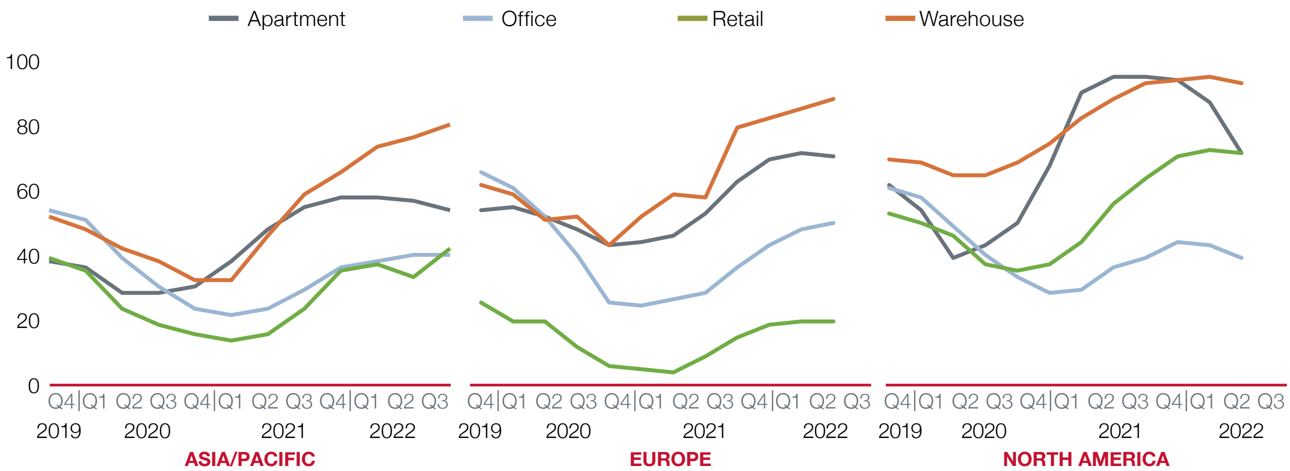
Sources: MSCI Real Capital Analytics; as of 2022Q3; *includes development sites.

Most Fundamentals Holding Solid

It's hard to generalize on a global basis but many markets mostly industrial and for-rent residential markets continued to have solid if not strong fundamentals, albeit to a lesser extent than a year ago in the U.S. apartment sector.

Exhibit 2: Global Fundamentals are Relatively Disparate

Average Leasing Environment Health Score



Sources: CoStar; PMA; JLL; CBRE; Hines Research; as of 2022Q3

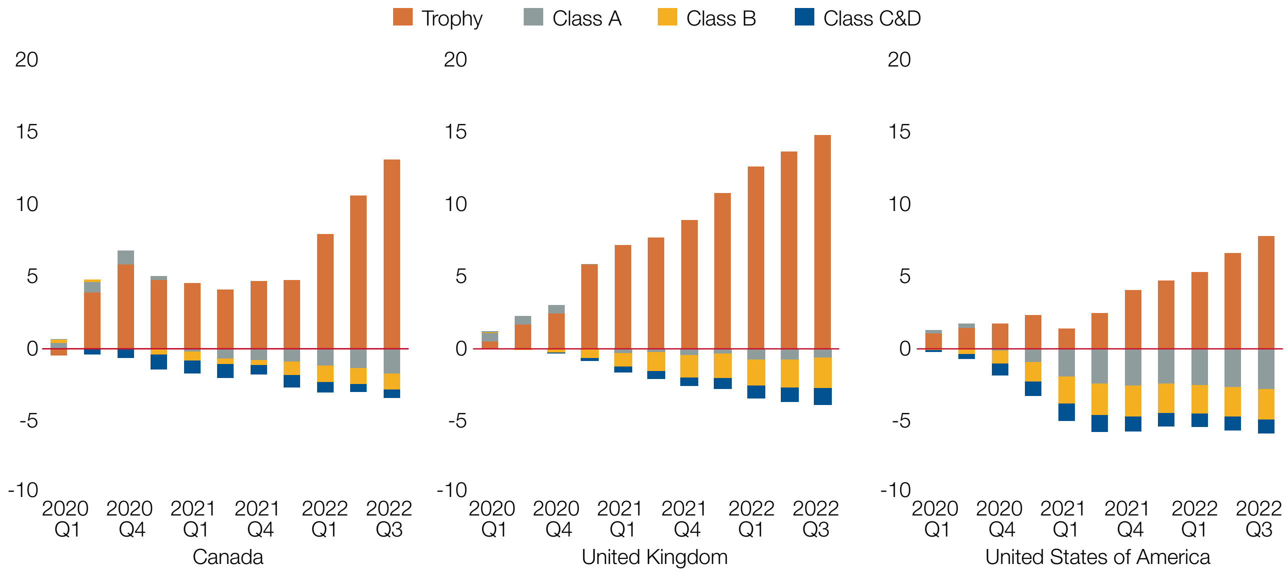
Exhibit 2 illustrates our proprietary Leasing Environment Health Scores (LEHS) average across the markets we track for each of the major property sectors across Asia, Europe, and North America. The LEHS is a composite index on a scale of 0-100 with 50 equal to the long-term average of three demand-side fundamental indicators: annual tenant demand growth, occupancy rates, and trailing annual rent growth.

Retail fundamentals continued to recover from the damage caused by lockdowns across each of the regions, though we may be seeing early signs that high inflation in many markets is starting to cut into discretionary spending and disrupt the recovery, particularly in Europe.

Office fundamentals are less of an overall market story and more of a bifurcated one as asset fundamentals differ by age, quality, and ESG credentials, even within the same market. As shown in Exhibit 3, the highest quality buildings in each of the countries where we can get asset-level data from CoStar have experienced heady demand gains at the expense of lower-quality buildings.

Exhibit 3: Tenants Choosing the Highest Quality Office Space at the Expense of Lower-Quality Buildings

Cumulative Tenant Demand Growth Since 2019Q4



Sources: CoStar; Hines Research; as of 2022Q3

Across regions, the average leasing environment health score remained a strong 75 in North America, an above-average 53 in European markets, and a slightly below-average 48 in Asia. All three regions are 20-35 points higher than the lows they fell to during the height of the pandemic in 2020, although North America fundamentals have appeared to soften in more recent quarters.

Fundamentals and the Bid-Ask Gap

Despite generally healthy fundamentals as of third quarter 2022, worries of economic malaise and the resultant impact on future fundamentals are contributing to the bid-ask gap in the transaction market.

Lease trade-outs have stoked net operating income (NOI) growth expectations in many U.S. apartment markets but with rents beginning to soften on more normalized levels of absorption amidst record-high completions and rising concessions, those expectations may prove a bit optimistic.

Heady, and in many cases record-breaking rent growth in recent years has generated a similar phenomenon in the industrial sector more broadly, particularly for assets with shorter weighted-average lease terms (WALTs) where buyers can see a clearer path to marking in-place rents up to higher market rents upon lease expirations.

Throughout 2022 the valuation of these types of assets in the transactions market was supported by both buyers' and lenders' willingness to transact at cap rates below the cost of debt (i.e., negative leverage) as the path to positive leverage was driven by the simple thesis of rolling in-place rents to prevailing higher market rents. In the early part of the year, lenders were willing to participate in this thesis on the basis of a path to positive leverage within 18 to 24 months. As the year went on, that timeframe was reduced to 12 to 18 months and is likely continuing to shorten, given economic uncertainty and regulatory pressure in some jurisdictions.

With multifamily rents falling on both a nominal and effective basis, lease trade-outs have been reduced to more normalized levels in U.S. markets. Should this trend continue, valuations could be impacted quickly by the unwillingness of lenders to continue this practice.

For longer-duration industrial WALTs with below-inflation annual rent steps, the impact of higher financing costs has put stronger and more immediate upward pressure on cap rates. Anecdotally, a new industrial asset with a 10-year lease to a good credit tenant and 2.5% rent bumps would have traded for a cap rate in the 4-4.25% range in the first quarter of 2022 but was pricing in the mid-5% range by October.

Capital Conundrum

In the not so very distant past, capital was the commodity every investor had.

While dry powder remains plentiful in the equity part of the capital stack, debt has become more precious, particularly in the U.S. Most money center banks shut down or significantly slowed lending activity in the second half of 2022, while smaller regional banks increased underwriting standards. To date, this phenomenon has been less apparent in Europe and Asia but what often starts in the Americas is observed in other global regions several months later, so we continue to monitor for any signs of changes in debt markets more broadly.

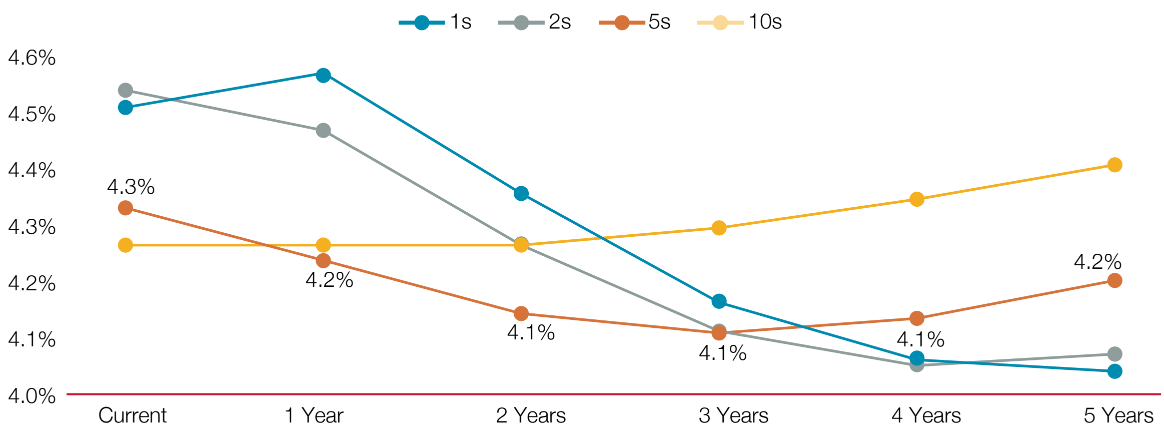
The denominator effect from falling stock and bond valuations, coupled with a lack of deployment of existing commitments, has generally decreased the number of new commitments, particularly for run-of-the mill strategies. In the U.S. and Europe, redemption requests have forced many open-end funds to seek liquidity where it can still be found.

Rate Reactions, Value Matriculations

Forecasting inflation and interest rates is always difficult but it's particularly tricky given macroeconomic and geopolitical uncertainty now. There are encouraging signs of deflation in some key sectors (and in Brazil), bottlenecks continue to ease, and supply chain reconfiguration is ongoing. Yet energy costs remain elevated on a historical basis despite recent improvement. In addition, food inflation remains problematic in many parts of the world.

Exhibit 4: Bond Market Expects Longer-Dated Rates to Stay High

U.S. Treasury Rates as Derived by the Forward Curve

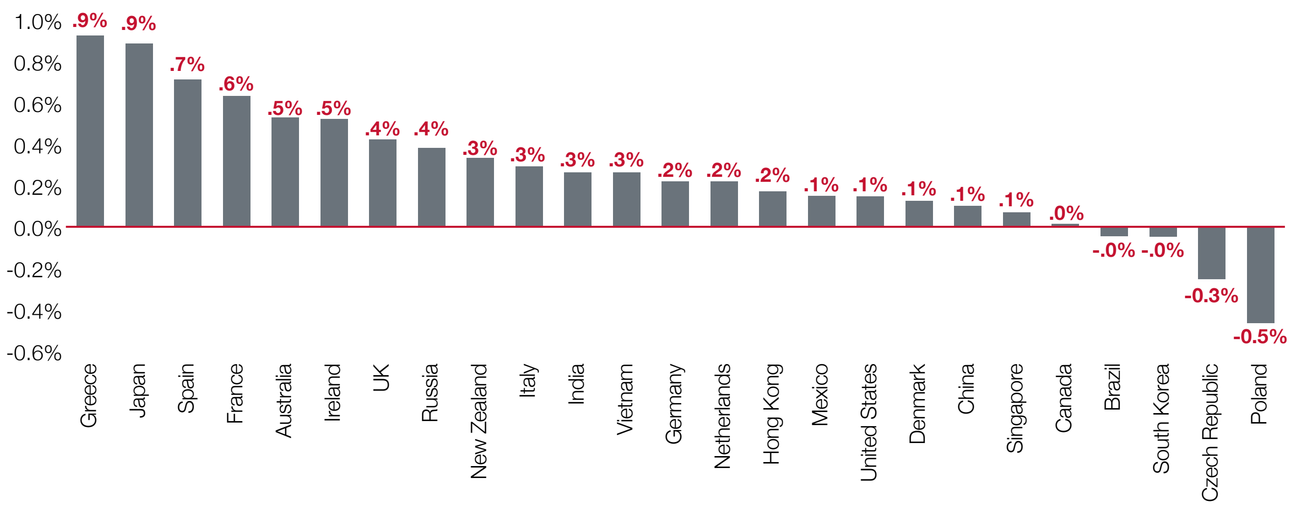


Sources: www.worldgovernmentbonds.com; Hines Research; as of November 21, 2022

Short-term rates are expected to fall amidst slowing economic growth and/or recession as a decrease in aggregate demand should put downward pressure on inflation and allow central banks to ease but the bond markets are not expecting longer rates to follow suit and, in fact, most 10-year sovereign bonds are expected to inch higher over the next handful of years.

Exhibit 5: Expected Change in Rates

Expected Change in 10-year Rates 5 Years from Now

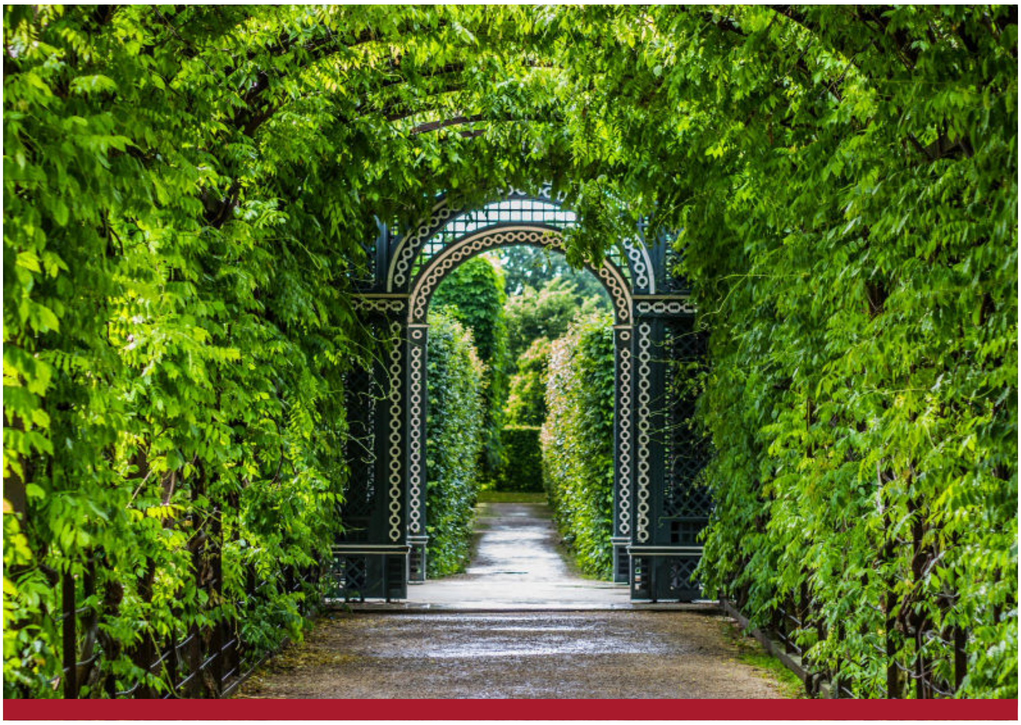


Sources: www.worldgovernmentbonds.com; Hines Research; as of November 21, 2022

With few assets transacting and few visible material increases in the private market cap rate data just yet, it's difficult to say exactly where today's cap rates are. But the implied cap rates in the public markets suggest significant increases. With such low cap rates at the start of this adjustment, the implied impact on valuations is equally significant, even in markets with healthy fundamentals. That said, embedded NOI growth has certainly mitigated the impact of higher cap and discount rates on valuations in markets with stronger fundamentals.

Despite the lack of hard cap rate data, anecdotally we've seen discounts of 15% relative to broker initial guidance become relatively common in Europe and the U.S. As 2022 progressed, and in the latter half of the year, there have been multiple instances where bids have come in well below those initial discounts.

Should long-term interest rates remain sticky per the bond market's expectation, cap rates may stay higher for longer. In this scenario, managers will likely only be able to differentiate themselves through value growth via good old-fashioned income growth. Market, asset selection, and asset-level execution would be an increasingly pivotal component of outperforming a more subdued market.



Predictive Pivot Signals

Every real estate cycle is slightly different. Recognizing what is different and what may at least rhyme with previous cycles can provide insight into how to navigate what is both challenging, as it relates to existing holdings, and opportunistic, as it relates to the potential to deploy capital in a more sober and attractive pricing environment. All parts of the cycle require a bit of both defense and offense. We believe knowing when to pivot more fully to either is a key component of outperforming the broader market, particularly in periods of transition.

Given the current economic questions, the changing cost or lack of debt, and the shortage of broader seller capitulation thus far, any near-term defensive strategy should focus on shoring up the existing portfolio's occupancy and balance sheet to get from here to the other side of this downcycle. Fortunately, we have decades of experience in enhancing value. As Mark Cover, CEO of our Southwest, Mexico, and Panama business, recently stated, "At this part of the cycle, capital preservation may be the best form of value creation."

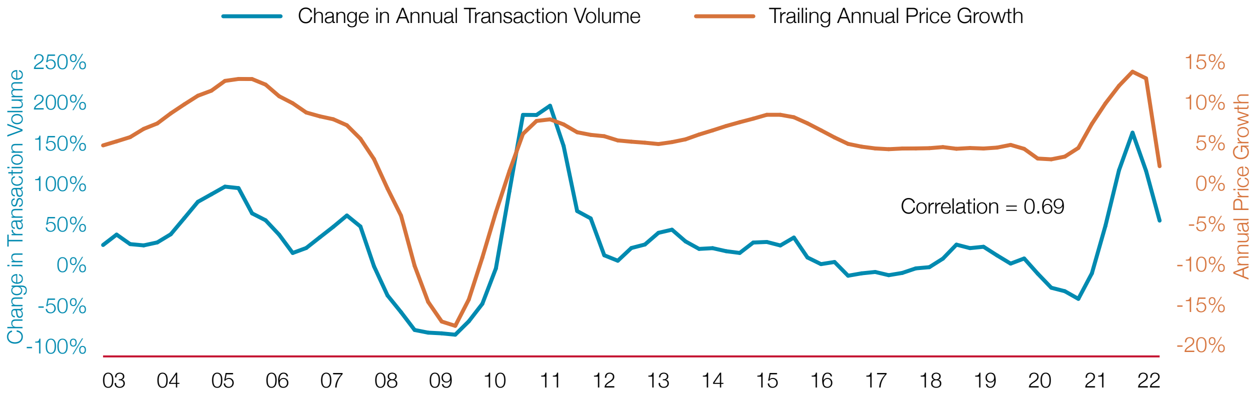
The severity will vary by geography and asset type. Thus far, Japan's office market appears relatively unaffected, but Australia is experiencing a palpable repricing. In the U.S., commodity Class A office appears fairly illiquid at the close of the year, but bidding pools remain healthy in the industrial and multifamily markets, albeit thinner than at the start of 2022. In Europe, high-street retail underwent significant repricing earlier in the cycle on fundamental fears, so it has been less impacted by rising rates than the industrial and residential markets given the latter's skinnier spreads at the onset of the increase in rates. Suffice it to say, the intensity of defensive efforts will vary across global markets accordingly.

As we play defense in the near term, there are two indicators that have a strong historical relationship to changing market prices and can be informative in shifting our stance from a defensive posture to a more offensive one: transaction volume itself and the availability of debt.

Signal 1: Improvements in Transaction Volume

With a longer time series of transaction volume in the U.S. spanning multiple cycles, we can observe the historical relationship between volume and price growth. Unfortunately, the relationship is concurrent rather than predictive but the stabilization of transaction volume and subsequent increase during past cycles has been a good sign that prices found a bottom and should begin to rise if volume continues to rebound. •

Exhibit 6: A Rebound in Transaction Volume Could be a Good Indicator of a Market Bottom



Sources: www.worldgovernmentbonds.com; Hines Research; as of November 21, 2022

Exhibit 7: Changes in Transaction Volume are Indicative of Near-Term Price Changes

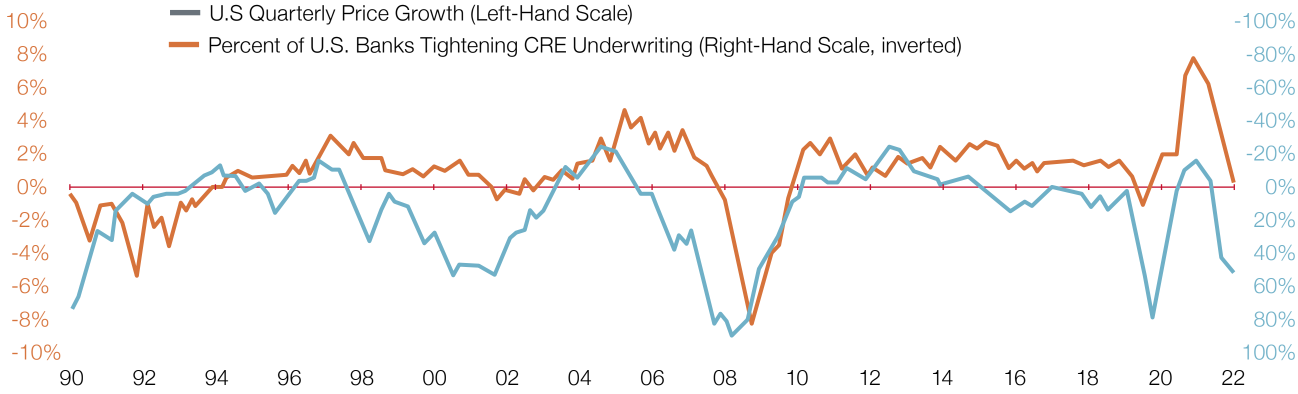
	Change in Volume Percentile Range		Average Forward Price Growth	Median Forward Price Growth	Probability of Price Growth Over Following Year	Percent of Time with Price Growth Over Following Year
VOLUME RISING	70	100	5.6%	5.0%	79.4%	90.1%
	50	70	6.0%	5.5%	75.2%	86.5%
	40	50	6.0%	5.9%	74.3%	85.0%
	30	40	5.4%	5.3%	75.8%	85.8%
	20	30	5.7%	5.8%	78.3%	87.7%
	10	20	5.9%	5.7%	78.2%	89.2%
	0	10	5.6%	5.4%	77.1%	86.8%
	-10	0	4.9%	4.6%	69.7%	79.9%
	-20	-10	3.0%	3.6%	62.0%	73.3%
	-30	-20	2.1%	2.7%	58.2%	66.0%
	-40	-30	1.9%	2.4%	56.8%	65.0%
	-50	-40	0.1%	1.7%	50.4%	61.4%
	-60	-50	-0.6%	0.7%	47.9%	55.5%
	-70	-60	-2.0%	0.7%	43.9%	53.5%
VOLUME FALLING	-100	-70	-4.3%	-2.0%	37.6%	45.0%

Sources: www.worldgovernmentbonds.com; Hines Research; as of November 21, 2022

Signal 2: Rising Availability of Traditional Debt

Although highly correlated to transaction volume, the change in the availability of debt is another indicator of changes in market prices.

Exhibit 8: Bank Underwriting Policies Historically Related to Concurrent Price Changes



Sources: www.worldgovernmentbonds.com; Hines Research; as of November 21, 2022

In the third quarter, the Federal Reserve's Loan Officer Survey (from which 2022 data is derived) showed that 50% of survey respondents reported tighter underwriting standards for commercial real estate loans, comprised of 57.6% for construction and land development loans, 52.9% for non-farm, non-residential loans, and 39.7% for multifamily properties. All three categories recorded a significant increase from a year ago when banks reported they were loosening their standards in the second half of 2021.

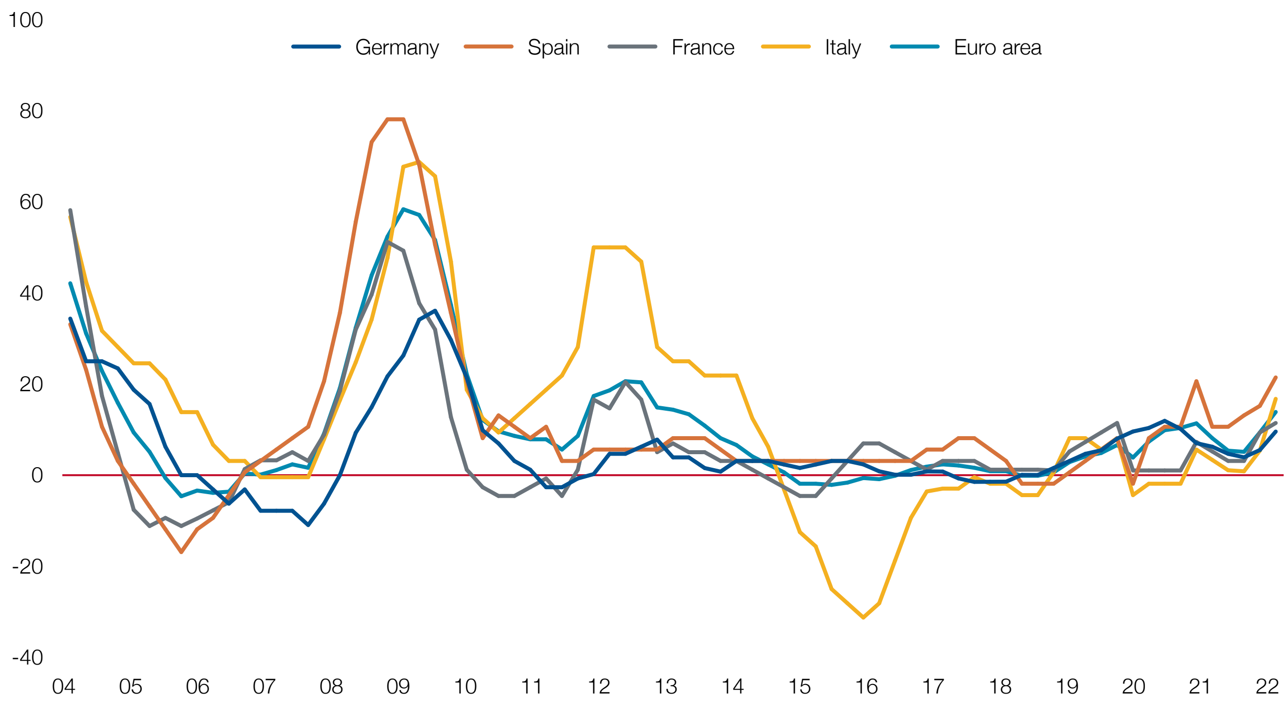
Exhibit 9: Loosening Bank Credit Standards Would be Good Signal of Near-term Price Gains (U.S.)

	Net Percentage of U.S. Banks Tightening Credit Standards for CRE Loans Range		Average 1-Year Forward Price Change	Probability of Price Growth Over Next Year	Percent of Observations with Price Growth Over Next Year
LOOSENING	-25	-20	12.1%	96%	100%
	-20	-15	11.3%	94%	100%
	-15	-10	9.3%	94%	98%
	-10	-5	8.6%	93%	96%
	-5	0	5.3%	79%	85%
	0	5	4.1%	66%	68%
	5	15	3.5%	67%	74%
	15	25	4.1%	77%	81%
	25	45	4.1%	67%	74%
	45	65	3.0%	60%	58%
	65	75	1.5%	70%	37%
	75	80	-17.7%	0%	0%
	80	85	-20.2%	0%	0%
TIGHTENING	85	90	-20.2%	0%	0%

Sources: www.worldgovernmentbonds.com; Hines Research; as of November 21, 2022

The European Central Bank undergoes a similar survey with European banks and we observed a parallel relationship to commercial real estate prices. Like U.S. banks, their European counterparts have undergone similar tightening. When this inevitably begins to reverse in the future, as it did following the dot-com bust and the Great Financial Crisis, we would expect that to be a good indication to increase investment activity.

Exhibit 10: ECB Bank Survey - Net Percentage Tightening Credit Standards to Enterprises



Sources: www.worldgovernmentbonds.com; Hines Research; as of November 21, 2022

Cost-Averaging Down

While we wait for the appropriate signals, cost-averaging down during a market correction is another strategy for deploying capital patiently during market disruptions.

Using data from the Great Financial Crisis, we created a fictitious U.S. fund that had the unfortunate timing of launching its three-year investment period right at the start of the Global Financial Crisis in the first quarter of 2008 - a quarter before the first write-downs started to show up in the NCREIF data.

Exhibit 11: Loosening Bank Credit Standards Would be Good Signal of Near-Term Price Gains (Europe)

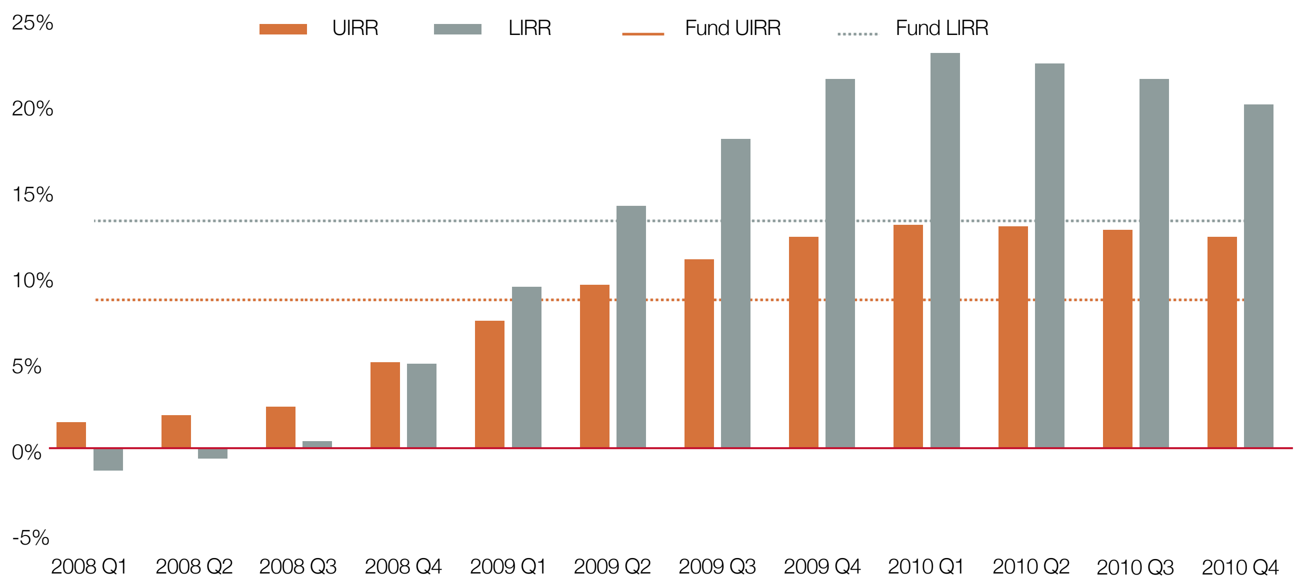
LOOSENING ↑ / TIGHTENING ↓

European Bank Credit Standards Range		Average Forward Annual Price Change	Probability of Price Gain	Percent of Observations with Forward Annual Price Gain
-35	-15	18.4%	97.7%	100.0%
-15	-5	9.0%	83.0%	87.5%
-5	0	9.0%	84.1%	89.6%
0	5	4.8%	69.5%	81.3%
5	10	1.6%	55.2%	57.5%
10	20	0.9%	53.4%	68.0%
20	30	0.0%	49.8%	60.6%
30	40	-1.3%	45.8%	60.8%
40	60	-3.1%	37.3%	41.4%
60	75	-7.9%	25.5%	31.0%

Sources: www.worldgovernmentbonds.com; Hines Research; as of November 21, 2022

This particular fund manager had ice in their veins and, unruffled by the events of the day, calmly deployed $100 million of the fund's $1.2 billion of equity every quarter during the fund's three-year investment period. Assuming 5-year business plans for each of its investments and the same investment performance as the NCREIF NPI benchmark, Exhibit 12 displays the fund's performance for each quarterly investment made and the aggregate unlevered and levered IRR for the fund as a whole.

Exhibit 12: Fund Performance by Vintage Investment Quarter and in Aggregate



Sources: www.worldgovernmentbonds.com; Hines Research; as of November 21, 2022

As is evident from Exhibit 12, those early investments were dogs but as the correction continued, later investments significantly outperformed; and the overall unlevered IRR for this theoretical fund came in at 8.6% while the levered IRR was 13.2%.

With an average loan-to-value (LTV) of 45% in the NCREIF NPI data during this fund's life, that matches a core-plus profile which is typically trying to generate net returns to investors of 9-11%. So, despite this fund's unfortunate timing, it was able to deliver expected returns to investors using simple market beta.

With a bit of value enhancement via asset selection and management, the fund would have over-delivered its target returns. It may be difficult to call a market's bottom but in the case of the most volatile market correction in the past 25 years, it wasn't necessary.

Conclusion

Market conditions have changed and therefore investment strategies should evolve appropriately. Defensively shoring up the existing portfolio's occupancy rates and capital structure will continue to be top of mind as we enter what appears to be the beginning of a typical market correction, one initially driven by higher inflation and interest rates, but which may also be impacted by the usual fundamental softening that occurs during recession, should one occur.

If that path is the one the industry ultimately takes, there will likely be a moment to switch from defense to offense. But as noted in the previous section, calling the bottom may not be necessary to generate our return objectives.

While we don't know the length or severity of the likely correction we are currently into, the two signals that should let us know when that moment is right to pivot are: stabilization of transaction volume declines and an easing of underwriting standards for commercial real estate loans by the banks. Those two signals are obviously related but when they occur, it will be a good sign that we are at the beginning of the next cycle.

In times like these, a global, diversified approach, along with the ability to see and seize opportunity in micro-markets, may lead to stronger long-term outcomes. We continue to be engaged in the market and patiently ready to invest in the right opportunities—whether now or as indices fall further. Our confidence comes from over 65 years of experience navigating multiple cycles, the nearly $94 billion in assets under our management, and the diligence of our risk analysis and underwriting teams.

About the Author
and Hines' Proprietary Research team

Joshua Scoville, Senior Managing Director – Research, reports to Hines' Chief Investment Officer and works closely with the firm's Chief Risk Officer and Strategy Group. Josh Scoville and his team are responsible for constructing the Hines macroeconomic view and outlook for commercial real estate market fundamentals and pricing; assisting with the development of investment strategies for the firm's investment programs; working closely with the local and fund management teams, clients and partners; and supporting U.S. regional and international country heads in identifying market/submarket opportunities and risks. The views of the local and fund management teams on the latest market developments are exchanged regularly via biweekly conference calls and quarterly market updates and are essential for reviewing investment strategies and fund portfolio allocations.

The Hines Proprietary Research team includes Michael Hudgins, Ryan McCullough, James Purvis, Erik Thomas, Michael Spellane, and Anthony Witkowski.

Regional Perspectives

Americas

ALFONSO MUNK
Chief Investment Officer, Americas | Hines

"We began 2022 hoping to put the existing critical challenges in the rearview mirror, but as the year progressed, new risks and uncertainties emerged. The war in Eastern Europe, spiking energy prices, and the looming prospect of a recession all carried major market impact. In addition, during the second half of the year, interest rate increases from the Fed's fight against inflation has resulted in a dislocation of real estate markets. Increased financing costs and reduced bank lending have decreased transaction volumes and asset prices. This environment, while unnerving to many investors, is a natural part of the business cycle which patient investors can exploit.

SILVER LININGS

These undercurrents of concern have overshadowed some good news. Most global economies and markets did reopen in 2022. Many U.S. businesses carry healthy balance sheets and have moved past the worst of the supply chain crisis. Employment figures are favorable, and retail fundamentals continued to recover during the busy holiday shopping season. Corporate America's return to the office is picking up steam—two Midtown Manhattan buildings managed by Hines now have surpassed 60 percent daily building occupancy for the first time since the pandemic began. Given these positive signs, combined with the ongoing repricing of real estate assets, we believe our research-driven investment approach will continue to uncover new opportunities.

Looking ahead to 2023, we will keep a close eye on certain macroeconomic data, including U.S. employment trends, discretionary spending, real estate transaction volume, and lending activity. We cannot predict how the next 12 months will unfold given the significant employment headwinds, particularly in technology. However, we are well-positioned to work through a down cycle and emerge stronger in the Americas.

INVESTMENT IMPACTS

We are entering what is likely to be the most difficult part of the cycle for tactical investment. A defensive posture will remain essential and underwriting asset pricing will be critical. Conservative projections for rental growth and investing at the right going-in basis will be key to generating attractive returns.

This summer we started to see evidence of pricing declines of 25% and that number extended up to 40% this fall. In some instances, price discovery has been nullified by a sheer lack of bids. The United States is experiencing a steep decline in investment transactions. However, that is not a surprise because our markets typically are the first to be repriced.

Activity has likewise trended down elsewhere in the Americas, notably in Mexico and Brazil, with four-quarter investment volume down 71% and 53% respectively from year-ago levels per RCA. The Canadian market has remained liquid with Q3 2022 trailing four-quarter volume equal to year-ago levels, but third quarter trading has slowed, suggesting Canada's downturn has been delayed rather than avoided. Brazil may be on the fastest track to recovery as inflationary pressures eased in the third quarter, which may lead to an easing of the SELIC benchmark interest rate, and the uncertainty of its presidential election cycle now behind it.

With interest rates continuing to climb, capital markets have been dislocated. The general upward pressure on interest rates and instability in the market has challenged underwriting for both acquisitions and development as negative leverage is pervasive and widening. However, debt providers are reluctant to say they are "on pause" and remain selectively available, albeit at lower leverage and significantly elevated rates. Such lending conditions make it difficult for the smaller players but tend to favor well-established capitalized investment managers like Hines.

Investors are still recalibrating their portfolios, as they have seen downturns on both the equity and fixed income sides of their ledgers. Meanwhile, corporate tenants everywhere have been reviewing their growth plans for the year ahead and pausing on new activity. Not surprisingly, we expect a wave of distressed office assets seeking workouts or facing defaults to hit the market in 2023. Given the amount of loan maturities in 2023, which are expected to roll at lower loan to value (LTV) levels and higher all-in rates, we are looking for the funding gap to widen, generating capital needs or funding gap to widen, generating opportunities for those with dry powder to invest. Also, investors who acquired assets with short-term financing, credit lines and bridge facilities will be facing considerable difficulties in obtaining permanent financing, which will generate capital losses. We will be on high alert to take advantage of distressed asset sales and projects with refinancing issues.

Nevertheless, real estate is typically an investment hedge against inflation. While market fundamentals have downshifted recently in response to economic headwinds, real estate assets have typically increased in value through multiple cycles. We view disruption in property value as an opportunity for investment and remain committed to our conviction that real estate holds up well during economic downturns. The investments that should be the safest will be those that have a favorable risk profile, construction pipeline or supply constraints, a strong core score and a realistic pricing discount. In addition, generating outsized returns in this market environment will require more active management and operation of the assets. Vertically integrated investor operators will likely have an advantage as they will have direct contact with tenants as well as the data to support value-enhancing opportunities. During periods of negative market performance (such as 2008-2010), Hines alpha-generation capabilities were able to overcome the value decreases experienced in the U.S. market.

SECTORS IN OUR SIGHTS

We believe the investing landscape will continue to experience headwinds during 2023, however there is potential for some bright spots and opportunities during the second half of the year. Drawing on our research and local team intelligence, we are seeing and seeking opportunities in:

INDUSTRIAL *Approaching the market with prudence*

- Industrial fundamentals are still strong in most markets, but others like Dallas, Indianapolis, and Phoenix are red flagged on development due to supply imbalance.
- Demand will drop if discretionary consumer spending is negatively impacted by the downturn.
- Opportunities can still be found, but will require more active selection and analysis, as higher returns are typically achieved in developments which are harder to pencil due to land pricing and constructions cost increases.
- The most interesting opportunities are in high barrier markets like Inland Empire, Northern New Jersey, and South Florida, where yield premium to acquisition value is substantial.

OFFICE *Quality and differentiation beats commodity*

- Continued caution is warranted, with weaker demand per economic conditions and work-from-home impacts. The full impact of WFH and demand rationalization by tenants has not been fully absorbed yet.
- Flight to quality is evident in new development performance as well as better designed, modern, sustainable product, such as Hines T3 developments.
- There is very limited debt available for office assets, and generally at low leverage levels and high all-in rates. This is causing officing prices to decrease, particularly for commodity product, up to 40-50% below peak pricing.
- Product catering to future tenants in specific industry micro-sectors – like content creation, media and entertainment – are likely to be more demanded, as we expect office utilization and occupancy to continue to improve going forward.

LIVING *investing for future demand*

- Higher mortgage costs are crimping for-sale housing demand, but apartment absorption is slowing while rents are flatting or decreasing. Some markets are oversupplied and affordability ratios are elevated, so careful submarket selection will be paramount.
- The pandemic has reinvigorated design with demand for larger units, activated green space, and single-family rentals. Newer, better located product with modern amenities and services are experiencing better performance.
- Secondary and tertiary markets may provide outsized opportunities arising from migration trends, particularly as we look at sunbelt markets in the southeast, notably South Florida as well as Texas.

RETAIL *Challenged, but pockets of opportunity*

- Sentiment is reaching a point at which we may see more pricing upside than downside as retail has been repricing for some years.
- Compelling opportunities are emerging to redevelop dated retail for highest and best use, such as high-density living and last-mile logistics.
- Performance of grocery-anchored, lifestyle, and open-air service-oriented retail is improving as post-Covid consumption has increased. Assets are performing well while pricing is attractive (7% plus cap rates) which presents opportunities.

EMERGING SECTORS
Selectively approaching key themes

- We see opportunities to ride secular tailwinds in fragmented industries.
- We are reviewing interstate migration, data creation, pharmaceutical R&D, and agriculture supply chains.
- Opportunities may be emerging in life sciences, data centers, and self-storage, among other sectors.

Analyzing U.S. markets, the Sunbelt and other high-growth markets like Denver, Austin, Dallas, Nashville, Atlanta, Raleigh-Durham, Charlotte, and Florida are still outperforming, relatively speaking. The traditional gateway markets in the Northeast, including New York, Boston and Washington DC, as well as West Coast metros like San Francisco and Los Angeles, have experienced a more subdued recovery from the pandemic and therefore less interest from institutional investors, primarily in cooling asset classes such as office and retail.

We are keeping our eyes open for opportunities in the year ahead, as we see values and yields improving in certain submarkets. The key to unlock transaction volume will be debt availability and the reset of pricing levels more in line with expected fundamentals. Future acquisitions and developments need to be underwritten with positive leverage and conservative assumptions.

RESPONSIBLE INVESTMENT

The U.S. has experienced the jarring impact of high energy prices alongside a reawakened focus on sustainability. The planet-friendly provisions of the Inflation Reduction Act and the decisions made at COP 27 are noteworthy steps forward. In terms of action, the U.S. lags Europe in both the public and private sector, but we expect that gap to close in the next few years.

In the absence of direct U.S. regulatory pressure, corporate occupiers want to understand the ESG profile of each asset they lease or own. They are expecting green leases to support their own corporate ESG goals, and to boost hiring and employee retention. Demand for energy retrofits and other ESG upgrades is likely to increase in 2023.

A recent Hines example of sustainable innovation is New York City's 555 Greenwich, anticipated to be one of the first office developments with a circular energy infrastructure that aims to reduce energy usage. Energy simulations suggest that 555 Greenwich will reduce operational carbon by 45%, electricity consumption by 25% and save 800,000 gallons of water per year— exceeding New York City 2030 carbon targets by 50%.

Disruption provides the opportunity to ramp up efforts to achieve resiliency and move to carbon-neutral status. Over the long term, we expect intelligent and consistent investments in ESG upgrades to produce higher occupancy rates, driven by tenant demand, and more liquid assets, protecting investors from the downside of “brown discounts'' and achieving stronger pricing at exit.

CONCLUSION

In these turbulent times, we are maintaining a cautious stance in response to recent pricing volatility, financing costs and revised growth expectations. We remain disciplined in our underwriting, focused on the durability of the cash flows as well as value-added improvements to help generate returns to our investors. Nevertheless, as always, we are actively monitoring attractive investment opportunities across the risk spectrum, with location, asset quality and attractive basis being the likely drivers of returns. As noted earlier, we see the likelihood of distressed asset sales and refinancing risk as problematic for some investors in 2023. However, our organization has never been better positioned to capitalize on a downturn in terms of dry powder and local insights, and we are committed to capturing opportunities when the time is right. ”

Asia-Pacific

CHIANG LING NG
Chief Investment Officer, Asia-Pacific | Hines

"The economic climate in Asia shares similar characteristics to the other major regions, but with less turmoil and relatively tame inflation, thus far. Climate change still poses a major threat in the region, and at the time of writing this note, China's COVID-19 lockdowns are taking a toll on its economy. China is such a meaningful contributor to the region's (and world's) output that a slowdown there has real consequences for the overall Asian economy. Exports have continued to do well over the last year – a critical support for many of the region's major economies – but that contributor to economic output could begin to suffer as external demand weakens with potential recessions in Europe and the United States. Despite these challenges, Asia has been faring notably better with fewer challenges than some of the world's other major economies.

As inflation makes its presence felt in all regions of the world, concerns about a global recession have been looming. Most of Asia's sub-regions are already in the mid-cycle phase of recovery. Asian central banks have taken some steps to tame inflation—but have not felt the pressure to raise rates or enact stimulus packages. Average inflation peaked at 5.5% and by August 2022 was already down by about 0.50% from peak levels.[1] China and Japan, which accounted for 60 percent of the region's real GDP in 2022,[2] have seen relatively moderate inflation. Energy costs in Asia constitute a smaller share of consumer inflation indices, as they have not risen at the same rates seen in the United States and Europe.

Cost pressures for materials, commodities, and labor have been felt globally. New construction projects require built-in cost contingencies to attempt to safeguard financial success. Supply chain disruptions have begun to show pockets of improvement but have continued to significantly impact construction timelines.

"Optimistic uncertainty" sets the tone as we move into 2023. Asia could potentially be pushed into a moderate recession by continued weakness in China and a loss of demand from its overseas export markets, but we believe inflation has a better chance of moderating here.

INVESTMENT OUTLOOK

In Asia, the regional price-discovery process appears to lag the United States and Europe. Apart from Japan, where Tokyo office cap rates fell in the second quarter 2022, initial signs indicate that cap rates are rising in response to higher debt costs in Korea and select markets in Australia and Singapore. Our deal teams have been seeing real-time evidence of meaningful cap rate increases, even in logistics. With higher debt costs, the opportunity for leveraged yield in Asia has largely evaporated.

[1] *https://www.cnbc.com/2022/08/16/inflation-in-asia-has-peaked-morgan-stanley-says-.html*
[2] *According to the International Monetary Fund: https://countrycassette.com/list-of-asian-countries-by-gdp-2022/*

We believe pricing is the key determinant in the scale and duration of any downturn in property values during a crisis or recession. As 10-year sovereign bond yields continue to increase, current yields can be used to calculate cap rate spreads across regions and, in turn, re-estimate pricing for markets. By this methodology, only about half of Asian markets are expensive, in contrast to 70 percent of U.S. markets—suggesting a less severe property downturn in Asia (as of 2022Q3).[3]

Asia's property market is expected to outgrow the United States and European markets, driven by a combination of value gain for existing property but also newly developed stock. Hines Research estimates that the total value of investment property in Asia across the four major property types should outgrow U.S. and European investment property market value over the coming decade. The pace of that growth should be such that Asia will grow from holding its smallest share of investment property at 30 percent in 2022 to the highest share of 36% by 2032.[3]

Our response is to be patient through pricing fluctuations and focus on strategies that lean into non-discretionary demand and sectors/markets where rents should ultimately benefit from inflation. Amongst continuing opportunities across all the region's major economies, we have found very compelling opportunities in for-rent residential in Japan, build-to-rent in Australia and office in India. With values for secondary-quality assets likely under pressure, we could purchase select assets in attractive locations at discounted prices for our Core Plus Fund, Hines Asia Property Partners, with an eye to "fixing" to proper Core for the long-term; or take on assets with a traditional value-add approach. In addition to the opportunity proffered by an expected repricing, the growth in Asian property markets noted above will lead, we believe, to significant, measurable opportunities for development in both Asia's developed and developing economies. To capitalize on this outlook most effectively for both our business and our investors, we are exploring options for a new Asia Pacific Fund designed for just that purpose.

SECTORS IN OUR SIGHTS

In addition to some of the current opportunities discussed already, over the long term, we are optimistic about the office, life sciences and mixed-use / retail sectors in the Asia Pacific region. We are also focused on sustainability as companies aim to attract an eco-conscious workforce and meet corporate goals for carbon emissions reductions.

Against the backdrop of this year's macroeconomic and political headlines, the rebalancing of real estate product types has largely played out. While trends have indicated that the real estate industry's main sectors may converge further, the current picture drawn from Hines research and local teams' intelligence shows that sectors remain quite differentiated.

INDUSTRIAL

Tailwinds continued, but market has gotten tighter

- Investors and developers have been looking to avoid obsolescence in their properties and demand for higher clear heights and more efficient locations and configurations
- The Asia Pacific region has continued to see a relative shortage of logistics space for products addressing e-commerce demand; and as Asia's economies become wealthier, there is a scope for more cold-storage demand
- Micro-location analysis, asset selection and design prowess have become critical in this crowded market for investors

LIVING

Addressing affordability and upgrading aspirations

- Rental demand has been supported in markets where homes have become increasingly unaffordable; this includes developed markets like Australia, Korea and Japan.
- In developing markets, consumers have ownership aspirations and have sought affordable or next-level up housing

[3] *Per Hines Proprietary Research as of 3Q22*

OFFICE

Evolution, not revolution

- We have seen strong growth in high-value locations
- With a lower susceptibility to "Work from Home," as well as relatively healthy office-using employment growth, there are indications that office demand may likely seep into lower quality segments in Asian markets; the implication is that the office investment opportunity would be more broad-based in Asia relative to expectations in Western markets. Return-to-office requires a new dimension of user experience to attract tenants.
- We have found a noteworthy correlation between funding and space demand for Life science facilities. The levels of life science venture funding targeting the region, if it continues, will lead, we believe, to demand growth for the region in aggregate that trails only the major life sciences clusters of the US.
- Investors have been pursuing ESG initiatives that enhance returns and bring operational efficiency

RETAIL

The Yield Play

- Yields for retail assets – while varying by sub-type – have been attractive relative to other property sectors. We see increased stability in retail fundamentals as vacancies and rents have been stable or moving in the right direction.
- Investor sentiment has reached a point at which we may see more upside than downside in pricing of some products; investors have become increasingly confident that we have seen a shake-out of poorly performing assets, but more importantly, the market now understands what types of retail and which locations can thrive moving forward
- Even well-located prime retail has been being priced at levels significantly lower than pre-COVID levels

EMERGING SECTORS

Offering higher yields and room for upside

- Sectors are institutionalizing, suggesting higher income yields and growth prospects

RESPONSIBLE INVESTMENT

Asia Pacific countries with supportive government policies that require energy-efficient buildings are leading the region's race to net zero. All countries in the region have made pledges as part of the Paris Climate Accords - an international treaty on climate change. Many of the largest economies have recently made ambitious commitments to reduce emissions and achieve carbon neutrality. In Singapore, 95% of Class A office stock is rated under the Building and Construction Authority's (BCA) green building rating system,[4] and all new buildings are subject to the green rating requirement. In Australia, a newly passed climate change bill[5] is also expected to accelerate the adoption of green leases as part of carbon-reduction efforts.

Beyond regulatory pressure, some corporate occupiers have pushed for green leases. Across the Asia Pacific region, 42% of occupiers have already signed a green lease and another 43% plan to do so by 2025. Green leases have traditionally been focused on environmental clauses, but more companies in Asia Pacific are planning to include environmental, social and governance (ESG) clauses when they renew their leases.[6]

Consistent and well-proportioned investments in ESG upgrades aim to produce higher occupancy rates, as occupiers often appear to prefer more sustainable properties. For investors, ESG investment may add liquidity and better pricing at exit with protection from "brown discounting." The present moment is a good window in which to consider advancing ESG investments.

CONCLUSION

In the long term, we remain optimistic about investment in Asia. The region is buoyed by a unique growth profile, relative to the US and Eurozone, for both Asia's economy and the underlying property markets, a key pillar for economic output. We are focused on sustainable properties in the region as governments continue to create new regulations related to decarbonization in the built environment.

[4] *https://www.straitstimes.com/singapore/buildings-in-spore-have-to-meet-higher-standards-to-be-certified-green-under-refreshed*
[5] *https://www.bbc.com/news/world-australia-62829709*
[6] *https://www.jll.com.sg/en/trends-and-insights/research/green-leases-setting-the-tone-for-responsible-leases*

Europe

ALEX KNAPP
Chief Investment Officer, Europe | Hines

A highly unusual year comes to an end:

- The summer season was the hottest on record; tourism bounced back but so did climate change concerns
- COVID is no longer the top headline, but still disrupts international supply chains
- Russia's war on Ukraine evolved in surprising ways throughout the year
- European energy prices rose to historic highs but have since fallen back
- Central banks raised rates, while seemingly at cross-purposes as European governments greenlit stimulus packages

Looking into 2023, we cannot predict the market as many variables remain impossible to call. For certain, the economic landscape has changed and Europe faces increasing risks of recession. However, we believe our research-driven approach, combined with our in-depth local presence, will uncover valuable long-term opportunities for investors.

INVESTMENT IMPACTS

This new environment has disrupted the 'lower for longer' credo, which the real estate industry became so accustomed to during a period of sustained gains. The sobering reality is that it could be **harder for longer** than we would like—even without new surprises or further escalating conflicts to the East.

European real estate, however, is moving into this more turbulent time from comparatively healthy starting points—especially when looking back to the Great Financial Crisis:

- Occupancy levels in most relevant institutional markets have remained relatively high
- Supply has been relatively less concerning as the development pipeline was already reduced by COVID-19 repercussions, heightened regulation, and increased construction costs
- Debt levels across commercial assets remained substantially below the perilous levels of 2007—2008, and European lenders seem willing to grant some latitude rather than taking the keys (and much more so than their American counterparts).

Economic corrections will come, but Europe will react at a European pace. Unlike the United States, pessimism doesn't spread in the industry as rapidly given the multi-jurisdictional region's lower transparency. In fact, some southern European markets remain surprisingly stable, due in part to fewer international ties. German valuation methodology takes longer to adjust thereby muting some of the worst spikes in Europe's biggest economy.

Still, higher financing costs are feeding through the system, starting with the public markets. Despite less transactional evidence, we have already seen some trades with discounts of 20—30% compared to the start of the year. Private market valuations are definitely lagging and will likely get worse before they get better. Yet, recent months taught us to prepare for more unexpected events to shake the markets – both down and up. We believe exogenous factors may make it particularly difficult to call a bottom. In addition, corrections should continue to be uneven depending on product type and geography across the European markets. A common theme is once again the flight to quality.

Our advantage is we are local and disciplined. Teams on the ground stay close to the deal flow while Hines' proprietary research ensures underwriting across the globe reflects the new realities. Deep local presence helps ensure income resilience. At the same time, we believe disruption will drive opportunities. With the ability to commit discretionary funds, we are now well-positioned to provide liquidity as 'motivated sellers' come forward.

SECTORS IN OUR SIGHTS

Against the backdrop of this year's macroeconomic and political headlines, the 'beds and sheds revolution' of recent years has largely played out. There is no longer a standout winning sector. Our ability to understand nuances of quality within a product type has become more important than just picking the right general bucket.

INDUSTRIAL *Fundamentals remain… for the right assets*

- Market momentum has cooled but medium-term fundamentals are supported by e-commerce potential with Europe's overall relatively low adoption rate
- As capital demand normalizes, focus is expected to return to individual asset and location quality
- Drivetime catchment areas provide robust guidance for urban logistics locational quality

LIVING *Looking beyond stable and regulated*

- Mainstream residential lost its appeal as tight yields have come particularly under pressure
- Heightened regulation (e.g. Ireland, Netherlands, Germany) has restricted rental growth potential and financing costs largely result in negative leverage
- Niche product types—especially student housing—have therefore garnered outsized interest but require more operational capabilities

OFFICE *A smaller pool of viable assets*

- The hybrid working evolution played out as the workforce got used to flexibility and convenience.
- The magnitude has been less pronounced compared to the U.S. It is an evolution not a revolution in Europe
- While we believe the overall market will inevitably shrink, best locations have already proven resilient
- Superior quality with focus on ESG should outperform

RETAIL *Faring better than one might think*

- Negative sentiment has resulted in attractive pricing on a global basis
- New economic headwinds and uncertainty may delay a sector rebound as consumer confidence draws back
- Still, higher yields provide a meaningful buffer for the best assets

RESPONSIBLE INVESTMENT

Disruption provides the opportunity to double-down on resiliency for investors and occupiers. In Europe, an asset's ESG profile has become critical for occupiers to help meet their corporate ESG goals, to boost hiring and employee retention. We believe the current energy crisis should cause occupiers of lower-performing assets with higher energy costs to become even more cost-conscious. Tightening regulation across Europe will further drive change. This is a "must-have" characteristic of European investments.

We expect demand for ESG upgrades will only increase among occupiers and owners that lack the technical resources to deliver cost-effective solutions. In the long term, we expect intelligent and consistent investments in ESG upgrades to produce higher occupancy rates (driven by tenant demand) and more liquid assets, protecting investors from the downside of "brown discounts" and achieving stronger pricing at exit. This is a good window to consider advancing ESG investments.

CONCLUSION

In times of increased volatility, geopolitical tensions, and higher cost of capital, we see resiliency of the best product in the best locations. Hines will remain disciplined in its underwriting and focused on the durability of the cash flows. Across sectors and markets, pricing will adjust unevenly, and we will be ready to take advantage of tactical opportunities through a hyper-local platform with €4.5 billion of discretionary capital available to invest in Europe.

PAIRING GLOBAL PERSPECTIVES WITH LOCAL INSIGHTS

Looking for more local perspectives?

Visit www.hines.com/globaloutlook to dive deeper into viewpoints from our local experts on the ground from around the world.

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The NFI-ODCE, short for NCREIF Fund Index – Open End Diversified Core Equity, is a capitalization-weighted, gross of fee, time weighted return index with an inception date of December 31, 1977. Other supplemental data such as equal-weight and net of fee returns are also provided by NCREIF for information purposes and additional analysis. To be eligible for NFI-ODCE membership, each member fund must be marketed as an open-end fund with a diversified core investment strategy primarily investing in private equity real estate. All members funds must adhere to the following index inclusion criteria:

- At least 80% of the market value of net assets must be invested in real estate with no more than 20% invested in cash or equivalents;
- At least 80% of the market value of real estate net assets must be invested in private equity real estate properties [no more than 20% of such assets may be invested in, but not limited to, property debt, public company, equity/debt or private company (operating business) equity/debt];
- At least 95% of market value of real estate net assets must be invested in US markets;
- At least 80% of market value of real estate net assets must be invested in office, industrial, apartment and retail property types;
- No more than 65% (± for market forces) of market value of real estate net assets may be invested in one property type or one region as defined by the NPI;
- No more than 35% leverage. Leverage is defined as the ratio of total debt, grossed-up for ownership share of off-balance sheet debt, to the fund's total assets, also which are grossed-up for such off-balance sheet debt.

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The NCREIF NPI, short for the NCREIF Property Index—is a quarterly index tracking the performance of core institutional property markets in the U.S. The objective of the NPI is to provide a historical measurement of property-level returns to increase the understanding of, and lend credibility to, real estate as an institutional investment asset class. The universe of investments: (1) is comprised exclusively of operating properties acquired, at least in part, on behalf of tax-exempt institutions and held in a fiduciary environment; (2) includes properties with leverage, but all returns are reported on an unleveraged basis; and (3) includes Apartment, Hotel, Industrial, Office and Retail properties, and sub-types within each type. The database fluctuates quarterly as participants acquire properties, as new members join NCREIF, and as properties are sold. Sold properties are removed from the Index in the quarter the sales take place (historical data remains). Each property's market value is determined by real estate appraisal methodology, consistently applied. Please note that when returns are computed for the NPI, the returns for the levered properties are computed on a de-levered basis, i.e., the impact of financing is excluded. A benchmark Index is not professionally managed. Investors cannot invest directly in an index.