CASTLEFORGE

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DISTRESSED OPPORTUNITIES IN EUROPEAN REAL ESTATE

Across Europe and the US, real estate markets are strained today to a degree that we have not observed since the global financial crisis (GFC). Over the last few quarters, borrowing costs have surged, and liquidity has started to evaporate. If economic fundamentals continue to soften, liquidity problems could turn into full-blown solvency problems, particularly in structurally challenged sectors. According to one forecast, based on current interest rate levels, the average interest coverage ratio for a UK office or industrial property acquired in 2018 will fall below 1x within the next year.[1]

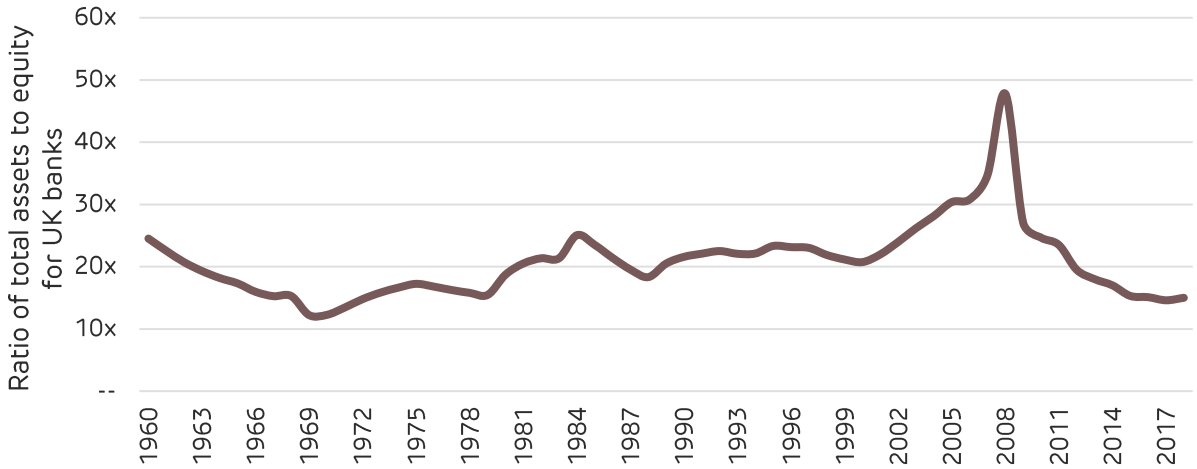
These problems will give rise to investable stressed and distressed situations, and this could happen quickly. In comparing today's circumstances to those present in the GFC, we feel obliged to utter the four most dangerous words in the investment lexicon ("this time is different", for all our readers who started their careers post-2008). As we describe below, it took half a decade for distressed opportunities to emerge after the global financial crisis. However, the drawn-out distressed cycle that took place 15 years ago was a product of unique circumstances: namely, (1) banks' weak capital positions combined with (2) falling interest rates. These co-dependent circumstances incentivised weak lenders to accommodate struggling borrowers. Today, the background conditions look entirely different. With interest rates pushing higher and European banks in relatively good financial health, we believe that a meaningful volume of distressed opportunities will materialise within the next 18 months.

A brief history of real estate distress after the global financial crisis

European banks entered the GFC with extremely precarious capital positions. For one, they were highly leveraged. As Figure 1 shows, the ratio of total assets to equity for UK banks reached 48 by 2008, roughly double the ratio's long-run historical average. At the same time, banks had accumulated significant exposures to risky assets during the preceding decade. These included relatively low-quality, high-LTV property loans. While banks originated more than £80 billion in UK commercial real estate loans in 2007, up from about £20 billion in 2000,[2] the average maximum LTV of a senior loan on a prime office asset stood at 83% in 2005.[3] Residential loans in the UK were less overcollateralised still, with LTVs of 90% on average.[4] Ultimately, on the eve of the crisis, banks had almost no cushion to absorb losses, either in the form of meaningful overcollateralisation or core capital.

[1] Oxford Economics
[2] Cass Commercial Real Estate Lending Survey (2019)
[3] IPF
[4] Financial Times

FIGURE 1. UK BANKS WERE HIGHLY LEVERAGED AS THEY ENTERED THE GFC[5]



When property values finally crashed, equity holders were wiped out, and lenders were left holding enormous portfolios of underwater real estate loans. This problem was amplified by the trillions of dollars of additional losses that many of the same institutions had just incurred on various real estate-backed financial instruments. With a large part of the financial sector on the brink of insolvency, banks were desperate to stop their balance sheets from deteriorating any further. Thus, they decided to stall, by avoiding activities that would have required them to crystallise yet more losses on soured loans.

This strategy was operationalised in several ways. First, lenders often declined to enforce on defaulted borrowers. Under the circumstances, it was preferable to continue holding bad loans, which could be carried at reasonably aggressive valuations, than to realise definitive losses in foreclosure sales. Lenders also tried to make defaults disappear altogether, via a policy of "extending and pretending": would-be non-performing loans were restructured under terms that effectively brought borrowers back into compliance, enabling banks to treat those loans as unimpaired as far as their reported balance sheets were concerned. As a result, commercial-loan defaults, as self-reported by lenders, did not peak until 2012 in the UK—three years after property prices and broader economic conditions had both bottomed.[6]

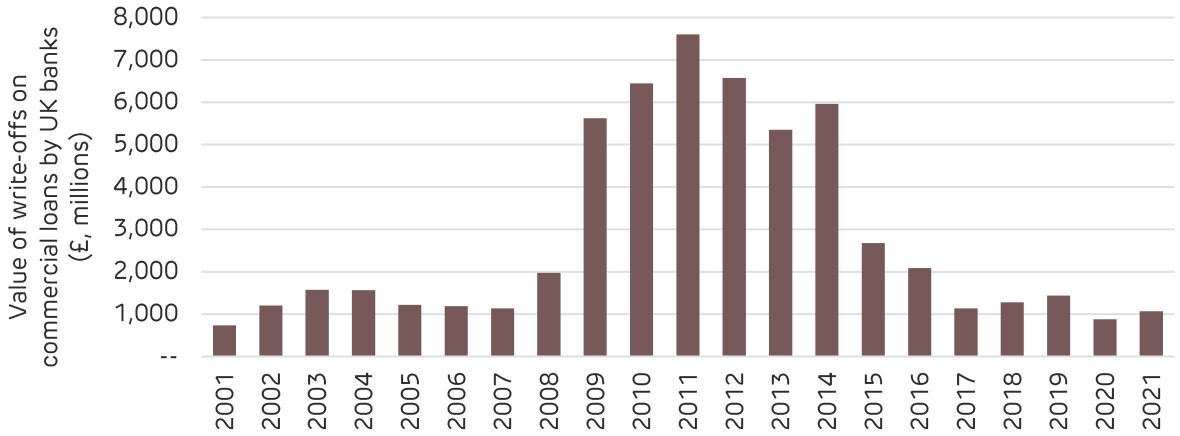
What's more, a sustained collapse in interest rates during this period reduced the cost of carrying outstanding loans. This situation provided banks with yet another reason to delay taking action. The Bank of England's overnight rate fell from more than 6% in 2007 to less than 0.5% by 2009, and mostly remained below that level until 2019.[7] As interest rates declined, and remained low, banks faced commensurately low carry costs. Even if they could have stomached the losses at the time, their options for redeploying recovered capital were limited, and their low cost of funds afforded them the ability to sit tight.

As a result, it took several years for banks to move bad assets off their books. As Figure 2 shows, write-offs for UK banks did not return to pre-crisis levels until 2016. As banks slowly got around to cleaning up their balance sheets, the market for NPLs expanded. In fact, while we can recall being involved personally in some of the first NPL trades from investment bank CMBS warehouses (2009) and the UK clearing bank balance sheets (2011), well after valuations declined, the majority of the pain

[5] Bank of England, Our World in Data
[6] Cass Commercial Real Estate Lending Survey (2019)
[7] Federal Reserve Bank of St. Louis

happened much later: post-GFC NPL trades in Europe finally peaked in 2015 at €122 billion.[8] Meanwhile, although there were just 2,900 distressed commercial property sales in the US in 2008, that figure eventually rose to 16,000 at its peak in 2012.[9] In short, real estate investors had to wait for these opportunities to emerge.

FIGURE 2: AFTER THE GFC, BANKS SPREAD THEIR WRITE-OFFS OVER HALF A DECADE



Ready for 1,489,368,931,344 kilometres per hour?[10]

The financial conditions that led to a long and slow distressed cycle a decade ago are not at play today. On the contrary: (1) banks are now well-capitalised for the most part, and (2) surging interest rates have substantially increased banks' carry costs. As a result, where defaults occur, we should expect lenders to move swiftly to recover their collateral and reallocate capital to higher-yielding uses. In turn, this should quickly create attractive distressed opportunities for investors.

First, the European banking system is significantly better capitalised today than it was 15 years ago. Following the financial crisis, banks overhauled their business models and capital structures, substantially reducing on-balance-sheet trading activities, adopting more cautious lending standards, and building up equity. In the UK, traditional lenders (mainly banks and insurers) slimmed down their commercial real estate loan portfolios, reducing the total value of outstanding loans from about £250 billion in 2008 to less than £200 billion in 2019.[11] At the same time, LTV ratios have also declined: the average maximum LTV of a senior loan on a prime UK office asset reached 65% in 2017, down from 83% in 2005.[12] All told, UK banks would enter a near-term downturn with relatively robust capital positions.

This has two implications. One, it means that even broad-based declines in property values are less likely to jeopardise the banking sector's solvency this time. That, in turn, means that banks will not depend for their survival on "extending and pretending" either. Two, higher levels of overcollateralisation suggest that lenders can now intervene before their loans are underwater. During the GFC, banks had to realise losses to recover what remained of their principal: if a property with a typical 85% LTV loan lost 30% of its value, the lender had to take a haircut. As we discussed above, rather than incur losses, banks often accommodated borrowers, in the hopes that asset prices

[8] PWC
[9] CoStar quarterly earnings transcript (Q3 2022)
[10] For our readers unfamiliar with 1987's *Spaceballs*, that's Ludicrous Speed.
[11] Cass Commercial Real Estate Lending Survey (2019)
[12] IPF

would eventually rebound. Now, alternatively, higher LTV ratios create different incentives: if a property with a 65% LTV loan loses 30% of its value, the lender will have little to gain by waiting to see if values recover; it should simply move to get repaid in full as quickly as possible.

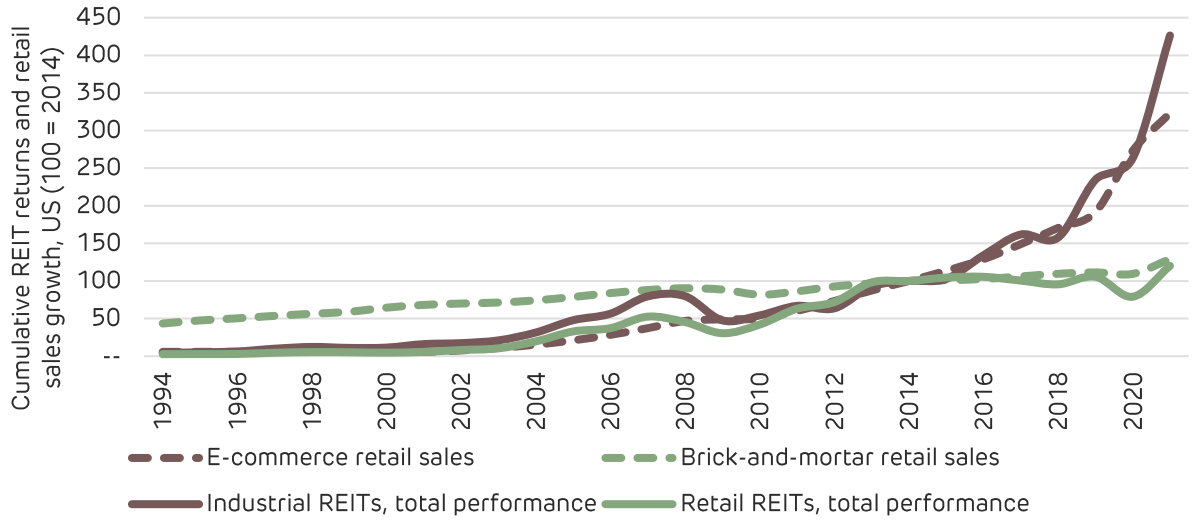
Not only do banks lack strategic reasons for kicking the can down the road this time, but their appetites for swapping out old loans for new ones should be much stronger now, too. This is due to the fact that interest rates have surged over the past year, substantially increasing banks' carry costs. Since banks generally "borrow short and lend long", changes in interest rates usually influence their interest expenses more quickly than their interest income. At the margin, a sharp increase in interest rates, of the sort we have seen over the last two quarters, should therefore put pressure on banks to cycle out old, lower-yielding loans for new, higher-yielding ones, and to do so quickly. As that happens, investable stressed and distressed situations will come fast.

EUROPEAN LOGISTICS: DOES LATE-CYCLE BECOME AN ATTRACTIVE ENTRY POINT?

Logistics is the new retail—in both good ways and bad

Before the internet, retail property functioned as the final link in the supply chain for virtually all consumer goods. Under this market structure, consumer goods were produced in factories and then shipped to brick-and-mortar stores, where physical exchanges with customers took place. About a decade ago, e-commerce came along and shook up that supply chain. Online sellers cut out brick-and-mortar intermediaries by distributing goods directly to consumers' homes. However, this innovation did not so much eliminate physical retail intermediaries as it did replace them with physical intermediaries of a different type: e-commerce required a lot of logistics infrastructure, and it required this infrastructure in new places. As a result, as Figure 3 shows, industrial real estate boomed over the last decade, in tandem with the growth of e-commerce. Ultimately, as consumer goods were increasingly sold via e-commerce platforms, logistics real estate started to supplant traditional retail real estate as the physical locus of consumer-goods distribution. Logistics investments widely outperformed in turn.

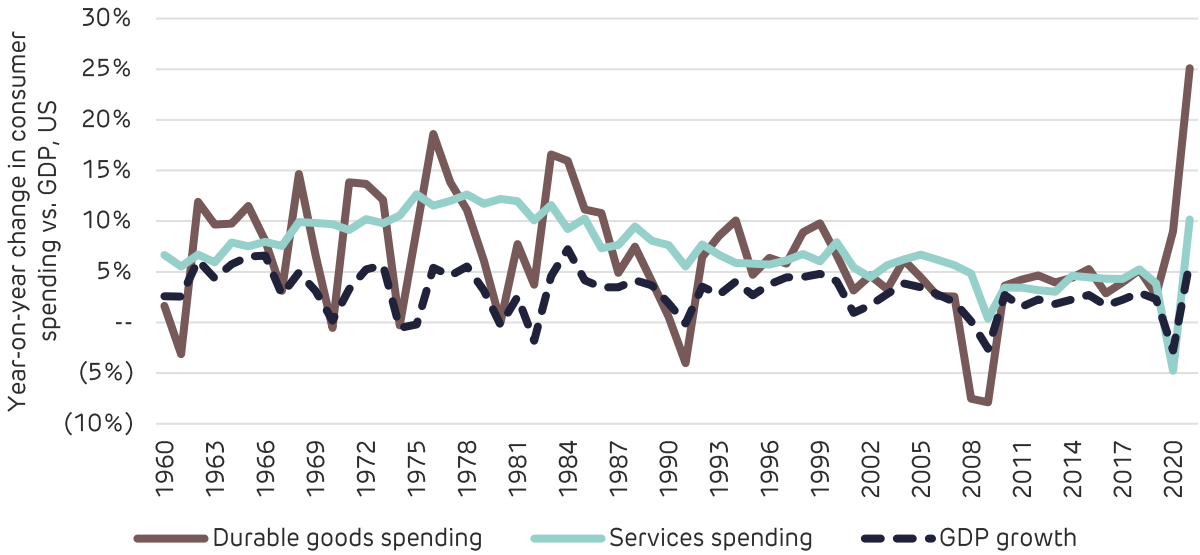
FIGURE 3. AS E-COMMERCE REPLACED BRICK-AND-MORTAR, INDUSTRIAL OUTPERFORMED RETAIL



Consumer goods businesses are generally cyclical, though. As Figure 4 shows, people tend to consume fewer goods, especially durable goods, during recessions. Back before consumers bought goods online, retail was the real estate sector that bore the brunt of this fact. Now, however, demand for logistics

real estate is also driven by spending on consumer goods. As a result, we should expect logistics to be similarly sensitive to pullbacks in consumption. In fact, it could prove even more sensitive: services tend to hold up better than goods during most downturns, and, unlike retail, which facilitates the consumption of both goods and services, logistics is almost a pure-play bet on online consumer-goods spending.

FIGURE 4. CONSUMER SPENDING ON DURABLE GOODS IS HIGHLY CYCLICAL[13]



Notably, the logistics sector has not experienced a normal economic downturn since 2008, well before the rise of e-commerce. (The Covid recession was obviously anomalous—goods outperformed services as everyone was stuck at home buying Peloton bikes.) As economic growth now seems poised to slow, we will soon find out how it fares. Our bet is that it will see significantly softer occupier demand, slower rental growth, and potentially lower values. The consistent outperformance that characterised logistics over the past decade could well reverse during a recession.

In continental Europe, e-commerce is still in its early days

This presents an opportunity. Although the sector faces challenges in the near term, logistics real estate in continental Europe still has legs for meaningful growth in the longer term, as it ultimately continues to benefit from structural tailwinds created by e-commerce.

E-commerce spending is lower in most parts of continental Europe than in the US or the UK. In 2021, e-commerce spending accounted for 28% of total retail sales in the UK, 14% in the US, 13% in France, 11% in Germany, 11% in Spain, and 10% in the Netherlands.[14] We should expect this gap to narrow over time. Although these regions have important economic, regulatory, and demographic differences—and these differences have led them to adopt e-commerce at different paces—they are all advanced, consumption-driven economies with almost universal internet access. With the right infrastructure in place, the benefits that e-commerce confers on consumers are no less available in continental Europe than in the more mature e-commerce markets. Consumption patterns should eventually come to reflect this fact.

As European e-commerce spending catches up, demand for European logistics real estate should see accelerated growth. This will likely have an outsized effect on rents, given that Europe's industrial

[13] Federal Reserve Bank of St. Louis
[14] JP Morgan

stock remains too small to accommodate an e-commerce market the size of that in the US or the UK: last year, the total per capita stock of industrial real estate stood at about 40 sq ft in the US, 30 sq ft in the UK, 20 sq ft in Germany, and 10 sq ft in both France and Italy.[15] Ultimately, new supply will be needed. In short, Europe's e-commerce market still has a long way to go. As it matures, the continent's logistics sector will have to expand, too.

CHINA'S CHALLENGES & HOW TO BUILD A DEFENSIVE UK HOTEL PORTFOLIO

Over the last two decades, China's economic gains helped power the growth of the global middle class. Between 2009 and 2019, about 1.8 billion people entered the global middle class; some 700 million of those new entrants, or about 40%, were Chinese.[16] As we have written in the past, the expansion of the global middle class presents a significant opportunity for Europe's hospitality industry. Just as new members of the North American and European middle classes took up international travel half a century ago, the newest members of the global middle class, who largely live in Asia, have started to do the same. In 2009, there were fewer than 50 million international travel departures by Chinese residents; by 2019, there were more than 150 million.[17]

However, the Chinese economy faces critical structural challenges going forward. Considering the pivotal role that China played in the expansion of the global middle class during the last two decades, these challenges raise questions about the trajectory of the global middle class in the years ahead. In short, although there continue to be reasons for optimism, we think some caution is also warranted here. With that risk in mind, we continue to focus our hospitality strategy on investing in affordable hotels in European cities that cater to all forms of tourism, including domestic drive-to as well as foreign.

China's economic predicament is rooted in the country's growth strategy. Government-directed infrastructure investment has been a pillar of China's growth strategy for decades. Since the 1990s, local governments have largely implemented this programme by creating some 10,000 "local government financing vehicles" (LGFVs), which raise off-balance-sheet debt to fund and execute infrastructure and development projects on behalf of their government sponsors. Back when China's manufacturing capacity and infrastructure stock were underdeveloped, it was relatively easy for the state to invest productively via this mechanism to create economic growth. Yet as the country industrialised, opportunities for productive infrastructure investment grew scarcer. Rather than rebalance the economy towards consumption, China met its growth targets by having local governments invest more in increasingly unproductive uses. As a result, China's incremental capital-output ratio (total investment as a percentage of GDP divided by GDP growth) tripled between 2007 and 2020, from 3 to 9.[18]

This led to a higher debt burden. The market for LGFV bonds now totals about $7.8 trillion, double its level just six years ago and more than half of China's GDP.[19] Altogether, China's total public debt now exceeds 300% of the country's GDP, up from 140% in 2008.[20] Since borrowing costs for LGFVs (about 6% on average) have generally exceeded the returns generated by their infrastructure investments (less than 2% on average), local governments have subsidised the difference out of pocket, primarily through land sales to residential developers. This left China's investment programme, the bedrock of its economic growth, highly exposed to the country's property sector. As

[15] CBRE
[16] Caixa Bank
[17] World Tourism Organisation
[18] Brookings Institution
[19] Financial Times
[20] World Bank

the Chinese real estate market imploded over the past year, local government funding started to dry up: in July, local authorities' income from land sales was down 33% year-on-year.[21]

While there are signs that China's real estate market has bottomed, longer-term structural challenges clearly lie ahead. Fundamentally, China's growth in recent years has relied on a strategy that may prove difficult to sustain for much longer; a national economy cannot rely on an investment programme that consistently produces returns below its cost of capital forever. With a debt-to-GDP ratio of 300%, and global interest rates trending higher, China could be approaching that limit. To be sure, alternative paths to growth may still be available. For example, the Chinese economy could remodel itself as a world-leading manufacturer of high-value goods, like advanced electronics or renewable energy infrastructure (an area where it already excels). Still, this type of outcome is hardly guaranteed.

Thus, there are reasons to be cautious about the idea that medium-term growth in demand for international travel will be driven by the Chinese middle class. As a result, we have invested in hotels that are resilient to a potential decline in Chinese international travel. These hotels are located in places that generate strong demand from domestic tourism, like Bath, Cardiff, and Edinburgh, and they are affordable to middle-class households in the UK. This approach essentially provides us with a free option: if international tourism, including from China, accelerates as travel patterns revert to pre-pandemic trends, these hotels still stand to benefit, since rates will increase across the board; if not, our downside is protected nonetheless from good old-fashioned American tourists looking to visit Shakespeare's birthplace or rediscover their Scottish roots. Can we interest any of our readers in a whiskey-tasting and golf holiday package?

GIMME SHELTER: UK HOUSING & OCASA'S VALUE

The UK's housing market is notoriously dysfunctional. Housing is undersupplied in general; the tax system creates incentives that prevent houses from being sold to those in need; a lack of "as of right" anything in the land use planning (zoning) system creates a sclerotic pipeline; a substantial portion of the country's rental stock is low-quality or outright obsolete; and homeownership is broadly unaffordable, especially now that mortgage rates have soared. In fact, if any of our readers wish to learn about the system one would establish if one *wanted* to create a chronic and irreparable shortage of housing, we'll show you. But that immutable fact is what provides good-quality, well-managed rental housing in the UK with such an opportunity for strong performance.

While almost one in ten households in private rental accommodations lives in overcrowded conditions, the government fell short of its affordable-housing supply target by about 65% last year, and 1.2 million people remain on waiting lists for local authority housing in England alone.[22] As we have discussed in previous letters, affordably priced housing is also substandard, with 21% of private rental homes failing the government's Decent Home Standard.[23] What's more, the bulk of the country's housing stock was built decades ago, for a population with a household structure that is considerably different than the one that exists today. For example, while about 10% of homes are comprised of two or fewer main rooms, about 75% of UK households consist of three or fewer people.[24] This suggests that few households live in homes that suit their actual requirements. The housing stock is fundamentally inefficient.

Meanwhile, private rental homes are largely operated by unprofessional landlords who have little incentive or ability to provide decent service or make necessary improvements, knowing that their

[21] Financial Times
[22] National Housing Federation
[23] English Housing Survey
[24] ONS

tenants have few alternatives. Just 6% of the private rental stock is professionally or institutionally managed, and, remarkably, 35% of all private landlords are retirees.[25]

You might think that some of these problems could be solved by building new homes. Unfortunately, even putting aside the complexities of the UK's planning system, new residential development is not economically feasible in many parts of the country, as building costs have grown much faster than residential values and rents in recent years. The construction sector's profit margins nearly tripled between 2015 and 2022, while rents increased by just 15%, and home prices grew by about 50%.[26] As interest rates have increased over the past year, developers' margins have only gotten tighter.

Ultimately, the result is a grim equilibrium: renters are stuck with a bad product, and most landlords and developers will not or cannot provide something better.

Our workforce housing platform, Ocasa, is helping to solve this problem. Ocasa now operates 37 assets (comprising about 2,300 units) across the UK regions, in or near cities like Leeds, Sheffield, Birmingham, Norwich, Durham, Liverpool, and Manchester. The platform provides professionally managed, high-quality rental housing at prices affordable to middle-income workers, and it aims to provide a customer experience that most renters cannot get elsewhere. Moreover, Ocasa is able to deliver affordable housing to people who may otherwise find themselves in unsafe housing situations, particularly including single people who are deprioritised for social housing eligibility. As economic conditions soften and households struggle with higher living costs, we think that Ocasa's emphasis on social responsibility will come to matter more and more.

LINA KHAN DOESN'T CARE ABOUT YOUR CHEAPER CONSUMER PRICES

In our May 2021 letter ("A Basis for Value"), we wrote that "[big tech companies] should prepare for more regulation and antitrust enforcement". More generally, we observed that the regulatory environment in the US and Europe appears to be changing, with political leaders increasingly bent on reigning in anticompetitive behaviour by large, market-dominating firms. At the same time, we also pointed out that this shift would coincide with a period of rising interest rates, putting further pressure on many of those same firms, which often relied on cheap capital to fuel their growth.

While rising interest rates are old news by now, several recent events seem to support the first half of that narrative, too. In October, a US federal judge sided with the Justice Department and blocked Penguin Random House's attempted acquisition of Simon & Schuster. The Justice Department had complained that the acquisition would harm competition in the market for publishing rights. A few weeks earlier, the UK's Competition and Markets Authority ruled that Meta had to sell off Giphy, which it bought in 2020 for $316 million, on the grounds that "Meta's takeover of Giphy could allow [it] to limit other social media platforms' access to GIFs". More decisions like these are probably forthcoming.

As we noted in that letter, the long-duration, growth-focused businesses that thrived during the last decade—in part, by using cheaply financed "killer acquisitions" to "quash upstart competitors"—may not fare so well in the next one. Indeed, as interest rates have shot up, investors have lost their patience for many of these firms, and have instead rotated into value-driven investments capable of generating income today. As the regulatory environment becomes increasingly difficult, we think that shift could well last.

WHAT IS A CAP RATE ANYWAY?

As monetary conditions have tightened over the past year, real estate analysts have revived a classic narrative about the relationship between cap rates and interest rates. According to that narrative,

[25] ONS
[26] ONS, CSI

interest rates and cap rates always move in the same direction, and they do so for mechanical reasons: when interest rates decline, cap rates must compress, and when interest rates rise, cap rates must expand. As we discuss below, even if this heuristic leads to successful predictions some of the time, it ultimately obscures a lot more than it illuminates. In particular, we think that it ignores dynamics that are especially salient in the current macro environment.

Start with some definitions. A property's cap rate is equal to its stabilised income divided by its value. "Stabilised income" could be construed in different ways, but we will use it to mean a property's expected NOI in the next year. "Value" refers to a property's value today. Thus:

$$Cap\ rate = \frac{NOI}{Property\ value}.$$

If we rearrange that definition, we get:

$$Property\ value = \frac{NOI}{Cap\ rate}.$$

If the value of a property should equal the sum of its discounted future cash flows, and that NOI is fully converted into cash flow, the Gordon Model describes the value of a property, with cash flows that extend into perpetuity and grow at a constant rate, in the following way:

$$Property\ value = \frac{NOI}{r-g},$$

where r is the discount rate that investors require as compensation for the time, risk, and illiquidity of their investment, and g represents the expected rate of NOI growth. Combining the two previous equations, it follows that

$$Cap\ rate = r - g.$$

Next, as we just suggested, we can interpret r as follows:

$$r = risk\ free\ rate + illiquiditiy\ premium + real\ estate\ risk\ premium.$$

It is difficult to decompose g in an analogous way. The model above assumes that expected NOI growth is constant. This assumption implies that investors cannot expect real estate in a given sector or location to ever undergo a period of structural growth, where expected NOI growth for that sector or location exceeds expected NOI growth for the real estate universe at large.[27] Yet actual cap rates clearly do reflect such expectations sometimes. So, it's useful (if not quite consistent with the model) to think of expected NOI growth as a function of expected supply and demand for real estate of a specific type in a given location. All else equal, higher expected demand leads to higher expected NOI growth, while lower expected demand leads to lower expected NOI growth. Alternatively, higher expected supply leads to lower expected NOI growth, while lower expected supply leads to higher expected NOI growth.

At least directionally, cap rates therefore depend on four underlying components: **(1) the risk-free rate, (2) the illiquidity premium, (3) the real estate risk premium, and (4) the balance of (a) expected supply growth and (b) expected demand growth, which determines the rate at which NOI is expected to grow.**

[27] If NOI for a particular sector or location perpetually grew faster than the average NOI for the entire real estate universe, then it would eventually exceed the aggregate NOI for all real estate everywhere, which is impossible.

Although interest rates fit into this picture in a few different ways—most significantly, by determining the risk-free rate—they do not tell the whole story. In particular, higher interest rates do not guarantee higher cap rates. The illiquidity premium, the real estate risk premium, expected supply growth, and expected demand growth all depend on underlying factors that interest rates influence only to a limited extent, if at all. For example, interest rates could rise at the same time that liquidity conditions improve in a given local market (due to improved economic fundamentals there). In this case, the illiquidity premium would decline, and the cap rate could well compress. Or, as we have discussed in the past, in the Central London office market, rental growth is expected to be strong for best-in-class, ESG-friendly buildings, which are undersupplied. This should tend to hold down cap rates. In short, we simply have no reason to expect that the effect of interest rate shifts on the risk-free rate will always dominate in the determination of cap rates.

Moreover, even where interest rates do influence these other variables, their influence pulls in different directions. Under some conditions, we might actually expect rising interest rates to reduce expected supply or increase expected demand, thereby increasing *g*. Even if higher interest rates increase the risk-free rate, their net effect on cap rates is ambiguous.

On the supply side, higher interest rates impose higher borrowing costs on developers. Since this discourages new development at the margin, real estate markets should react to higher interest rates by expecting supply growth to slow in the medium term. This should tend to increase *g* in the long term. On the demand side, higher (nominal) interest rates are sometimes a product of higher price-inflation in the wider economy. Although this means a higher nominal risk-free rate, which mechanically increases the cap rate, it should also coincide with increased nominal demand and therefore higher expected rents. This should tend to increase *g*, too. Within specific real estate sectors, higher interest rates could also increase real demand. For example, as interest rates rise, so do residential mortgage payments. Homeownership thus grows less attractive at the margin. This should tend to increase demand for rental housing and therefore expected NOI growth for that sector. On net, cap rates could rise, fall, or remain the same in any of these cases.

Ultimately, none of this implies that cap rates will not expand alongside interest rates over the next few years; that would be foolish of us to suggest (because they will). Our point is simply that investors should not take that claim for granted or see the impact as one-for-one; the interest rate is not the only thing that matters.

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