CASTLEFORGE

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ONLY THE PARANOID (OFFICE INVESTORS) SURVIVE

A corporation is a living organism; it has to continue to shed its skin. Methods have to change. Focus has to change. Values have to change. The sum total of those changes is transformation.[1]

The ghost of András István Gróf is very much alive and well over at Castleforge offices in London.

Andy Grove, as he then became known upon moving to the US in the late 1950s, was the much-celebrated CEO of Intel, often credited with transforming the company's core business from memory to processors in the latter two decades of the twentieth century. The results of recognizing the shift early were astounding for Intel: between 1980 and 2000, the company saw its revenues grow by a factor of 40, from $855 million to $34 billion, and its stock price soar from $0.18 to $35 (adjusted for splits). His other contributions to the field of management possibly left an even bigger mark on posterity. Anyone who has ever done an "OKR" (immortalised in former Grove subordinate John Doerr's *Measure What Matters*), or who works in the Silicon Valley ecosystem that the early VCs of the 80s and 90s helped to create, has Andy Grove to thank.

One of our favourite watches of late is an Andy Grove lecture to MIT students about what he terms "strategic inflection points," where a company's competitive environment undergoes drastic change, due (for example) to technological innovation, a shift in consumer preferences, or the emergence of a new regulatory regime. The analogy he uses is of a digital face transmogrifying into another face[2]. At the start and end point, each face is clear and distinct. But in the middle, all the pixels are jumbled, and it's impossible to tell what one is looking at.

Why do we like this talk so much? Lessons from Grove's strategic inflection points lecture can be found everywhere, including in the real estate industry.

Some ten years ago, a similar structural change was about to take place in the retail sector. It took most people the better part of ten years to figure out exactly what the new face was going to look like, but once they did, it forever transformed the way that real estate investors approached the retail and logistics assets classes. With the advent of a substitute product (e-commerce and the related logistics operations and infrastructure), instead of driving to the million square foot Bluewater mall in Dartford, on the south side of the River Thames, the million+ square foot Amazon distribution centre LCY2 at Tilbury Docks on the north side of the Thames now comes to you.

Intelligently investing in retail as an asset class was virtually impossible unless you had a good idea of what was going on in the first place. Only then could you create a framework to help you navigate what Grove in his lecture terms the "Valley of Death" – the middle part of the transformation where nothing you do using the old paradigm seems to be working. Only then could you determine if a product was "Amazon-able," or what the likely roll-out of e-commerce would be in the grocery sector, or what would happen if omni-channel became more important, or if "nail salon and ice cream parlour"-type strip centres would have a future and why, or any number of other considerations. Witness the recent success of the Crow Holdings recap of the nearly $2 billion portfolio of unanchored strip centres in the US that are still relevant purveyors of services that e-commerce can't touch.

We believe that these types of framework are particularly important in real estate, where a single-minded focus on inductive reasoning can sometimes lead investors to accept overgeneralisations,

[1] *Esquire* interview with Andy Grove (January 2007)

[2] Created using DALL-E. We had to give it a try!

which throw the baby out with the bathwater. When transaction data is limited or imperfect (or held by competitors), it is often better to create a top-down framework to guide one's thinking.

That brings us to the central theme of this paper. **We think that very much like the retail market a decade or so ago, the office market is going through its own strategic inflection point.**

Participants all across the real estate piste can certainly *feel* the decline in investors' desire to own office buildings. Covid seems to have been a turning point, with work from home ("WFH") bringing office cash flows and the business model into focus. Yet we believe that the office sector's challenges have actually been a long time coming. We began writing on the topic in 2017 and then again in 2019 with our thoughts on the WeWork phenomenon, and then elaborated on these themes in our 2020 paper, A Future for Offices.

As we wrote in that paper, we expected to see "offices being used in a more efficient way, potentially causing employers to need less 'traditional' office space overall." "What would take its place," we argued, "is a more flexible type of working." But our paper was focused on the demand side of the equation – why a *tenant* would want flexible office space. Although what's good for the tenant is often also what's good for the investor, this is not always the case.

Thus, expanding on that missing link from our last paper, we set out to answer the following question here: **Why should investors invest in flexible offices rather than traditional offices?**

After establishing a framework for our thinking about office investing in the first section of this paper, we then use that framework, in the second section, to explore how particular office subsectors have fared in recent years. Finally, in the last section, we consider how our framework might predict the future of the office market from an investor perspective, and show why we believe that certain types of office investments will do better than others once we are on the other side of Grove's Valley of Death.

A BROKEN BUSINESS MODEL?

Office Chart of the Year…

We believe the traditional office business model is broken. As we explain below, Figure 1 encapsulates why:

FIGURE 1. LENGTH OF STAY FOR UK OFFICE TENANTS[3]

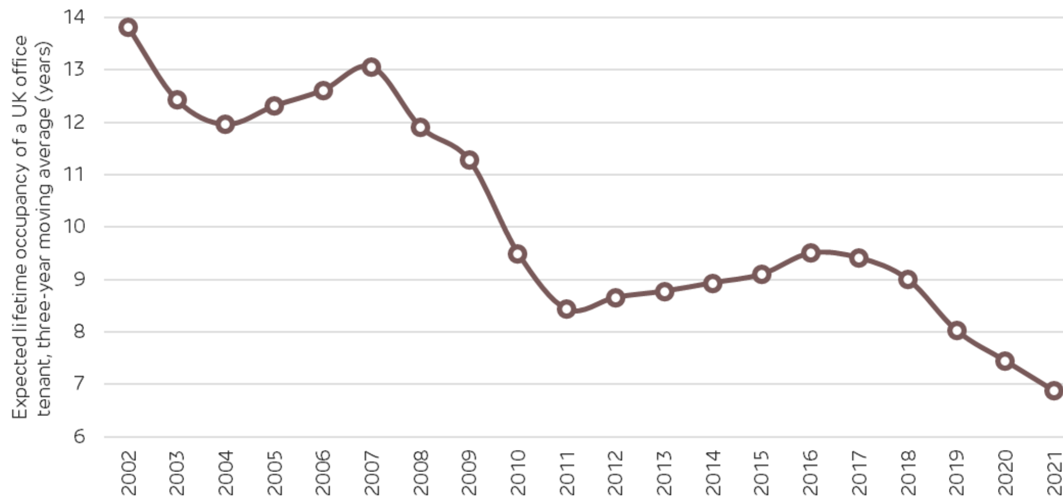


Figure 1 charts the expected "length of stay" of a UK office occupier, accounting for any breaks and renewals. It is *not* a measure of lease length: while the two are correlated, the problem with lease length is that it does not account for churn and customer retention. In the past, tenants would sign up for a 10-year lease with a break at year five. Then, not only did they stay the full 10 years, but they also typically renewed for another (almost) five years. Today that is not the case: not only do tenants not stay the full 10 years, but they also typically exercise their break half the time so that the average length of stay is between six to seven years. Notably, this trend preceded Covid and the rise of WFH by at least two decades, as the chart above illustrates. Indeed, Covid and WFH have only played a small part in the overall story.

…And Why We Think It Matters

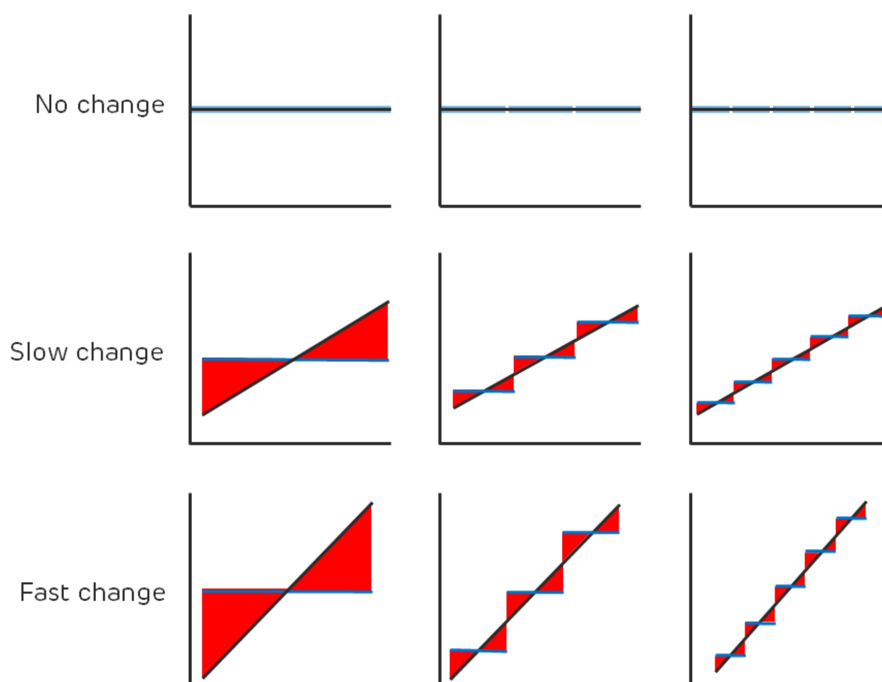
The reason this chart is so instructive is that it captures the dynamics of the office market in terms that other industries (outside of real estate) often use to evaluate business quality and market dynamics. **Namely, it shows that the lifetime value of the typical office customer has fallen in half over the previous two decades.** And yet, if one were to look at the customer acquisition costs ("CAC"), including re-leasing costs, broker fees, capital expenditures and tenant incentive ("TI") packages, one would find that they are virtually the same as they were two decades ago. Given the downward trajectory in the chart, investors are rightly worried about where this decline will end.

Why are tenants moving much more often? The simple answer is likely to be "technological progress," on which we cannot turn back time. We have written extensively in previous papers about how the move to the cloud and mobile internet has reduced switching costs, giving tenants the ability to move to new office premises more frequently than before. We have written also about how the seemingly increasing pace of change in business has created a desire on the part of tenants to match their

[3] Castleforge analysis, MSCI, Yardi, Urban Land Institute

personnel needs more closely by adjusting their real estate portfolios. As we have discussed in the past, Figure 2 shows that, as a tenant's operating business grows (or declines) at a faster rate, the tenant better satisfies its real estate requirements by taking shorter and shorter leases. An infinitely short period of time would be ideal, except for moving or switching costs, which are both real and positive, but have themselves been reduced through the use of flexible space options.

FIGURE 2. THE ADVANTAGES OF SHORTER LEASES FOR HIGH-GROWTH FIRMS



Ultimately, it is unlikely that the average lifetime value of an office tenant will revert to the previous average. Therefore, office investors instead need to understand how the lower lifetime value of their customers will affect their long-term buy-and-hold returns for owning the asset class. Even more importantly, investors should be searching for a corner of the office market that is not susceptible to this change, if such a corner exists at all.

When Is a 6-Cap not a 6-Cap?[4]

Why do core, income-driven real estate investors invest in the sector in the first place? That's a big question, but we believe that it has something to do with cash flow generation. Mike calls it the "lazy kids problem." You were clever enough to create a business that grew from nothing to £50 million of value (£5 million EBITDA at 10x), and now you want to ensure that your kids don't starve and also can maintain their lifestyle over time. You could hand them the business to run, but your lazy kids, unsupervised, could very quickly turn £5 million EBITDA in a widget-manufacturer into a loss-making operation. Poof – and it's gone. Alternatively, you could sell your £50 million and redeploy it into £50 million of real estate at a 6-cap. £3 million every year is enough for them to be lazy and still provide for their frequent trips to Miami to "get plugged in" to the NFT/crypto market. But there's a problem here with your 6-cap assumption.

Most real estate investors know that the stated cap rate, say of 6%, does not equal the true annual cash flow yield on the property, regardless of the asset class. One must still deduct a stabilised vacancy factor, tenant incentives, leasing commissions and irrecoverable operating costs from the stated yield

[4] (Answer: When it's a traditionally multi-tenanted office cap rate.)

to arrive at what Green Street calls the "economic cap rate" – that is, the long-term buy-and-hold IRR that one can expect from the asset class. Some assets incur very little of the above costs, and some are more cost-intensive. To this economic cap rate, one can add a long-term rental growth rate to arrive at an expected long-term buy-and-hold nominal IRR. Only then can one compare across asset classes to see which ones do well on a buy-and-hold IRR basis and which do not.

When it comes to offices, we've previously worked with Green Street on getting to the economic cap rate derived from a typical UK office asset leased on traditional leases on a multi-tenanted basis. As Figure 3 shows, the net result is that **a "6-cap" is really only a 3.6% IRR** (*excluding* long-term rental growth, which adds to the economic cap rate to get to a long-term, buy-and-hold IRR).[5]

FIGURE 3. INDICATIVE ECONOMIC CAP RATE FOR TRADITIONAL OFFICE

Traditional office model (all psf unless stated)	
Headline rent	£28.0
Stabilised occupancy	92%
Gross rental income	£25.8
Tenant incentives	(£5.6)
Furniture, fixtures, & equipment refresh	--
Leasing commissions	(£0.4)
Net effective rent	£19.8
Operating expenses	(£15.0)
Tenant contribution (based on occupancy)	£13.8
Net rental income	£18.6
Long-term structural capex reserve	(£2.8)
Economic NOI	£15.8
UK NIY	6.00%
Value (net of purchasers' cost)	£437
Economic cap rate	3.6%

Even more important than the result, however, is understanding the underlying assumptions behind getting to that 3.6% IRR. Customer acquisition costs and customer lifetime values ("CLVs") show up as two key assumptions in the gross-to-net spread above.

If we change that CLV to the most recent read of 6-7 years instead of vacancy once every 14 years, then the 3.6% IRR reduces to a 2.9% IRR—meaning that absent any movement in base rates, cap rates *should* be higher for multi-let offices than they were previously, *ceteris paribus*. To get the same actual buy-and-hold IRR as twenty years ago, the stated purchase cap rate would need to be 6.75% rather than 6%, forcing investors to run faster just to stay in the same place. **As a result, we believe that some of the widening of traditionally leased, multi-tenanted office cap rates over the past year is not strictly driven by the movement out in base rates, and could actually be here to stay, since it reflects a cumulative decade or two of changes to the office investment business model.**

What is an office investor to do? Office as a sector makes up 27% of the NCREIF index. It represents a huge asset class, held by many institutional investors. Investors could of course reflect the new

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[5] Another interesting listen on this subject is a podcast outlining Jim Chanos's short position on the data centre stocks—it all comes down to the stated cap rate on NOI or EBITDA being so divergent from the economic cap rate actually achieved.

reality into their thinking and just buy the same office investments at 75 basis points higher of a cap rate. **But, what if the trend continues? What if 6-7 years becomes 4 years?** Then the IRR reduces by another 60 basis points, meaning that investors would need to be adjusting cap rates not to 6.75% but to nearly 7.5%. And *that* is why we believe office investors are downright scared about what the future holds for the asset class.

Even worse, if office occupancy never recovers to pre-pandemic levels, it's highly likely that rental growth rates for offices in general will slow, due to persistent oversupply across markets. This could take another percentage or two off the buy-and-hold IRR. **The implications of the preceding discussion probably result in hundreds of billions of losses across the board—on average.**[6]

Thankfully, however, we don't *have* to live in the world of "averages," nor does any other investor.

One of the insights from the framework we've created above is that certain sub-sectors of the office asset class are less susceptible to declines in the typical length of stay, or have lower customer acquisition costs, or both, relative to the average office investment. So, much like how certain retail subsectors emerged largely unscathed from the "retail apocalypse," we expect certain segments of the office market to significantly outperform the sector at large.

GETTING BACK TO 15 YEARS

As we have just discussed, we believe that falling customer lifetime values combined with constant (or increasing) CACs will likely lead to significant declines in offices valuations on average. As a result, in order to avoid suffering those losses, office investors need to gravitate towards the parts of the office market that lack those negative dynamics. This is easy to say, but: (1) what does it mean in practice? (2) Are there sub-sectors of the office market that are impervious (or at least less susceptible) to those average negative dynamics? And perhaps more importantly, (3) what is the market now telling us about how those sub-sectors are faring?

As we look around the market for evidence of how long-term buy-and-hold investors are pricing office assets, we can see a clear gap opening up between the cap rates of buildings that only a few years ago would have priced at around the same level.

The Good

We first focus on those buildings with long term leases of 15-20 years or more, where the business model today is similar to the business model of 20 years ago—with a predictable cash flow stream achievable over a long-term horizon, where all the deductions from the gross or stated cap rate can be accounted for from the outset. For example, high-quality headquarters-type buildings still show the same general leasing dynamics that they did in the past: HSBC is reportedly about to sign a 20-year lease at over £90 per square foot on 500,000 square feet in the City of London, and that lease will likely provide approximately three years' equivalent of TIs as an incentive for the tenant to fit out its space. The buyer of the finished product will be able to determine its economic cap rate as per the above schedule in the same way that it used to over the long-term hold. Our redevelopment of Winchester House will fit into this segment of the market.

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[6] A recent paper by NYU and Columbia economists ("Work from Home and the Office Real Estate Apocalypse") estimates that work from home will reduce US office values by about 40% in aggregate, representing about $450 billion of value destruction. Even if the magnitude of their prediction turns out to be wrong, investors cannot dismiss their conclusions. Notably, however, the authors also point out that "the effects [of work from home] are not uniform across properties" and that it is the "lower quality office stock [that] appears to be a more substantially stranded asset."

Indeed, the market is telling us that not much has changed from a valuation perspective, either. Recent sales in London prove out this point, even in a post-2022 world: see, for example, Landsec's £350 million sale of 1 New Street Square in Holborn at a 4.7% cap rate in January 2023, or Helical's £160 million sale of Kaleidoscope in Farrington at a 4.3% cap rate in September 2022. Both buildings are large, single-tenanted, new-build offices with long-term leases to credit tenants. While these sales prices may be slight discounts to those seen in the heady days of 2021, prime cap rates in the 4.00-4.75% range are no different than they were from 2013-2018.

But there is a caveat to all of this.

The Bad

Fewer tenants are taking leases of 15 years or more, and when they do, these tenants are typically large multinational corporations taking huge amounts of space. HSBC might have been happy to take 500,000 square feet for 20 years, but the typical 50,000 square foot lease is unlikely to be signed for any longer than 10 years, and at 5,000 square feet it's more likely five years with a break at year three. Even most tenants taking 75,000 square feet—tenants that almost certainly would have signed at least 15-year leases a decade or two ago—are now looking for a break option at year 10 or even at year five. What's more, these large tenants increasingly demand office space that spans as few floors as possible, preferring "ground-scrapers" (rather than small-floorplate towers) that allow employee teams to interact more easily. (After all, in-person interaction is the reason those employees are coming into the office.)

Location, too, is a new red line for these major multinationals. HSBC is leaving Canary Wharf to sign in the City. Clifford Chance is leaving the Wharf for Liverpool Street. There are talks that Credit Suisse will do the same and consolidate into the UBS building in Liverpool Street. In short, it is clear that the large companies still taking 15-20 year leases no longer want to be in certain locations. As a result, the office buildings in those locations—regardless of how large and how cheap, and regardless of their ESG credentials—will find it increasingly difficult to lease to those types of tenants.

What this implies is that far fewer buildings will be able to attract the 15-20 year leases needed to get back to the good old days of 2003. Since 5-10 year leases (especially in single-let buildings) do not allow building owners to confidently predict their long-term buy-and-hold IRR, those buildings are suffering. Which is all to say: if an office investor wants to secure the best tenants, on the types of leases that will attract cap rates similar to those of the past few years, then projects need to be 100,000 square feet or more. Anything smaller and the exit is open to the problem of ever-shortening lease lengths for the average tenant.

The Ugly

That leaves us with "The Rest": a set of multi-tenanted buildings that generally require major refurbishment, are in the wrong location, are too small for major multinationals, or lack the floorplates needed to attract the kinds of tenants still willing to take long-term leases. These buildings typically suffer from at least one of the following unattractive features: they have a relatively small number of tenancies that reflect a large percentage of their overall occupancy (often 15%+); there is limited visibility on vacancy until it is too late (6-9 month notice windows for breaks and none for expiries); and the TI packages and capex requirements for re-tenanting can often exceed a couple years' worth of NOI. Unless investors in these assets have other pockets of capital on which to draw, where does that money even come from?

The only thing that prevented these buildings from losing value up until this point was ever-decreasing financing costs. Lower financing costs (1) allowed for a carry trade that appeared attractive

on day-1 purchase NOI, and (2) enabled investors to finance customer acquisition costs at a cheaper and cheaper rate over time, thus hiding the real ongoing costs of ownership. Now that this dynamic has ended, the ugly business model of traditional-only multi-tenanted offices has come to light.

WHAT THE FUTURE HOLDS

Now that we have set up a framework that clarifies why we believe offices are a challenged sector, and have tested the framework in the context of the comparative performance between offices that can hold the customer lifetime values firmly at the traditional 15-25 years and those that cannot, we move on to consider what the future may hold.

Follow the Fortune 500

We believe that HQ offices will do well, but as we noted above, few existing office buildings meet the new requirements of large multinational companies. Nor do large multinationals appear in all cities around the world. Only the alpha cities or gateway markets likely possess the ability to draw the types of multinational tenants willing to sign 15-25 year leases at rents attractive to office owners. (These firms effectively regard their rent payments as recruitment expenses, since they represent only a small fraction of total labour costs and enable the firm to attract and retain top talent.) Cities in Europe like London, Paris, Amsterdam, Madrid and Munich and a few others would fit the bill. We doubt that secondary and tertiary cities will typically be able to attract the kind of companies that pay top dollar on long leases. Accordingly, we prefer to focus on the other bookend of the office market for these sorts of cities: flexible offices.

Cash(flow) is King

We believe strongly in secondary cities across Europe, even if we do not think that these cities will be the preferred locations for the big headquarter buildings we think should do well over the medium term. And now that WeWork and the other asset light operators have largely bit the dust (or changed their business model to a more successful version), even gateway markets aren't being flooded with flexible office operators willing to take leases they have no intention of ever paying. Plus, with the realisation by investors that traditional 50,000-odd square foot multi-tenanted buildings leased to 3-8 tenants is a recipe for disaster, prices are coming down fast. This combination of factors is making it possible to purchase offices all over Europe and lease them up using our Clockwise operator to unlevered yields in the double digits in most cases.

To be sure, the expected length of stay for a typical flexible office customer is even lower; instead of 6-7 years, our Clockwise tenants stay for about 3-4 years. But (1) we have an organisation of 175 people working day in day out to manage that increased complexity and (2) we then charge more for the increased flexibility, which results in a total customer lifetime value of approximately the same level.[7] What Clockwise does is reduce the customer acquisition costs over time, since there is no requirement to completely overhaul the office space every time a tenant leaves, and because the smaller average tenancy size reduces downtime between leases. Just as it would be absurd to refurbish a hotel room every time a customer checked out, so it would be with flexible offices.

However, perhaps the greatest virtue of the flexible office model, as Figure 4 below shows, is that a 6-cap really is (very nearly) a 6-cap.

[7] NOI in Clockwise is typically 50-100% higher than in traditional office space, and so 3.5 x 1.75 = 6.1

FIGURE 4. INDICATIVE ECONOMIC CAP RATE FOR FLEXIBLE OFFICE

Flexible office model (all psf unless stated)	
Headline monthly rent per desk	£425
Headline annual rent per desk	£5,100
Square feet per desk	70
Stabilised occupancy	85%
Gross rental income	£61.9
Tenant incentives	--
Furniture, fixtures, & equipment refresh	(£4.1)
Leasing commissions	(£1.0)
Net effective rent	£56.8
Operating expenses	(£22.0)
Tenant contribution	--
Net rental income	£34.8
Long-term structural capex reserve	(£5.6)
Economic NOI	£29.2
Valuation at 6% (net of purchasers' cost)	£544
Economic cap rate	5.4%

This is because flexible office NOI takes into account all elements that traditional office leasing leaves out, like structural vacancy, maintenance and releasing costs, irrecoverable CAM, FF&E reserves, marketing costs and even operational and corporate overheads.

Where the Public Market Is Embracing the Bookends, the Private Market Will Follow

Finally, the market increasingly recognises that these two bookends—HQ-style and flexible—will represent the most successful office sub-markets over the longer term. For example, in its April 2022 market day report, the UK REIT Great Portland Estates (GPE) laid out a new strategy that will guide its activities in the office sector going forward. This strategy buckets GPE's office portfolio into three categories: (1) HQ-style buildings (or buildings that can be transformed into these); (2) buildings that can entirely become flexible offices operated by GPE; (3) and buildings that GPE will sell. It's not often you get a message as transparent as this one, and the public market has long regarded GPE's management team as one of the best in the business. Further reinforcing its commitment to the strategy, the company recently made a number of acquisitions, including 141 Wardour Street in Soho, a ~35,000 square foot building it will refurbish and entirely transform into a 100% flexible office operation.

GPE's new posture is particularly telling because UK REITs, unlike many US REITs, typically trade on NAV, rather than on cash flow or adjusted FFO. As a result, GPE's announcement suggests that the REIT is confident its portfolio will not be marked down by valuers (who will be using the RICS Red Book standards), even as "20% of [GPE's] total area [is] producing NOI from flexible office solutions by 2027." This confirms a meaningful shift in market perceptions, signalling that investors and valuers are willing to accept income from flexible offices as long as it is managed by a professional operator with a coherent strategy and a track record of delivering consistent cash flow.

At Castleforge, we too have moved into these two categories of offices only: flex and "best-of-the-best" HQ repositioning. Take for example our recent acquisition of Winchester House and the ability to deliver some 500,000 square feet of ESG-credentialed offices to a central London market that is

in short supply (so short that HSBC recently signed up four years in advance to move from its 1.5 million square foot office in Canary Wharf into a 500,000 square foot refurbishment in the City, at rents 10-20% above pre-Covid levels).

Likewise, Clockwise (our flexible office platform) is well-positioned to outperform the overall flexible office market, where barriers to entry may be low but barriers to *successful* entry are very high. In addition to Clockwise's office-related service offering, we have an expansive set of other amenities that make tenants want to join our product, and then stay with us well beyond the length of their initial contract.

THE TRILLION DOLLAR TAM

Strategic inflections present serious challenges to investors and operators. Since market participants cannot know with any certainty what their industry will look like on the other side of the Valley of Death, major business decisions are inherently risky. Even more, established practices and past experiences cannot guide investors and operators through the strategic inflection because the transition creates fundamentally new market conditions, which are not amenable to old ways of doing things. Even if most managers could accurately forecast how their industry will evolve, translating that view into concrete results involves a further set of challenges.

As a result, strategic inflection points always produce losers: the once-great firms that suddenly found themselves on the wrong side of a major transition, failed to adapt in time, and wound up tumbling down Grove's Valley. (Consider Blackberry, a company that was once the vanguard of the smartphone revolution, until the iPhone supplanted it. Blackberry's revenues went from $1 billion in 2005 to $20 billion in 2011, and then back to $1 billion by 2018.)

At the same time, strategic inflection points also create tremendous opportunities. Like Intel during the last few decades of the twentieth century, the organisations that manage to navigate through strategic inflections will often achieve enormous success, not just survival. This is particularly true when the strategic inflection occurs in a trillion-dollar industry—like office real estate—where decades of relative stability have nudged some of the industry's oldest and largest players into complacency, and created an environment ripe for disruption by nimbler, more innovative firms. Under these circumstances, the winners that do emerge often win decisively. (Again, consider the Blackberry and iPhone example.)

Winning is easier said than done, though. To capture the opportunities produced by strategic inflections, investors must be (1) fundamentally correct about what type of competitive landscape awaits them on the other side of the Valley of Death and (2) capable of acting on that knowledge, by executing a strategy that creates and captures value in the new environment. Market participants stand a good chance of successfully navigating strategic inflection points if (and only if) both conditions are satisfied.

After two decades of declining customer lifetime values, stated cap rates have decoupled from the actual buy-and-hold IRRs that investors can expect to receive by owning traditional office real estate. As a result, stated cap rates no longer measure the underlying quantity that matters most to income-driven real estate investors. This decoupling has concealed the increasingly wide disparities in the performance of different office subsectors. The framework we developed here illuminates those disparities, by focusing on economic cap rates, which accurately represent an asset's ability to generate stable, long-term cash flows.

This yields a much clearer picture of the office market's current dynamics. In particular, we have shown that two segments of the market—HQ-style and flex—continue to generate attractive cash

flows, despite a meaningful deterioration in the overall sector's traditional business model. As real estate investors come to grips with this reality, asset prices should adjust accordingly.