CASTLEFORGE PARTNERS

8 October 2019

Dear All,

It is our pleasure to bring you the latest letter, which we felt would be a good opportunity to run through our activities in the context of one of the busiest times our company has ever seen. Recently we have been experiencing a healthy flow of potential investments at attractive pricing, achieving a number of successes within our operational activities, and engaging in numerous positive discussions with investors. We don't know where the summer went, but it is great to be busy.

Over the past three years we have seen quite a bit of political volatility, not only in the UK but throughout the globe. Starting our firm in 2010 in the wake of the financial crisis and just before the Euro crisis, we have always kept an eye on the potential impacts of political uncertainty and have designed our portfolio to be well positioned not only to weather these events, but potentially to thrive in volatile environments. Because we focus on acquiring mispriced assets in good locations, below fundamental replacement cost and with an attractive cash flow profile, the least attractive investment environment for us is actually one in which most people broadly believe the economy is improving and values will grow.

Thankfully, today's uncertain UK environment has already caused a downward repricing of assets in a variety of submarkets. Although we believe fundamentals are in place for values to increase during our hold period, many market participants do not seem to recognise these factors.

In the following pages we first discuss how construction costs have increased rapidly over the past two decades and how, combined with a continued increase in costs under any Brexit scenario, this is likely to lead to higher rental values. Next we examine our mid-market multifamily business, Ocasa, which we believe is well positioned to see strong relative rental growth due to rising construction costs, increased demand for affordable rental housing and certain other policy developments. Then we turn to the interaction of so-called "permitted development rights" and increased re-urbanisation, which we believe will lead to higher equilibrium rent levels in certain English cities. Finally, we examine our flexible office/co-working operation, Clockwise, which we believe is relatively well positioned to take advantage of a number of trends affecting office markets.

They Don't Build Them Like They Used To

Over the past 20 years, the UK property industry has seen a substantial rise in construction costs. We believe that this rise in construction costs has led to a secular increase in the equilibrium level of rents across the property spectrum as the replacement cost of buildings has increased. Here, we argue that future rents and building capital values should grow to reflect this input cost increase to a greater extent than it has in the past.

According to cost consultant reports, since 2000, construction costs have outstripped consumer price inflation by an average of nearly 60% every year. As we approach Brexit (repeatedly) we continue to consider how this event will impact the main inputs of construction in the UK. Construction costs are comprised of two main inputs: raw material and labour. According to industry reports, in a typical construction project labour comprises 25-50% of direct, on-site costs. However, according to discussions we've had with UK house builders looking at total value add, labour costs can comprise a supermajority of all costs.

On the materials side, the UK imports over £10 billion of building materials from the EU per year. The cost of these materials in post-Brexit world is as yet unknown, but it is likely that prices will increase under any new trade agreements, as increasingly materials will have to be sourced domestically or from other jurisdictions at a higher price, thereby fueling the upward trajectory of current build costs.

The labour side is even more important, and here the UK is likely to lose a portion of its construction labour force in the wake of Brexit. According to the IPPR, a UK think tank, the proportion of EU-born (ex-UK) workers in construction has risen nearly five times since 2003, now making up nearly 10% of this workforce. In London, this proportion is higher, with around 30% being EU-born. Even without a departure from the EU, the labour situation has become increasingly dire for the UK construction industry. The UK's workforce is ageing rapidly, with over 50% of the UK-born construction workforce over the age of 45. This situation is only going to get worse as the population continues to age, resulting in even more job vacancies and hence increased costs within the industry.

So, what does this mean for investments? On the one hand, construction costs comprise a significant portion of the all-in basis on many value-add projects so all these projects become more costly to deliver. This can surprise investors who do not have specialist construction expertise in-house. Here at Castleforge we frequently purchase assets at a basis (including all refurbishment costs) around or even below build cost. This means that we are able to buy standing assets and reuse existing fabric, reducing the amount of construction we need to do to deliver new commercial or residential space. Relative to competing ground up developments, our investments are typically finished to a lower overall basis per square foot.

More importantly, though, the upward march of construction costs means that the overall replacement cost for buildings should continue to increase, and this will likely have a material upward impact on the market equilibrium rental level. Today, the cost to build a new office building to Cat A spec in a regional market is roughly £320 per net rentable sq ft (excluding land; including assumptions for fees and gross-to-net), whereas in 2000 that number was £130 per net rentable sq ft. Liverpool prime rents at the end of 2018 stood at roughly £21 per sq ft, virtually the same level as in 2007, and not much higher than a decade or two earlier. This of course begs the question of how the city intends to deliver new Grade A space absent a rise in Grade A rents (one answer is that it simply did not need to, until recently).

Readers may rightly ask themselves why this cost increase has not been reflected in rents to date. We believe a couple factors are at play. As cap rates for finished Grade A office buildings have trended downward over the past three decades along with a fall in interest rates across the board, developers have been willing to accept a lower development yield on cost (i.e., "building to a 10 and selling at an 8" is not too different from "building to a 5 and selling at a 4"). As a result, building costs could increase materially while rents could remain roughly the same, and developers could make the returns pencil out. Going forward, we cannot count on another 30 years of continuously decreasing cap rates to keep deals penciling as construction costs increase, at the same rents.

More importantly, many English cities historically had an overhang of space due to the difficulty of changing office to other uses. Buildings that had been mothballed in previous cycles could be taken off the shelf and refurbished, thus quickly producing a steady supply of newly refurbished Grade A space. Now supply is near long-term lows, and at exactly the time that these cities are repopulating, a 2013 piece of legislation called Permitted Development Rights came into place, allowing "as of right" conversion of office to higher value residential. This has permanently reduced the potential office space available for refurbishment, since a meaningful proportion of it has been converted to residential accommodation. More to discuss later on in this letter.

In short, we believe that rents across key markets in the UK will have to increase, as the addition of new supply should decelerate or require higher rental levels to enable delivery as construction costs continue to increase.

Housing for Everybody!

Due to rising construction costs and embedded planning constraints, on the supply side of housing we expect that the replacement cost of new homes should continue to increase, putting upward pressure on both house price and rental levels. Separately, on the demand side, we see increased demand for privately rented properties, particularly among lower-income households, as increases in house prices and required deposits relative to incomes has led to significantly decreased levels of housing affordability post 2008. We believe that this dynamic presents a very interesting opportunity in the market for mid-market residential properties.

The increase in the demand for privately rented properties in the UK has grown significantly in recent years. Across the UK there has been a substantial decline in homeownership, particularly among younger generations. For example in the 25-34 age bracket, homeownership rates fell from 64% in 1991 to 34% in 2016. Further, the total number of households in the private rented sector increased from 2.8 million to 4.5 million between 2007 and 2017, a 61% increase, compared to the number of households in the owner-occupied sector remaining at a broadly consistent level.

Even among owner-occupiers we've seen a change: from 2007 to 2017 households owning their properties outright increased by 19%, whereas households buying with a mortgage decreased by 15%. Part of this relative fall in mortgaged buyers can be attributed to increased deposit requirements (certainly we have seen a big jump in the proportion of buyers relying on friends and family loans to afford their house), but it can also be attributed to increased prevalence of private buyers purchasing additional residential properties to rent out given the minimal yield they could earn through bank products or bonds. Given the residential supply constraint, minimal real wage growth historically, and the recent competition from buyers seeking a financial product instead of a home, we believe the affordability problems for younger generations should continue.

Turning to lower-income households, these are being pushed out of social housing into the private rented sector, largely as a result of a lack of funding for councils to build social housing. Over the last 10 years the percentage of households in private rented accommodation has increased from 13% to 20% while the percentage of households in social rented accommodation has decreased despite lowered housing affordability. Specifically among households in the bottom two income quintiles, the percentage of private renters increased from 14% to 22%, predominantly caused by a fall in social rental tenancies for the people in this income profile. Thus, the most at-risk households are effectively being pushed from secure government tenancies into more uncertain private tenancies.

Due to the growth of the private rented sector in the UK, particularly among lower-income households, tenants have become more focused on the quality of housing provided by landlords, and there is a growing demand for professionally managed properties. Many developers have decided to target build-to-rent developments aimed at the higher end of the market, but these schemes do not meet the needs of lower- to middle-income households, who constitute the majority of rental demand, due to the rental levels needed to justify the build costs of these projects.

As an example, one build-to-rent development we know of in Liverpool is pitched at a rental level that only 3% of households in the city can afford to pay based on a typical household housing spend of after-tax income. These households are also the same ones that are most able to purchase a house, further reducing the addressable market. We believe it is more defensible to target the lower- to middle-income segments of the market, as this permits us to target a much deeper market with our rented housing product.

Even more, we believe that this less affluent segment of the market should be more resilient in a post-Brexit environment. These households may even see a relatively more rapid rise in their income levels, as the supply of lower-skilled labour would be expected to decline as competitive EU-born workers would likely either return home or not come to the UK going forward, and research indicates this competition has historically limited wage growth for low-skilled labour. Because households generally spend a reasonably predictable proportion of their income on housing, we believe that higher wages could translate into higher levels of rent while still maintaining affordability for our target mid-range market.

The UK rental residential market is highly fragmented, with 98% of units owned by private individuals. Given the focus on professional management and avoiding poor landlord treatment of lower-income tenants, the government has sought to professionalise this market. Specifically, in 2016 the government reduced the ability of private landlords (but not corporates) to deduct mortgage costs on buy-to-let properties from personal income taxes. Even more, new lending restrictions reduced the LTV for average buy-to-let loans from approximately 80% (which was historically more akin to personal mortgage terms) to 57% (a level more consistent with what a bank would lend a corporate landlord). Rather than refinance and inject additional equity, many owners have simply preferred to sell, often to owner-occupiers. The cumulative effect of these changes has been to reduce the supply of properties available to rent and to allow professionalisation of what was historically a "mom-and-pop" industry.

In summary, we are excited about the positioning of the Ocasa business, which offers professionally managed flats at affordable prices. Our low level of target rents is likely to remain affordable for a large portion of the population, and we are minimally reliant on rental growth, keeping assumptions in line with wage growth. We see the requirement to rent lasting for longer for a large proportion of the population and believe we are well positioned to offer a great solution for these tenants, especially with the backdrop of fundamental housing supply constraints.

When the Facts Change, We Change Our Minds

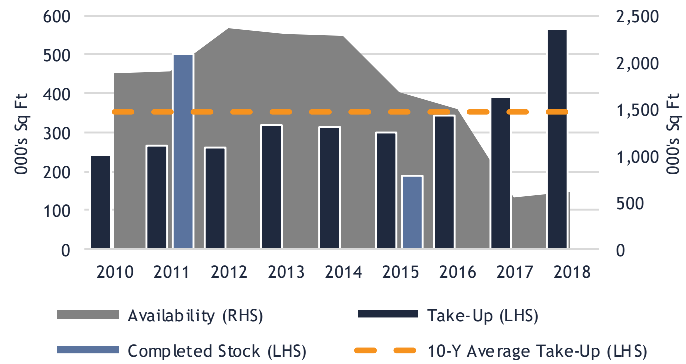
Moving away from the residential market back to offices, one force we have seen shaping the office supply landscape in certain English cities is a specific piece of legislation that allows owners to convert offices into apartments, as of right. Over the period in which this policy has been in effect, we have also seen an increase in the population in the same cities in which the policy applies, particularly among the younger and more educated population, as the trend of regional re-urbanisation continues. This has of course had a significant impact on the supply-demand dynamic in these cities, and we believe this will lead to a higher equilibrium rental level. However, we believe many of the UK real estate industry's more established players, so used to the dynamics that dominated the regional investment market throughout their working careers (declining populations and no as of right change of use), are ignoring these trends by using out of date facts.

Since May 2013 owners of commercial office buildings in England have had the right to convert these buildings to residential uses "as of right" under a framework known as office-to-residential permitted development rights ("PDR"). This is the first time the adaptive reuse of redundant office supply has been made easy since 1947. Consequently, in areas where residential values exceeded office values, large amounts of stock have been converted to flats, reducing office stock levels.

PDR automatically applies in most of England; however, major Zone 1 London office markets, like the City, the West End, Canary Wharf, Midtown, South Bank and Shoreditch, are exempt from PDR. This effectively means that redundant office stock takes longer to be reabsorbed and supply overhangs are permitted to exist for longer in these central London markets. Since the programme's inception, there has been an annual loss of over 10 million sq ft of office space across the UK, nearly all of which is outside Zone 1 central London, resulting in a permanent structural reduction in office space.

Looking at key regional markets, we've seen that some cities, like Bristol, Leeds and Birmingham, could each lose between 1-3 million sq ft of office space to PDR. In Liverpool, as set out in the accompanying graph, we can see that from 2013 to 2018 the availability of office stock fell from 2.3 million sq ft to 0.6 million sq ft, while take-up increased by 0.3 million sq ft across the same period. From this we can see that PDR has clearly had a massive impact on the supply of offices in Liverpool relative to demand, and this dynamic is also at play in other cities in England.

Liverpool Office Market



Adding further upward pressure on rents, during the same period of time as PDR has been in force, we have seen a general repopulation of many of these same English cities, as the growth of the knowledge economy has led to increased agglomeration benefits for companies looking to compete and retain an increasingly educated and specialised labour force. In particular we have seen large proportions of former university students remain in the city where they studied (for example, 46% of Glasgow's students remained in the city post university in 2018), which is very different from the more typical dynamic 20 years ago of moving to London after university to begin one's career. We believe this regional city repopulation is set to continue, particularly among younger age groups. In Bristol, for example, the population of 25-40-year-olds is expected to increase over 20% over the next 25 years, whereas in England it is only expected to increase by 2%. As this working age population increases, so does the demand for office space in these cities.

Thus the facts have changed. What we see is that in many English markets (outside Zone 1 central London), PDR has permanently reduced the supply of commercial office stock, while at the same time re-urbanisation has led to a population increase. Going back to economic analysis, a leftward shift in the supply curve combined with a rightward shift in the demand curve leads to an increase in the equilibrium price level, here meaning rents. Taking this in combination with the strong trend toward higher construction costs, and thus higher replacement costs for office stock, it seems sensible that this movement toward higher equilibrium office rents in regional English cities should march upward at an accelerated pace.

Clockwise: Building a Better Mousetrap

Because increasing construction costs, PDR and migration to regional cities continue to put upward pressure on equilibrium office rents, we believe that by being able to selectively implement our flexible/co-working office business, Clockwise, we are in position to outperform our competition on asset management while capturing these trends. We operate Clockwise in three of our current investments in Belfast, Glasgow and Liverpool, and we are delivering others elsewhere in our focus markets.

Clockwise adds significant value to our investment portfolio through several key avenues. First, the income profile generated by Clockwise operations helps us to outperform a traditional office leasing strategy. For example, in Liverpool at Edward Pavilion, had we approached this investment entirely as a traditionally leased office, following a refurbishment to Cat A spec we would have achieved an all-in unlevered basis below £190 per sq ft against projected rents of about £18 per sq ft (with roughly £20 per sq ft lost upfront to tenant incentives), thus generating an unlevered yield on cost of approximately 9-10%. However, by refurbishing the building to a fully fitted and furnished standard in roughly half the building and leasing that portion of the building through our Clockwise operation, we increased our all-in unlevered basis by about £60 per sq ft (while removing half of the tenant incentives) and increased our projected stabilised net operating income by about £14 per sq ft to total over £30 per sq ft in rent achieved net of operating expenses and maintenance reserves. This brings our total projected unlevered yield on cost up significantly to nearly 13%. We believe the incremental 300-400 bps development yield on cost compensates for the higher cap rate that would be used to value the portion of the building with a shorter-duration income profile.

This improved income profile allows us to be patient in the execution of our business plan: we can receive a high unlevered yield on cost while we wait for the right part of the cycle to exit these investments while using refinancing as a means to “stop the IRR clock”. This ensures that we can maximise the terminal value of these investments and capture the full upside of additional development activities even in the face of continued political uncertainty.

The second area of added value brought about by Clockwise is that by servicing a range of small- and mid-sized tenants Clockwise allows us to access nearly the entire leasing market in a given geography. In this way, we are able to tap into a higher volume of potential transactions, allowing us to lease up buildings more quickly and to better weather any demand contraction. Compared to a traditionally leased building where one is dependent on signing a small number of large leases (and where demand can be quite volatile), in the flexibly leased arena we are instead dependent on signing a larger number of leases of all sizes. Because the broader leasing market is often much more active, we are seeing a much less volatile lease-up profile. We are also much less dependent on agents, which improves our net rent and gives us direct access to the customer. Negotiation time for each flexible lease is drastically reduced with a standard contract, rather than asking tenants to enter a bespoke negotiation on every small lease. And, when compared to traditionally leased space, when a tenant leaves we are typically exposed to smaller vacancy risk, as we are dependent on a much higher number of leases. Assuming we structure our tenant mix carefully, no single tenant can materially swing the income profile.

Third, Clockwise allows us to operate buildings with unique or idiosyncratic floor plates in ways that traditional office developers cannot, as we are able to create smaller, less regular office spaces which we then combine in the same building with more regular office floor plates. This allows us to more reliably refurbish, lease and stabilise characterful buildings in key neighbourhoods where re-urbanisation and PDR have created an improved supply-demand dynamic. For example, at the end of last year we acquired the former town hall in Bromley, a neighbourhood in South London, from the council, following a failed sale process. Because we were uniquely positioned to deliver Clockwise, which allowed us to create higher occupational density across the complicated and quirky floor plates, we have a number of ways to outperform with this beautiful heritage asset in the centre of a growing and dynamic outer London neighbourhood. We continue to look to access these types of projects, particularly directly from councils, who have seen big budget cuts in recent years (some of 50% or more), and we have been seeing more of these opportunities coming our way.

Finally, Clockwise allows us to move tenants within and across our building portfolio as the tenants grow, which provides more opportunities to capture leases not available to the market at large. This translates to lower overall leasing risk and ownership over our leasing pipeline, a powerful tool in any part of the business cycle. For example, in Belfast at River House, we are traditionally leasing eight floors and operating Clockwise on the five remaining floors. On the initial opening of Clockwise in November last year, a tenant leased two desks. The tenant subsequently grew to occupy 40 desks and has recently decided to make Belfast its 150-person global R&D hub, now leasing up to two floors of traditional office space. It was not only the offering of both traditional and flexible office space that enabled us to convert this tenant: our Clockwise general manager kept us up to date with the tenant's requirements, meaning we had live, real-time information as opposed to the second-hand information that we may have received from an agent. Because agents can often be incentivised to act contrary to our best interest (for example by being paid more to move a tenant than retain them in the same space or vice versa dependent on the contract), owning these tenant relationships ourselves provides long-term benefits.

Overall, Clockwise offers numerous advantages to our investments: higher stabilised cash flow, a more robust and broad-based leasing pipeline, broader acquisition opportunities and a higher degree of control over the landlord-tenant relationship. All of these contribute to an improved return to our investors and a reduction in the leasing risk of the property. Clockwise is a valuable weapon to have in our arsenal. We have seen a number of other large landlords such as Hines, CBRE, Grosvenor, British Land and others begin to offer a flexible leasing product of their own. We believe that eventually flexible office will be a standard part of the repertoire of most large landlords, but until then we believe we have an excellent competitive advantage.

A Tale of Two Cities

When Brandon and Mike were walking by a Boston construction site recently, they noticed that a lot of the workers were wearing union hats and t-shirts. They were also surprised to see all the posters on the site advertising union memberships. The lack of unionised labour in the UK construction industry and on construction sites is something that we in London take for granted, but that is a very different dynamic compared to many other places in the world.

While there once was a construction union in the UK known as UCATT, its membership dwindled over the years from a peak in the 1980s to approximately 55,000 people in the UK in 2014 (compared to 2.4 million construction industry jobs, that's just 2%), and unionised labour is not at all powerful or even a force to be considered when selecting contractors for our refurbishment projects. As a postscript, financial losses at UCATT resulted in its inability to continue as a going concern and forced it to merge with UNITE, a broader representative union of workers in all sectors.

Without unionised labour or institutionalised job protection, Mike and Brandon believe the UK construction workforce has been a particularly volatile place for individuals working within it, and therefore it has not been conducive to building and retaining high-quality skills or management-level employees. It's just not a place to build a career, which is different than in the US or on the European Continent.

And now consider this. The last time Mike and Brandon walked about a construction site in London, Mike managed to pick out and translate some choice Hungarian expletives for Brandon. Reflecting on this, it all begs the question of how a skills shortage that already exists in the construction industry is going to be filled in a post-Brexit environment, without the ability to import labour quickly and cheaply from other European countries. Sure, both Boston and London have a high component of foreign-born labour in the construction industry. But the way that London got there historically is about to be dramatically altered, and we question what happens as labour mobility and immigration becomes more difficult for the UK construction labour force in the context of a smaller country with poorer demographics than the US.

The construction cost increases that we discussed previously could be a much more powerful driving force than even we anticipate, having far-reaching implications across the entire real estate industry.

Conclusion

We hope you have enjoyed this letter, recapping our thoughts and activities across the UK. We are very excited by the current environment given the disconnect between short-term pricing and some of these structural fundamentals that we are able to take advantage of with an embedded competitive advantage. We hope to share news of some interesting portfolio changes in the near future as developments continue. As always, please let us know if you would like to delve into anything in more detail and we wish you a wonderful fall.

Best Regards,

Brandon Hollihan   Mike Kovacs   Adam MacLeod