

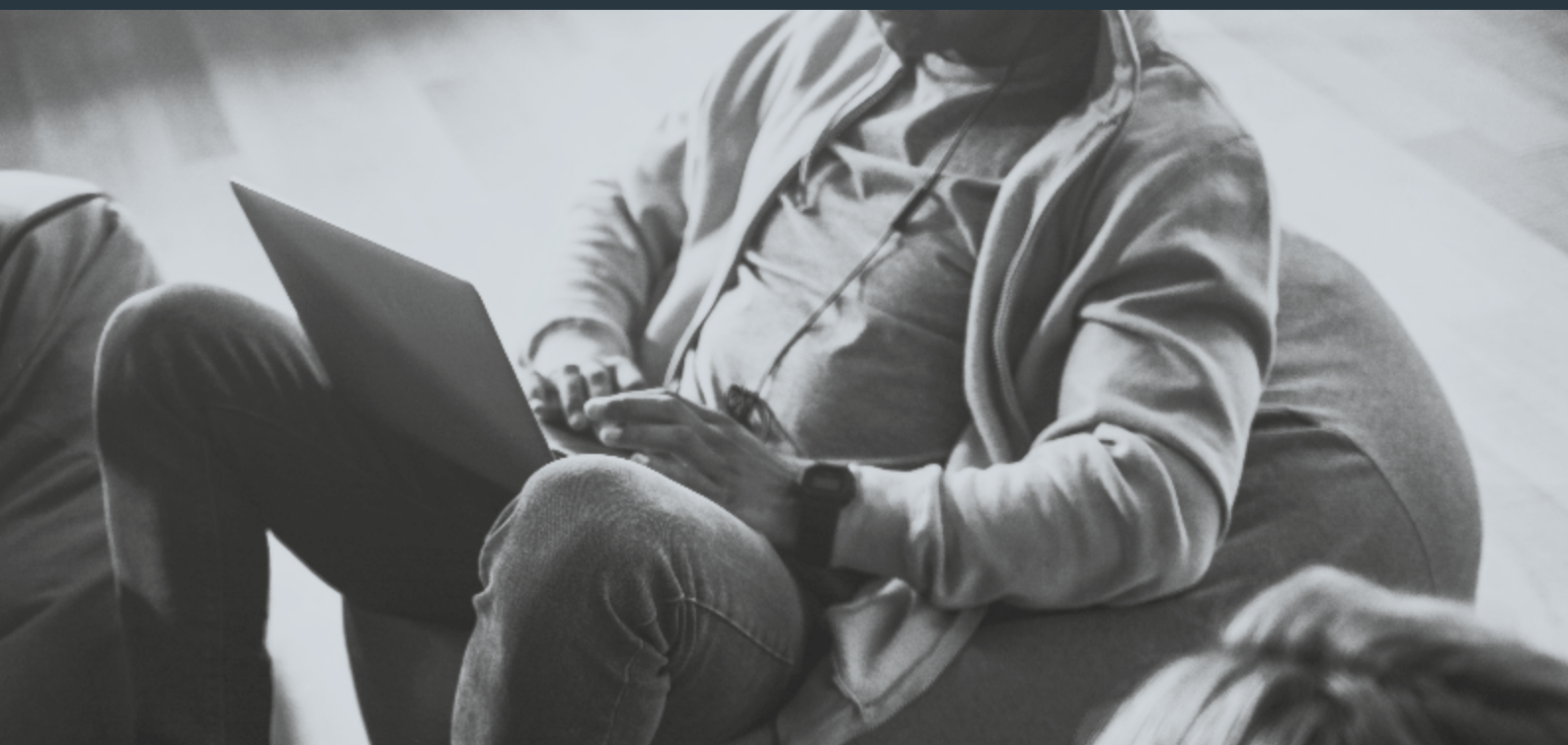
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WHITEPAPER

Space as a service

The rise of flexible working

November 2019



For today's investor





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Main responsibilities

Chris leads the research team, overseeing the production of property forecasts and preparation of key strategy and research reports. His team plays a key role in developing investment views of markets and sectors and identifying strategic opportunities for funds across the globe.

Experience and qualifications

Prior to joining Aviva Investors, Chris worked for CBRE where he was a senior analyst responsible for analysis of market trends in commercial property markets. Before that, he worked as an economist for the Institute of Public Policy Research and also HM Customs and Excise. Chris holds a BA (Econ) in Economics and an MA in Economic History from the University of Manchester. He is also a member of the SPR and committee member of ULI.



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Main responsibilities

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Experience and qualifications

Prior to joining Aviva Investors, Vivienne was a Senior Analyst in the International Market Research team at Knight Frank in London. Her experience also spans to include the real estate industry in Australia. She holds a BA in Business Management and a BA in Science from the University of Queensland.

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Key points

- The structural trends supporting the growth of flexible office solutions will remain in place in coming years, and further significant growth in flexible space is expected
- The growth of flexible space will disrupt office occupier markets and underlying occupiers will be the major beneficiaries of these trends, enjoying a wider range of leasing options and a reduction in leasing risk
- These changes to leasing conditions imply knock-on effects on the investment characteristics of offices and present challenges for landlords
- We outline investment strategies in order to mitigate risks and potentially profit from the rise of flexible space

Executive summary

In this paper we examine the effects of increased flexible office leasing on office investment markets.

The rapid growth of flexible office solutions has been a significant development in recent years. This growth has gone hand-in-hand with the rise of flexible working with both reflecting structural drivers, most notably advances in technology. These structural trends are set to remain in place and further growth in flexible office space is likely.

This growth will disrupt **office occupier markets** in a number of ways:

- More demand for flexible space, less for traditional leases
- Increased risk of oversupply as office space is used more efficiently
- Rental growth will be more difficult to achieve and rental income streams more volatile

Underlying occupiers will be the major beneficiaries of these trends. They will enjoy a wider range of leasing options and a reduction in their leasing risk.

These changes will in turn affect the **investment characteristics of offices**, notably through:

- Increased management intensity and capex for all lease types
- More income risk for landlords

In order to minimise risks and potentially profit from the rise of flexible space, a few of **investment strategies** are suggested:

The primary aim is to maintain as much exposure as possible to high-quality leases by focusing on:

- Assets that are less exposed to competition from flex space
- Assets in supply-constrained markets
- Brand-enhancing assets
- Locations with strong industry clusters

Avoiding assets that could end up competing with the flexible office sector, including:

- Commodity space, especially if poorly located
- Assets with small floorplates
- Assets wholly or largely let to flexible operators

Secondly, flexible space represents an opportunity to:

- Partner selectively with flexible providers
- Compete when appropriately compensated



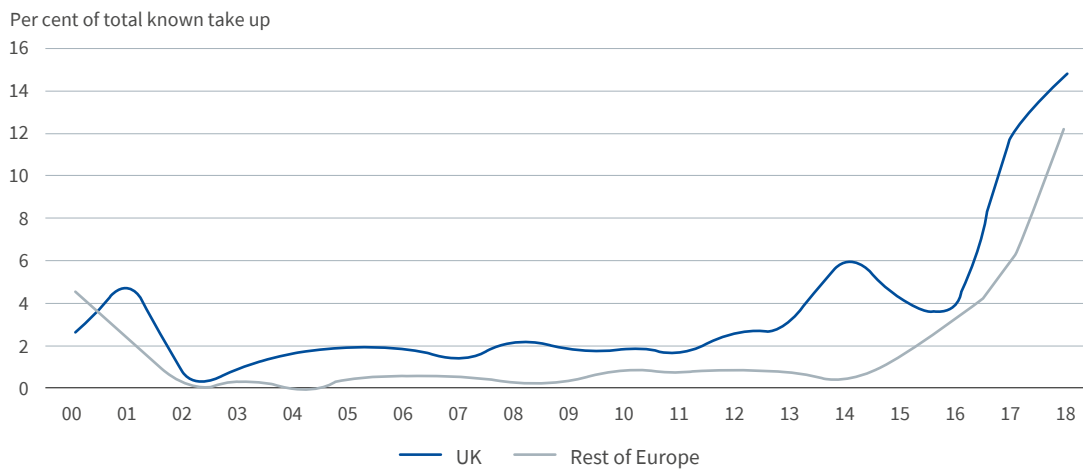
The rise of flexible working and offices – two sides of the same coin

Flexible office solutions have grown rapidly in recent years. A broader, and expanding, range of providers now account for a large share of lettings in most centres.

In Europe, the share of space taken by flexible space providers has risen into double digits in most markets, with UK centres

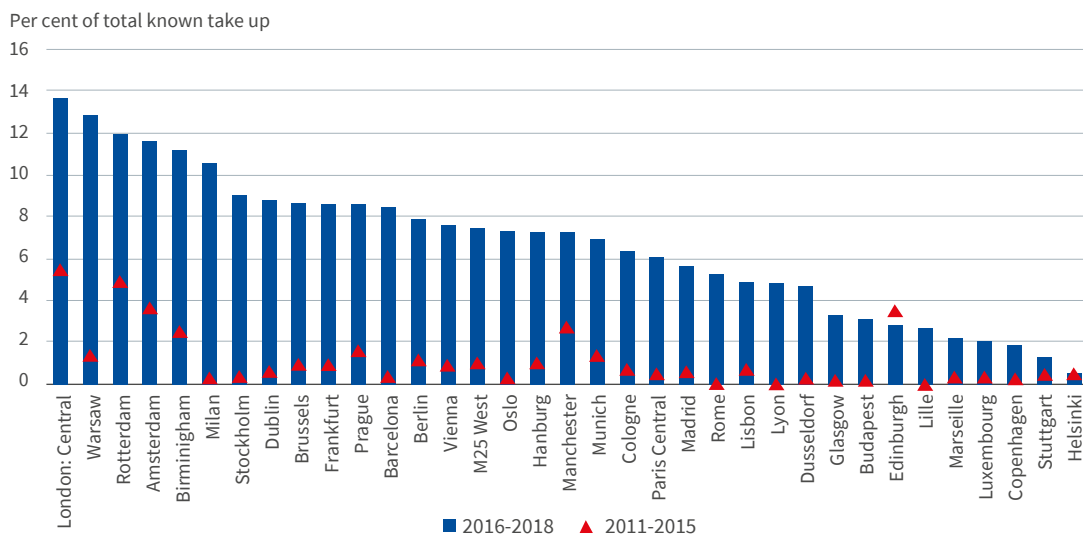
leading the way. In London, in the period since 2010, the year of WeWork's launch, flexible take-up has risen from a share of around two per cent to around 10-20 per cent today. Across the UK, JLL estimates that the amount of flexible space grew by approximately 25 per cent in both 2017 and in 2018.¹

Figure 1. Flexible offices take-up



Source: PMA, Flexible Office Providers: 2019 Update

Figure 2. Flexible office take-up, by city



Source: PMA, Flexible Office Providers: 2019 Update

This development has gone hand-in-hand with the rise of flexible working. CBRE estimates that freelancers already make up 36 per

cent of the global workforce, a figure that it expects to rise to more than 50 per cent by 2027.²

1. JLL, Disruption or Distraction, 2019.
2. CBRE, The Agile Advantage, 2018.

The rise of flexible working and flexible office solutions are effectively two sides of the same coin, and therefore reflect similar drivers. Advances in technology are changing the way workers within organisations interact; the nature of the work itself, as well as where and when it will take place is changing fundamentally. In the not-so-distant past, knowledge workers were tightly bound to their offices because that was where their computers and internet connections were. This has been completely altered in recent years by tech advances, notably:

- **Mobile computing:** improved processors and the proliferation of devices mean we now have more computer power in our pockets than we had in the office just a few years ago

- **Connectivity:** these devices are connected via ever-faster and ubiquitous broadband
- **Cloud computing:** our data is now stored in the cloud and available anytime, anywhere

Moreover, **advances in artificial intelligence** and robotics suggest further disruption ahead. The nature of work will continue to evolve rapidly. Many functions appear susceptible to automation or outsourcing to lower-cost economies. The work that remains is likely to be heavily focused on creativity and collaboration.



A major boon for companies

The growth of flexible working and offices offer major potential benefits to companies. In particular, these trends offer a much-increased opportunity to align human capital with real estate needs. In the knowledge economy, access to appropriate human capital, as and when it is needed, is key to success. Real estate is also the most significant overhead for many companies. The tech-enabled rise of flexible working and office space therefore offers companies the opportunity to grow and contract their human capital and real estate inputs based on business needs.

These possibilities weren't so readily available until recently. Business downturns might see companies hoarding labour and stuck with a real estate footprint that was no longer appropriate. The ability to pay only for labour and real estate as needed would be a major efficiency gain for those companies who are able to manage it. The quest to do so will be a major operational goal for knowledge-economy companies in coming years. Regulatory change, in the form of IFRS16, is also likely to increase demand for flexible office solutions by increasing the incentives to minimise real estate liabilities.

As such, advances in technology can be thought of as unleashing latent demand for flexible working and office solutions. This demand is likely to be sustained in coming years, though it is difficult to say exactly how much more flexible office space will

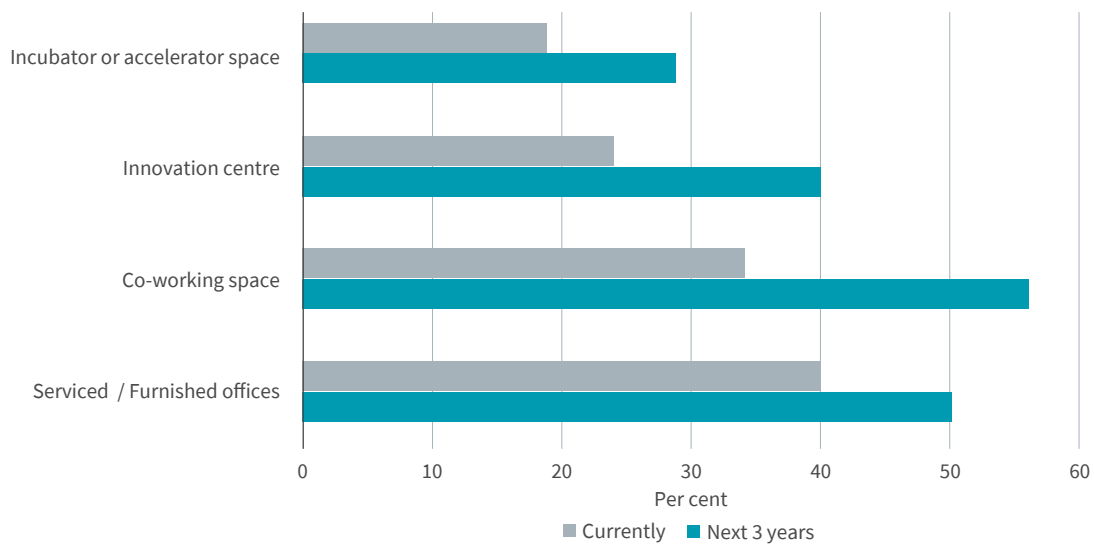
be generated as a result. In what is probably an ambitious prediction, JLL estimates that the share of flex space could rise to as high as 30 per cent over the next decade, from five per cent currently.³

Figure 3. The rise of co-working and flexible space



Source: JLL, 2019

Figure 4. Percentage of occupiers with substantial/moderate use of office types



Source: CBRE, EMEA Occupier Research Survey, 2018

3. JLL, Disruption or Distraction, 2019.

Growing demand meets a rapidly-evolving supply side

Meanwhile, flexible office providers are expanding rapidly to meet this burgeoning demand. Though flexible solutions have been around for decades, the variety of offerings has evolved

greatly as upgrades in technology allow a wider range of services to be provided more efficiently.

Figure 5. Spectrum of flexible offices on offer

Co-working spaces	Incubator / accelerator space	Serviced offices	Enterprise solutions	Turnkey	Flexible lease
<ul style="list-style-type: none"> Multiple membership models available on a fixed monthly fee or pay as you go basis Membership gives access to office space, meeting rooms, wi-fi, networking opportunities and events Popular with freelancers, entrepreneurs, startups 	<ul style="list-style-type: none"> Incubators target very early stage start-ups and act as an 'Advisory Board', offering dedicated office space for a set period of time Accelerators target more developed business, providing capital in exchange for a share of business equity. They tend to provide a physical location for shared resources and events 	<ul style="list-style-type: none"> Started in 1980s as traditional office set-up under flexible lease terms Fixed price per desk/office for an 'all inclusive offer' Includes reception services, wi-fi, refreshments, meeting rooms (may be chargeable), and ongoing maintenance 	<ul style="list-style-type: none"> Customised solutions tailored to corporates Delivers flexibility, aesthetic value and speed to market, but without element of communal space 	<ul style="list-style-type: none"> Managed agreements for dedicated space Landlord provides office ready for occupation Sold as a completed product allowing 'speed to service' 	<ul style="list-style-type: none"> Flexible lease terms provided in traditional office environment Occupier is responsible for fit-out costs, wiring, reception, cleaning costs, security, etc.

Source: Aviva Investors

Figure 6. Variation in the servicing of client needs

Client needs serviced	Co-working spaces	Incubator / accelerator space	Serviced offices	Enterprise solutions	Turnkey	Flexible lease
Leasing flexibility	High	High	High	High	High	High
Short term space	High	High	High	High	High	High
Promote collaboration and innovation	High	High	Moderate	Low	Low	Low
Foster a sense of community	High	High	Moderate	Low	Low	Low
Attract and retain talent	High	High	Low	Low	Low	Low
Reduce costs	Low	Low	Low	Low	High	High

Key: High Moderate Low

Source: Aviva Investors

Interestingly, the accelerating growth of flexible offices has come even as leasing conditions have tightened in most markets. A couple of years ago many observers believed that the business model depended on flexible operators paying relatively modest rents.

Their ability to grow despite more competitive leasing conditions has challenged this view and may be a sign of structural strength. We may need an economic downturn to verify this, however.

Growth to disrupt office occupier markets

Though it is difficult to predict the degree to which flexible office solutions will penetrate the market, we can nonetheless say

something about how their growth might disrupt office leasing markets. A number of implications come to mind.



Changing patterns of demand for office space

Companies will increasingly use a range of options to manage their demand for office space – central office, serviced office, co-working and home-working. These patterns can be characterised as “hub-and-spoke” arrangements, with a large share still being allocated to traditional leases but a growing share favouring flexible solutions. The split among these options will depend on a range of factors, especially the nature of the tasks at hand.

Of course, traditional offices retain certain advantages. Some occupiers desire certainty that they will be in a particular location, while others are keen to signal a deep commitment to a city or their labour pool. Companies are likely to seek assets that enhance the brand for their hub/headquarter space. Nonetheless, in general, we anticipate rising demand for flexible office solutions and a smaller share for traditional leases.

Less demand for office space

A key premise of the flexible providers’ model is that they can use space more intensively than traditional offices. In essence, more workers and economic activity can be accommodated in a smaller amount of office space. This implies an increased risk of oversupply.

A headwind to rental growth

Rental growth may be more difficult to achieve as, in effect, more economic growth may be accommodated in less office space.

More volatile rental income streams

An increase in the share of flexible space should mean that underlying rental income streams more quickly reflect changes in market rents. This implies that rental income streams will exhibit more volatility than in the past, closer to that of market rents.

Rising occupier expectations

A growing range of leasing options will drive a shift in occupier expectations, especially in relation to service levels. For landlords this suggests that assets will be more costly to manage, making net income growth more difficult to achieve.

Underlying occupiers as big beneficiaries

In essence, these various changes all appear to fall down in favour of underlying occupiers. They get:

- A greater array of leasing options with the promise of more efficient use of space overall
- An easier and less resource-intensive way of finding space
- More options to attract and manage human capital
- A shift in bargaining power in their favour vis-a-vis landlords
- A reduction in their leasing risk by more rapidly adjusting their real estate footprint

Knock-on effects to office investments

These changes in leasing conditions imply knock-on effects on the investment characteristics of offices. Many of these are challenges for traditional landlords.

Increased management intensity and increased capex for all lease types

Retaining income will be more operationally intensive and require increased capex for all types of space; traditional leases as well as flexible solutions. While successful landlords have always sought to understand and meet tenant expectations, those expectations are changing rapidly.

Proportion of assets backed by traditional leases set to decline

The shrinking share of assets backed by traditional leases should command a scarcity premium.

Proportion backed by questionable/weaker covenants set to increase

Investors are likely to remain wary of the vulnerabilities inherent in the flexible operators' business models. The pricing of assets with a significant flexible allocation needs to reflect this concern.

More income risk for landlords

If flexible space allows occupiers to reduce their leasing risks, those risks must be assumed somewhere else. Flexible office providers and landlords are the only options. And while the flexible providers are of course assuming some of this risk, the vulnerabilities in their business models may mean it is less than it appears at first glance.

For landlords then, the rise of flexible space has significant consequences for income security and income volatility. The degree of impact will vary along the spectrum from traditional to flexible office space and needs to be assessed for each individual asset.

Opportunity for landlords to sweat assets

Of course, landlords can endeavour, as the flexible operators do, to use their assets more intensively by incorporating a proportion of flexible space. They too have the opportunity to develop strategies that increase asset utilisation, attract the most desirable tenants and reap the rental rewards.

Implications for office sector pricing

While some of these factors apply only to assets with a share of space let to flexible operators, a number have the potential to affect the pricing of office assets in general. When looking at the return prospects of office assets, investors make assumptions about net income growth, depreciation and the real estate risk premium, among other factors. All of these are potentially affected by the rise of flexible office space. For instance:

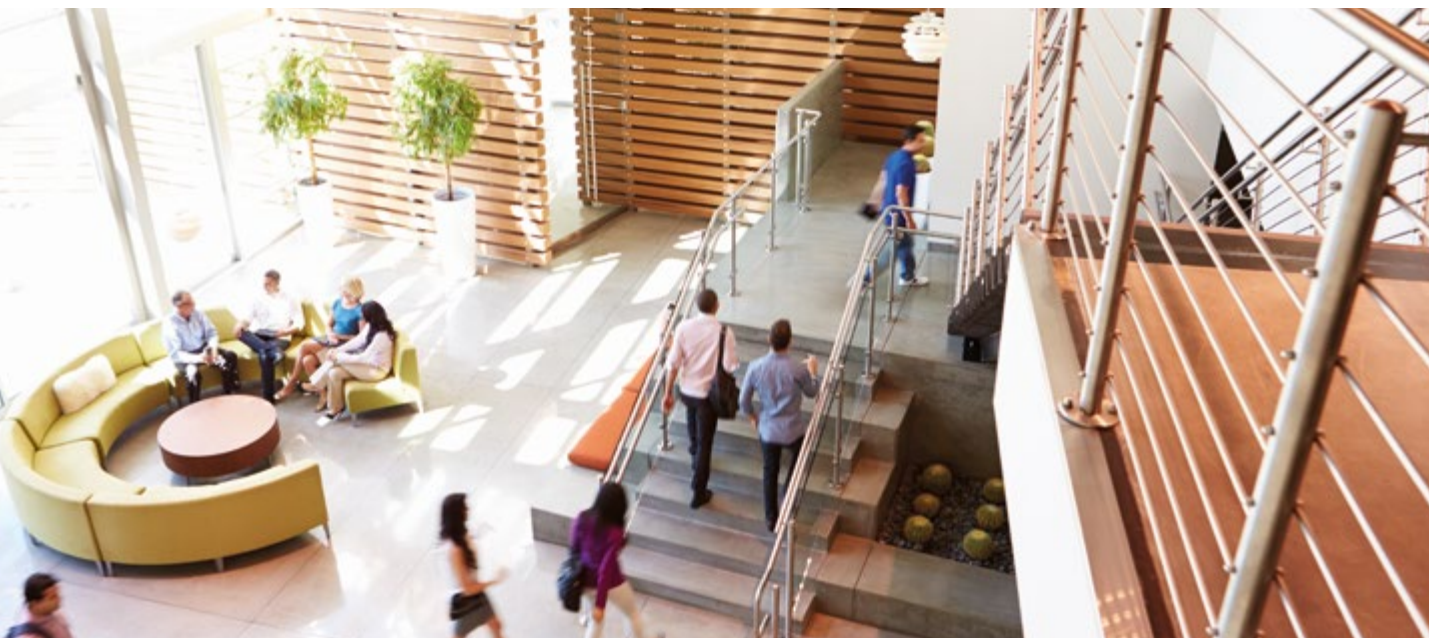
- Net income growth across the sector may be weaker given the likelihood that market rental growth will be harder to achieve and increased management costs may also subtract.
- Depreciation may be affected in a couple of conflicting ways:
 - Increased capex should slow the pace of asset deterioration
 - Obsolescence risk may increase with rapidly changing technologies



Investment strategies

The risks and opportunities arising from the growth of flexible offices are significant enough to warrant explicit consideration in

office investment strategies. This strategy comes in a couple of parts.



Primary aim is to maintain exposure to high-quality traditional leases

For institutional investors, the primary focus is to retain as much exposure as possible to high-quality, traditional leases. As outlined, these are likely to represent a diminishing share of office assets and it may be necessary to pay a premium to reflect this increasing scarcity. Landlords can also expect to work hard to maintain these leases with higher service levels and more capex needed than was traditionally the case. Landlords need to develop the skillset to keep occupiers happy.

In order to achieve this aim, we suggest a focus on:

- Office hubs with headquarter credentials
- Assets that are brand-enhancing to occupiers
- Assets in supply-constrained markets such as Paris and London
- Assets in locations with strong industry clusters⁴ where occupiers have incentives to maintain a presence

This strategy also implies avoiding assets that could end up competing in or with the flexible office sector, notably:

- Commodity space, especially if not well-located
- Assets with small floorplates
- Assets wholly or largely let to flexible operators

An opportunity to both partner and compete

Exposure only to traditional leases won't always be possible, and using only this approach risks missing out on the opportunity in the rise of flexible offices. Therefore, a strategy to engage with the sector is needed. In developing such a strategy, it is especially important to recognise that the sector comprises a broad range of space types with different characteristics.

The characteristic of most likely relevance is the degree and type of service required by occupiers. Some occupiers are drawn to certain flexible solutions overwhelmingly for the specialist services they include. Possibly the clearest example is incubator/accelerator space where a range of mentoring and business development services are provided to help occupiers grow their businesses. At the other end of the service spectrum lie flexible leases where flexible lease terms are provided in a traditional office environment. Here service levels do not differ substantially from traditional leases.

These characteristics suggest two broad approaches to engage with the sector: partnering and competing. The choice of focus will depend particularly on the degree to which specialist operating skills are required and the extent to which the type of space complements the main focus of a traditional institutional investor.

4. Aviva Investors, London: The Ultimate City of the Future, 2019.

Partnering opportunities may allow landlords to add value and gain exposure to the more service-intensive end of the flexible spectrum. The skillset necessary to operate such space is not a natural fit with institutional investors' traditional strengths and would be expensive to develop. Nonetheless, investors will need to be able to assess operator capabilities, and may need to invest in the ability to do so.

Meanwhile, opportunities to **compete** will likely be found towards the flexible space part of the spectrum. Less specialist skills are required here, and the type of space and service provided is a more natural fit or addition for institutional investors. There may be advantages in being able to offer a range of flexible and traditional leases. For instance, some occupiers experiment with flexible space but later decide to move back to traditional leases. Nonetheless, landlords need to be compensated for the riskier income profiles.

The vulnerabilities in the flexible operators' business models

The essential feature of the flexible office model sees the operators leasing space on a long-term basis and re-letting that space on more flexible terms. Their customers are willing to pay higher rates for this flexibility as well as for additional value-adding services and benefits such as meeting spaces, front of house personnel and opportunities for collaboration. The operators also seek to operate at higher densities than traditionally-leased space.

The key risk in the model is the "duration mismatch" between operators' long-term lease obligations and short-term lettings or memberships. In a downturn, the ability of customers to pay for their short-term leases is diminished but the flex operators are stuck paying their

long-term leases. Another risk comes from the supply side. Barriers to entry to this segment are relatively low suggesting upswings in demand can be quickly satisfied.

In essence, by using flexible space that can be easily divested instead of longer-term leases, the underlying occupiers are transferring the risk of being stuck with excess space in a downturn from themselves to the flexible office companies. This makes their financial strengths and risks a key focus for landlords. If their covenants turn out to be poor, that risk may ultimately get transferred back to landlords in the event of operator retrenchments.⁵ As with any relationship, these considerations mean investors need to select their partners wisely.

Conclusion

Further significant growth in flexible office space is likely, and office occupier markets will be disrupted by its growth.

The changes to leasing conditions will in turn affect the investment characteristics of offices and present challenges for landlords.

In order to minimise risks and potentially profit from the rise of flexible space, we suggest a couple of investment strategies:

Firstly, maintaining as much exposure to high-quality traditional leases by focussing on office hubs with headquarter credentials that are brand-enhancing to occupiers, and are in supply-constrained markets.

Secondly, flexible space also represents an opportunity to partner selectively with flexible providers or compete when appropriately compensated – the choice of focus will depend particularly on the skillset necessary.

5. Many operators use special purpose vehicles (SPVs) to sign up to leases rather than provide a corporate guarantee as a covenant. If flexible office cash flows go negative, operators with an SPV on the lease may default with limited consequence.

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