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Investment Implications of the Flexible Space Market

SHORT PAPER

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Investment Implications of the Flexible Space Market

Short Paper

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Investment Implications of the Flexible Space Market

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Disclaimer

Investment Implications of the Flexible Space Market

1. EXECUTIVE SUMMARY

This paper considers the investment implications of the predicted evolution of the flexible space market (FSM) in the office sector. It builds on the findings of the IPF Short Paper, 'Property Ownership in a Flexible World', February 2020 (the IPF Report), and seeks to estimate the impact that a move towards a flexible leasing model will have on the future risk-return profile for office investments. In the absence of a market return series, the risk and return profile is estimated from a simulation of the net income characteristics for buildings leased traditionally compared to buildings leased flexibly.

Four methods of engagement with the FSM are considered:

- landlords actively engaging with the FSM by operating directly;
- landlords leasing to an operator on a traditional lease;
- landlords leasing to an operator on a revenue-sharing arrangement; and
- lending secured on offices leased flexibly.

To benefit from leasing flexibly, the report finds that operating directly delivers higher income and, if slightly longer leases can be achieved (the report considers one- and two-year flexible leases), this higher level of income offsets the additional volatility to generate a higher asset value.

Revenue sharing arrangements are found to be much more attractive than leasing to an operator on a traditional 25-year lease. The likelihood of default from leasing to an operator on this basis is estimated as being so high that the projected income is reduced to the point where the net asset value is estimated to be lower than a portfolio of much shorter traditional 10-year leases let to a diversified range of tenants.

The key findings of this research are summarised below:

- Using assumptions, leasing flexibly is expected to generate a higher rental income than traditional leases (the dark and light blue bars in Figure 1.1) through higher occupational densities and the provision of services, although it also increases costs.
- Leasing to an operator on a traditional 25-year lease is expected to generate a lower net income than a portfolio of traditional 10-year leases let to a diversified range of businesses (the grey bars in Fig 1.1) due to the likelihood of operator default coinciding with a cyclical downturn.
- Figure 1.1 shows net income relative to a portfolio of traditional (not leased flexibly) 10-year leases. The positive figures for both two- and one-year flexible leases indicates that more income is expected over the period of analysis from leasing flexibly.
- The higher expected net income from flexible leases comes at the expense of higher income volatility. The modelled volatility from one-year flexible leases (the light blue bars in Figure 1.2) is higher than from two-year flexible leases (the dark blue bars) which is higher than the volatility of income from a portfolio of 10-year traditional leases (the green bars).
- The volatility of net income from a portfolio of traditional 25-year leases (the grey bars in Fig 1.2) let to an operator is sensitive to the tenant default assumptions but is estimated as generally more volatile than shorter, 10-year traditional leases with a diversified tenant base.

1. EXECUTIVE SUMMARY

Figure 1.1: Premium Net Income from Portfolio of Flexible Leases over Traditional 10-year Leases, 1996-2021

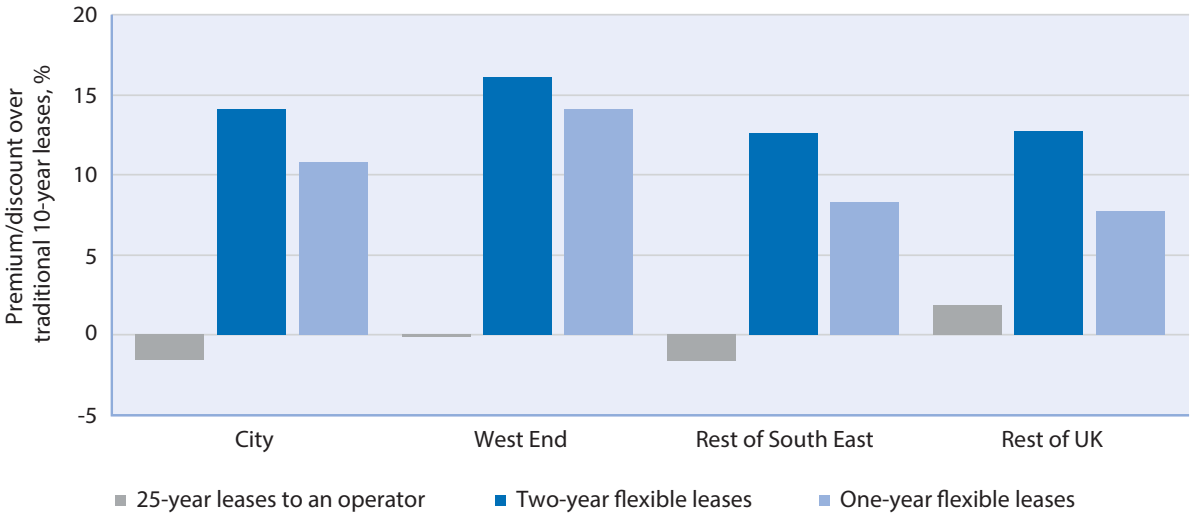


Figure 1.2: Volatility (standard deviation) of Net Income Growth for Portfolios of Traditional and Flexible Leases, 1996-2021

1. EXECUTIVE SUMMARY

- Investors should theoretically require a higher return to compensate for the increased volatility of the cash flow for shorter, flexible leases, reflected either as a premium in a traditional valuation yield or in the discount rate for a DCF valuation (a lower value).
- To calibrate the approach, an additional risk premium is assumed relative to a 1%[1] risk premium for a portfolio of traditional 10-year office leases in the City of London.
- The volatility risk premium, or additional required return, from two-year and one-year flexible leases on City offices, for example, is estimated to be around 21 and 72 bps higher respectively than for a traditional 10-year lease. On a traditional 25-year lease, the premium is estimated to be 12 bps higher, on the same basis.
- The net present value (NPV), based on the difference in the level of the cash flow and a discount rate that reflects the difference in volatility of the net income, is highest for two-year flexible leases and lowest for a traditional 25-year lease let to an operator for City offices (see Figure 1.3).

Figure 1.3: Net Present Value of Portfolios of Traditional and Flexible Leases

Leasing to an operator on a profit-sharing arrangement

- Leasing to an operator on a lower fixed rent with a profit-sharing element lowers the risk of default, but also removes the rent protection from the upwards-only rent review.
- If the operator can deliver a higher surplus through their expertise in maximising the density of occupation and the additional benefits from their strong brand and large network of offices, a revenue sharing arrangement will be to the benefit of both parties.
- Transparency on operator performance on other similar buildings through the cycle would aid negotiations and produce the best structured management agreement. A publicly available database of centre revenues is required in the industry.

[1] A 1% risk premium is an indicative assumption – see discussion in Appendix A

1. EXECUTIVE SUMMARY

Lending secured on offices leased flexibly

- A loan secured against a property leased on a traditional basis to an operator is exposed to the high likelihood of a shortfall in the rental income received by the operator versus their rental liabilities. If this shortfall leads to a default, the lender will potentially have to take control of a portfolio of flexible leases in a weak market. A significant additional margin would be required to compensate for such risk.
- A profit-sharing arrangement significantly reduces the operator default risk and therefore the probability of loan default.

Long-term threat to flexible leasing model

- There is a risk that higher occupancy densities prove unsustainable in the long term, reducing the rental premium achievable if corporate occupier preferences were to shift over time, for example following a reassessment of productivity drivers or in response to fears over a future pandemic.

2. INTRODUCTION

The IPF Report 'Property Ownership in a Flexible World' (the IPF Report), published in February 2020, examined the recent development and future prospects of the flexible space market (FSM). This paper describes the impact that these changes are estimated to have on the future return characteristics from office property.

The FSM has grown over the past two decades to comprise around 6-8% of the office market[2]. The sector is synonymous with start-ups and scale-ups, plus a growing proportion on corporate occupiers taking a core and flex approach to their space requirements. The extensive commentary of the abortive listing of WeWork in 2019, investment by Soft Bank and departure of Adam Neumann, has kept the sector in the headlines and prompted speculation as to the robustness of the covenants of the FSM operators.

After the publication of the IPF Report, the Covid pandemic struck, closing many offices entirely. In the aftermath of the lockdown restrictions, the return to the office was slow with many businesses acquiescing with a rise in employee preference for homeworking. Whilst the pandemic was unprecedented, the detrimental impact on income and the uncertain recovery mirrors that of previous recessions such as the Global Financial Crisis (GFC), dot-com bubble and early 1990s recession. Once again, many landlords were faced with renegotiation or outright default by operationally and financially geared operators that were fighting to stabilise their balance sheets.

In recent years, the industry has pivoted to a more robust model of investors operating flexible space directly or through management agreements with operators. On the owner side, LandSec plan to grow their Myo flexible offer from c7,000 to c.50,000 m^2 in the next five years and British Land's Storey now covers 32,000 m^2. On the operator side, WeWork reported a strategy for 'asset-light' growth, acquiring operators with management agreements and IWG launched its franchise partner model in 2021. This pivoting of the industry mirrors the conclusions of this study.

The three key elements of the FSM are shorter[3] lease contracts, higher occupation density and the provision of services to occupiers. In the absence of a publicly available dataset of returns from flexible leases, this study simulates the impact on the level and volatility of income from two methods of engagement with the FSM, which are:

- landlords actively engaging with the FSM by operating directly; and
- landlords leasing to an operator on a traditional lease.

The impact on net present value (NPV) is estimated by applying a risk premium to the yield that is commensurate with the volatility of the income.

The implications of the results are then discussed for both:

- landlords leasing to an operator on a profit-sharing arrangement; and
- lending secured on offices leased flexibly.

[2] The Instant Group

[3] The relationship between lease terms and investment performance is the subject of a previous IPF report in July 2005 (Neil Turner, 2005) undertaken in response to the consultation document for what became the Commercial Lease Code (Anon., 2007). The focus for the 2005 report is the abolition of the upwards-only rent review (UORR) and a move towards a fixed five-year lease term.

2. INTRODUCTION

The modelling approach will mirror a discounted cash flow (DCF) valuation. This is one of several possible approaches to the valuation of office space, as described in the report, 'The Valuation of Flexible Workspace', (RICS, 2019). The key alternative method is a traditional valuation, which uses a comparable market rent and capitalises at an appropriate yield. The DCF approach sets out a projected net income in much greater detail.

The RICS report comments that the *"traditional approach is seen by valuers to have greater simplicity and fewer assumptions, and makes it easier to compare transactional data from the regular office market with data from the flexible workspace market"*. However, the report acknowledges that: *"(Contributors) recognised both approaches. There was no consensus over which is the more attractive approach, with both criticism and endorsement of each".* Further, the report concedes that "some prefer to triangulate different approaches".

This response invites valuers and investors to consider what assumptions they would make for an office leased flexibly and whether these would produce a higher or lower value than the same office let on a traditional lease.

The RICS report cautions that explicit DCF modelling *"requires assumptions that cannot be derived from contemporary evidence as they relate to future events"*. To use a retail analogy, the level of a retailer's sales should not be projected purely from the Christmas period but evaluated over a whole year. Similarly, in the office market, rental income should not be extrapolated from the performance in a strong occupier market. It is reasonable to assume that there will be both weak and strong market conditions (RICS, 1994).

3. APPROACH

This study utilises a bespoke model to simulate the level and volatility of income from leasing flexibly.

Two methods of landlords engaging with the flexible space market are considered: a landlord operating a flexible space operation directly; and a landlord leasing to a flexible space operator on a 25-year traditional lease. For a landlord operating a flexible space operation directly, two-year and one-year flexible leases have been modelled independently.

A comparison of these results is made to the scenario of leasing on a traditional basis with a diversified tenant base (not flexible space operators). Traditional leases of 25-years, 10-years, five-years, two-years and one-year are considered.

A qualitative assessment is then made for a landlord leasing to an operator on a revenue sharing agreement (as opposed to on a traditional lease). This analysis draws upon the results of the quantitative analysis.

The final method of investor engagement, as a lender rather than a landlord, is then contrasted for each of the permutations of landlord engagement: a loan secured on a property leased flexibly; a loan secured on a property leased to an operator on a traditional lease; and finally, a loan secured on a property leased on a revenue sharing agreement.

A full description of the methodology and all assumptions made in the modelling is provided in the appendices. However, the key assumptions are listed below.

Rental growth

The model simulates rental income through the last three complete cycles spanning the 26 years from 1996 to 2021 (inclusive). The three previous cycles are only a guide for investors of what they can expect in future. Each cycle is different in the length and quantum of the upswings and subsequent falls in market rents. However, it is reasonable to assume that the degree of rental volatility recorded in these cycles is likely to be repeated in future.

Occupation densities

The IPF Report indicates a typical occupation density of 11.1 m^2 (120 ft^2) for a conventional lease, 7.4 m^2 (80 ft^2) for managed space and 4.6 m^2 (50 ft^2) for coworking space. Achieving the same rent per person would equate to a 50% premium for managed space and a 140% premium for coworking space.

Fit-out and services

Operators will incur the additional costs of fitting out the space.

Fit-out costs will inevitably vary from building to building and operator to operator. The modelling assumes a fit-out cost equivalent to 20% of the market rent each year, with an associated 30% rent premium[4].

The flexible leasing model requires many more services to be provided to the occupier. The price paid by the customer for essential services is 'bundled' with the desk charges for the space.

[4] New letting fees of 15% of gross rent are also included.

3. APPROACH

With little hard data available, assumptions have been made for the cost of delivering services, at 10% of rental value[5], and the profit margin at 50%.

Table 3.1 summarises the cost and additional rent associated with the fit-out and services. Rates are also added to the simulation, at 30% of rental value, which are included in the rent charged for a flexible lease.

Table 3.1: Model Assumptions – Service Costs and Additional Gross Rent

	Premium	Costs
Cat B fit-out	30% of rental value	20% of rental value
Services	15% of rental value	10% of rental value
Rates	30% of rental value	30% of rental value

Discount rate

The increased volatility of the cash flow for shorter, flexible leases should be reflected in a higher required return, reflected either as a premium in a traditional valuation yield or in the discount rate for a DCF valuation.

To calibrate the approach, an additional risk premium is assumed relative to a 1%[6] risk premium for a portfolio of traditional 10-year office leases in the City of London.

Landlords leasing to an operator on a traditional lease

To model the impact of leasing to a flexible space operator, the net income from a traditional 25-year lease has been modelled assuming a 15% chance per annum of operator default in a modest downswing (rental value growth between 0% and -5% per annum), rising to 20% per annum for rental value growth between -5% and -10% per annum and to 25% for rental value growth lower than -10% per annum.

[5] IWG report overhead as a percentage of revenue of just over 10% in 2018 and 2019

[6] A 1% risk premium is an indicative assumption – see discussion in Appendix A

4. ANALYSIS OF RESULTS

This section summarises the results of the modelling.

Subsection 4.1 considers the impact of the first two methods of engagement with the FSM, which are:

- landlords actively engaging with the FSM by operating directly; and
- landlords leasing to an operator on a traditional lease.

The net income is contrasted between a traditional lease and the two FSM engagement approaches. The volatility of this income is also estimated, which is converted into an appropriate risk premium. A NPV is then calculated based on both the projected net income and the associated discount rate with the volatility of that cash flow.

Subsection 4.2 then discusses the investment implications of letting to an operator on a revenue sharing arrangement, while Subsection 4.3 outlines the implications for securing lending against flexible leases.

4.1 Modelling landlords operating directly and leasing to an operator on a traditional lease

4.1.1 Net income

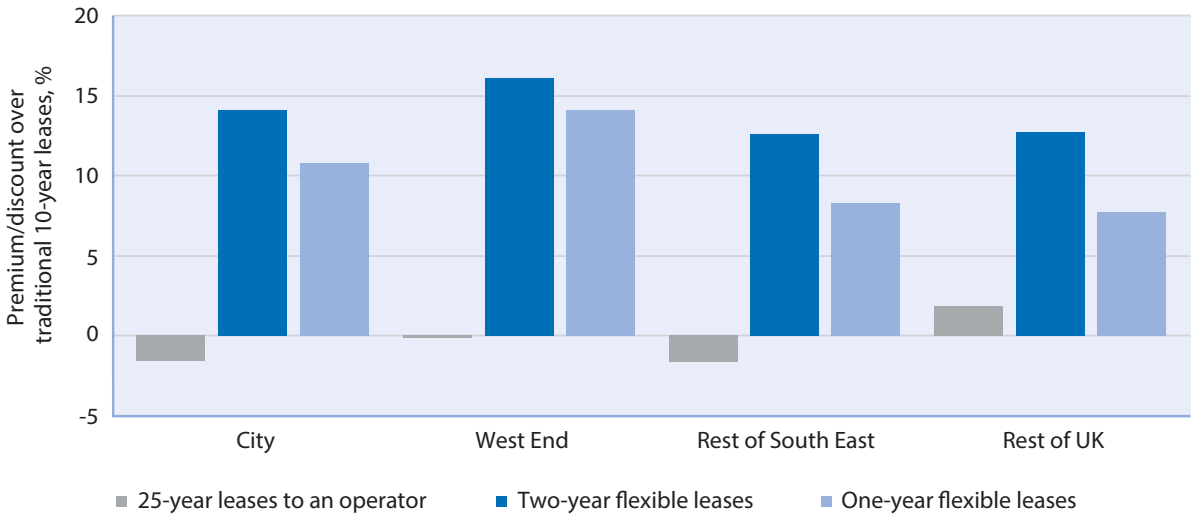
The net income from a portfolio of traditional and flexible leases has been modelled using the rental cycle back to 1996. The assumptions for revenue and costs from leasing flexibly are described in the appendices.

Both two- and one-year flexible leases in each region are expected to generate a higher net income to a portfolio of traditional 10-year leases (see Figure 4.1). The assumption of a new letting fee of 15% of gross income lowers the surplus from the one-year flexible leases relative to the two-year flexible leases.

The estimated net rental income from a portfolio of 25-year traditional leases let to an operator is lower than the net income from a portfolio of traditional 10-year leases let more broadly (see grey bars in Figure 4.1) except in the less volatile Rest of UK region. The results reflect both the high likelihood of tenant default and the likelihood that this default occurs in an occupier market downswing.

4. ANALYSIS OF RESULTS

Figure 4.1: Premium Net Income from Portfolio of Flexible Leases over Traditional 10-year Leases, 1996-2021



The achieved premiums will vary both over a cycle and also across individual centres.

Table 4.1 details the net income for portfolios of 25-, 10-, five-, two- and one-year traditional leases and compares these to leasing on a flexible basis on two- and one-year leases, plus for leasing traditionally to operators.

Table 4.1: Net Income from Portfolios of Traditional and Flexible Leases, 1996-2021, £m

Length of Lease (years)	Lease Type	City	West End	Rest of South East	Rest of UK
25	Traditional	£35.9	£43.4	£30.4	£27.0
25	Traditional – leased to an operator	£31.5	£39.3	£26.8	£24.8
10	**Traditional**	**£32.0**	**£39.4**	**£27.2**	**£24.3**
5	Traditional	£31.4	£38.9	£26.9	£23.8
2	Traditional	£32.5	£40.9	£27.2	£24.1
1	Traditional	£33.3	£42.3	£27.8	£24.4
2	Flexible	£36.5	£45.7	£30.7	£27.4
1	Flexible	£35.5	£45.0	£29.5	£26.2

Note: End December 1995 net effective market rent = £1,000,000

4. ANALYSIS OF RESULTS

4.1.2 Volatility

The volatilities of traditional and flexible leases and of leasing traditionally to an operator have been modelled over the analysis period.

For City offices, for instance, the volatility of the simulated net income from the two- and one-year flexible leases is 14.6% and 10.3% respectively, versus 8.5% for the portfolio of 10-year traditional leases. The volatility of the simulated net income for leasing traditionally to operators is much higher at 28.1% due to the correlation between operator default (creating higher vacancies) and rental value falls. Figure 4.2 shows that there is a similar pattern to the results in all regions.

Figure 4.2: Volatility of Net Income Growth for Portfolios of Traditional and Flexible Leases

4. ANALYSIS OF RESULTS

For comparison, Table 4.2 details the volatility of net income for: portfolios of traditional leases of varying length; portfolios on a flexible basis; and a portfolio of traditional leases let to operators.

Table 4.2: Volatility of Net Income for Portfolios of Traditional and Flexible Leases

Length of Lease (years)	Lease Type	City offices	West End offices	Rest of South East offices	Rest of UK offices
25	Traditional	3.6%	3.8%	2.8%	2.5%
25	Traditional – leased to an operator	28.1%	27.6%	24.0%	15.3%
10	Traditional	8.5%	8.7%	8.9%	7.3%
5	Traditional	9.0%	9.9%	12.1%	11.2%
2	Traditional	7.7%	8.0%	8.3%	7.4%
1	Traditional	14.1%	11.1%	13.0%	13.0%
2	Flexible	10.3%	13.6%	8.9%	8.2%
1	Flexible	14.6%	15.3%	15.1%	12.8%

4.1.3 Risk premium

Investors should require a higher return to compensate for a higher volatility of income. The volatilities have been converted into a risk premium in proportion to the volatility of a diversified office portfolio of 10-year traditional leases in the City.

The estimated risk premiums are shown in Table 4.3. The risk premiums are contrasted between a traditional lease and the two methods of engagement with the FSM. The lowest volatility of income is for 10-year traditional leases in the Rest of UK, so the risk premium, 86 bps, is lower than for equivalent leases in the City. The highest volatility of income is for one-year flexible leases, with the West End estimated to require a premium of 180 bps.

The volatility of net rental income from the portfolio of 25-year traditional leases let to an operator is higher than the net income from a portfolio of traditional 10-year leases let normally, despite the longer lease term. The results for a portfolio of 25-year traditional leases are provided for comparison.

4. ANALYSIS OF RESULTS

Table 4.3: Risk Premiums for Portfolios of Traditional and Flexible Leases, %

	City offices	West End offices	Rest of South East offices	Rest of UK offices
25-year traditional leases	0.43	0.45	0.32	0.29
25-year traditional leases to an operator	3.31	3.25	2.83	1.80
10-year traditional leases	1.00	1.03	1.05	0.86
Five-year traditional leases	1.06	1.17	1.43	1.32
Two-year flexible leases	1.21	1.60	1.05	0.97
One-year flexible leases	1.72	1.80	1.77	1.51

4.1.4 Net present value

The volatility premiums, described in Subsection 4.1.2, are applied to the net income, described in Section 4.1.1, to estimate the combined impact on the NPV, or worth.

The NPV is contrasted between a traditional lease and the two methods of engagement with the FSM. The NPV of two-year flexible leases exceeds that of 10-year traditional leases in all regions (see Figure 4.3). The additional volatility of one-year flexible leases (and therefore higher volatility premium) reduces their worth below that of a portfolio of 10-year traditional leases, in the City and West End, to a level similar to that of a portfolio of five-year traditional leases.

The combined impact of both a lower net income and higher volatility from a portfolio of 25-year traditional leases let to an operator, compared with a portfolio of traditional 10-year leases, produces a lower NPV in both the City and West End regions.

4. ANALYSIS OF RESULTS

Figure 4.3: Net Present Value of Portfolios of Traditional and Flexible Leases

Note: End December 1995 net effective market rent = £1,000,000

For comparison, Table 4.4 details the NPVs for portfolios of 25-, 10-, five-, two- and one-year traditional leases and of flexible two- and one-year leases, as well as for a portfolio of traditional leases let to operators.

Table 4.4: Net Present Value of Portfolios of Traditional and Flexible Leases, £m

	City offices	West End offices	Rest of South East offices	Rest of UK offices
25-year traditional leases	£29.3	£34.3	£24.5	£21.3
25-year traditional leases to an operator	£22.1	£25.9	£20.0	£19.1
10-year traditional leases	£23.3	£27.4	£19.1	£17.3
Five-year traditional leases	£22.7	£26.5	£17.6	£15.7
Two-year flexible leases	£25.4	£28.2	£21.6	£19.2
One-year flexible leases	£22.2	£26.5	£18.2	£16.7

4. ANALYSIS OF RESULTS

4.2 Landlords leasing to an operator on a profit-sharing arrangement

An alternative option, for the building owner to benefit from the higher income from leasing flexibly, is through a profit-sharing arrangement with an operator. The Covid pandemic emphasised the weakness of a model of leasing to an operator on a traditional lease. As a result, franchising (now a strong focus for both WeWork and IWG) and profit-sharing agreements are becoming more popular.

With a profit-sharing arrangement, the operator's financial obligation to the building owner may be determined as a fixed percentage of the full market rent, plus a proportion of the surplus from operations. The alignment of the operator's rent obligations, with the profitability of the centre, removes the mismatch between a fixed rental liability and a variable income, thus much reducing the risk of operator default. This is consistent with the definition of operational real estate in the IPF Report.

The hotel sector has proven over time that the management agreement model can work for both the owner and operator.

Setting the percentage for the fixed component of rent and the profit-sharing proportion requires an estimate of the long-term additional rent from leasing flexibly versus a traditional lease, estimated in the simulation at c15%.

The building owner sacrifices a proportion of fixed rent in return for an off-setting proportion of the anticipated operator surplus. As the rental income would be less secure than a traditional leasing arrangement, the building owner should demand a higher total rental income to compensate.

For example, if the operator is assumed to achieve a long-term surplus of 15% over leasing traditionally, using the research numbers, then for a fixed component set to 90% of the market rent, the operator's surplus will rise to 25%. To recoup the 10% rental discount, the building owner would require a minimum 10 percentage points of this 25% surplus i.e., 40%.

If the operator can deliver a higher surplus through their expertise in maximising the density of occupation and the additional benefits from their strong brand and large network of offices, the operator could negotiate a lower profit-sharing proportion. Transparency on operator performance on other similar buildings through the cycle would aid such negotiations and produce the best structured management agreement. A publicly available database of centre revenues is required in the industry.

A strong operator, and an appropriate profit-sharing arrangement, would therefore deliver to the building owner a higher income, without the significantly higher volatility of operating directly and without an elevated risk of tenant default. Therefore, for the majority of investors, this approach will provide the most successful outcome.

4. ANALYSIS OF RESULTS

4.3 Lending secured on offices leased flexibly

The long-term economic return from lending to income producing real estate is determined by the margin, less any losses.

An economic loss (as opposed to just a covenant breach) would occur if the rental income was insufficient to service the debt interest or the reduced value of the property was insufficient to repay the loan or secure a refinancing.

This simple metric ignores the influences of the amount of economic capital required to be held against the loan, the cost of this capital, the internal costs of writing the loan and any additional services sold related to the loan (such as a swap).

For the purposes of this paper, specific borrower credit considerations are ignored and the focus is on the influence on the lender's economic return.

4.3.1 Loan leverage

The larger the loan, the higher the probability of loan default[7] (PD) and the loss given default[8] (LGD). The economic return should also be higher for higher loan leverage to reflect this greater risk. Higher loan leverage therefore requires a higher margin to compensate for both the higher PD and LGD and the need for a higher economic return.

The loan amount, or loan leverage, is determined by reference to a minimum interest cover ratio (ICR) and a maximum loan to value (LTV). For example, the PD and the LGD would be lower for a loan with a maximum 60% LTV and minimum ICR of 2, than for a loan secured against the same property with a maximum 80% LTV and minimum ICR of 1.5.

If lending at the same minimum ICR and maximum LTV as an identical office leased traditionally on a 10-year traditional lease, computationally:

- an office operated directly on flexible leases should achieve a higher loan amount due to the higher cash flow and valuation;
- a landlord leasing to an operator would attract a lower loan amount in more volatile markets due to the lower valuation; and
- a building let on a profit-sharing basis would achieve a lower level of loan leverage, as the fixed component of rent is lower.

[7] The probability of loan default (PD) likelihood that a borrower will be unable to meet its debt obligations

[8] Loss given default (LGD) is the amount of money a financial institution loses when a borrower defaults on a loan, after taking into consideration any recovery, represented as a percentage of total exposure at the time of loss.

4. ANALYSIS OF RESULTS

4.3.2 Collateral risk

Income volatility and tenant default risk also directly impact the PD and LGD. The lower the collateral security, the higher the required margin for the same level of loan leverage, to deliver a higher economic return.

The income volatility, and therefore also the volatility of the valuation, for a building operated directly is simulated at around c75% higher than that of a portfolio[9] of traditional leases.

The highest income volatility occurs if the tenant defaults on the whole property. Lending secured against an office leased traditionally to an operator is therefore considered significantly higher risk. There are also operational considerations in the event of borrower default: the lender would need to hire managers with the skillset to either manage the centre back to profitability or transition back to a traditionally leased property. This risk of tenant default, and therefore the PD and LGD, is expected to be significantly lower if the lease to the operator is made on a profit-sharing basis.

4.3.3 Combined impact of loan leverage and collateral risk

A building operated directly could potentially secure higher loan leverage if finance is raised when income and values are high in strong occupier market conditions. This raised risk profile is exacerbated by higher income volatility. However, the centre will benefit from a high diversity of tenants and a rapid recovery from a downswing. A 'cash-sweep' procedure, whereby excess income in strong market conditions goes into a lender-controlled account, could mitigate much of this risk.

An office leased to an operator may achieve a lower level of loan leverage, but the raised tenant default risk, which is highly correlated with the occupier market cycle, is expected to increase both PD and LGD. A significantly (probably prohibitively) higher margin is required to offset this risk.

A profit-sharing arrangement, which benefits the building owner and operator, also reduces the risk to a lender by significantly reducing the tenant default risk. This risk is lowered further if no recognition of the profit-sharing is accounted for in the calculation of the ICR (reducing loan leverage). A large, strong operator and a larger building to maximise the economies of scale and opportunity for price discrimination would further reduce the likelihood and extent of any losses.

As for a building owner, the caveat for lending to the FSM is that the sector is to a large extent underpinned by a higher density of occupation. Any change in occupier tolerance for such high densities would affect all buildings whether operated directly, by an operator or through a profit-sharing arrangement.

[9] The income volatility of a portfolio is lower than an individual property. Empirical data would be required to show if the volatility of buildings leased flexibly was significantly greater than the volatility of individual buildings leased on a traditional basis.

5. CONCLUSIONS

- **Flexible leasing is expected to deliver higher net income at the cost of greater volatility**

Any change in leasing arrangements will affect investor returns. Shorter leases are expected to lead to more volatile income patterns but the additional revenue from leasing flexibly, due to higher densities and charging for added services, is expected to deliver higher net income through the cycle.

Operators able to lease fully fitted-out serviced office space on two-year (or longer) lease terms will be able to reduce the risk of an income shortfall in a downswing.

- **Economies of scale will favour larger operators and larger buildings**

Larger operators, through their greater expertise, a network of offices and economies of scale, should achieve the highest income premium, with larger buildings offering both maximum cost efficiencies and agglomeration benefits, as well as opportunities for further synergies with traditional leasing.

- **A passive approach of leasing traditionally to an operator is expected to result in both lower and more volatile income**

Passive landlords, adopting a 'hands-free' approach, will be taking a lower rent for a longer lease term, reducing their exposure to a downswing. However, there is the risk that the operator is unable to survive a downturn, leaving the landlord with the costs of running, or liquidating, a business centre in a difficult trading environment and without the requisite skill set.

- **Operating directly or through a management contract is expected to become the model of choice**

To remove the risk of operator default, whilst retaining the premium income for flexible leases, many investors are considering a DIY approach, as outlined in the IPF Report. A partnership between investors and operators, sharing the additional income and the volatility, is an effective means of profiting in the new office market where flexible leasing is a significant, and growing, component.

- **Market data requires a systemic overhaul to support effective valuation**

A move towards an explicit DCF valuation approach will require market statistics compiled from the records of the major operators over at least one downturn. As transparency improves and more investors gain experience of flexible leasing requirements, liquidity is expected to improve, as the number of experienced operators in the market grows to provide a sufficient investor base.

Data is improving (although data transparency in published report and accounts has been much reduced in the recent downswing) which will allow valuations to more accurately reflect the fundamental characteristics of the sector, including the volatility and level of the income.

- **Liquidity has been poor as investors seek to 'pass round the hot potato' of buildings leased to operators on traditional leases**

As vacancy rates on flexible space fall and rents rise more quickly than on traditional space, investors must guard themselves against complacency and be cognisant of the higher volatility of the FSM.

APPENDIX A: DISCUSSION OF METHODOLOGY AND MARKET ASSUMPTIONS

This study simulates, through modelling, the level and volatility of income for leasing flexibly and compares the results to leasing traditionally. The methodology and market assumptions made are discussed in this section of the report.

The rents receivable from a portfolio of 10-, five- two- and one-year lease terms are simulated, with lease expiry dates spread evenly over the term of the lease such that, for example, a tenth of the rent roll for the 10-year leases are assumed to expire each year[10].

Rental growth

The approach is to simulate rental income through the last three complete cycles spanning the 26 years from 1996 to 2021 (inclusive). The period includes three periods of above inflation rental growth from 1996 to 2001, 2005 to 2007 and 2013 to 2016, and three periods of falling market rents: post the dot.com boom and bust, from 2002 to 2004; post the GFC, from 2008 to 2012; and the post Brexit referendum and Covid period, from 2017 to 2021. The characteristics of the three cycles used in the analysis are tabulated in Table A1.

For simplicity, a net-effective market rent is assumed, with incentives applied over the course of the whole lease.

Table A1: Standard Office Rental Trends (real terms, i.e., after CPI inflation)

Cycle 1	Real Rental Value Growth	Cycle 2	Real Rental Value Growth	Cycle 3	Real Rental Value Growth
1996-2001	48%	**2005-2007**	18%	**2013-2016**	31%
2002-2004	-22%	**2008-2012**	-25%	**2017-2021**	-8%
1996-2004	16% / 1.6% pa	**2005-2012**	-11% / -1.5% pa	**2013-21**	13% / 1.4% pa

Source: MSCI, ONS, RES

The three previous cycles are only a guide for investors of what they can expect in the future. Each cycle is different in the length and quantum of the upswings and subsequent falls in market rents (RICS, 1994). However, it is reasonable to assume that the degree of rental volatility recorded in these cycles is likely to be repeated in the future.

The profile of rental value growth has varied by broad region, so results are calculated separately for the City, West End, Rest of South East and Rest of UK (real rental value growth over the period 1996-2021 being 1.0% pa, 2.2% pa, -0.8% pa and -1.0% pa respectively).

[10] This approach removes idiosyncratic influences on the results (tenant renews/does not renew, variation in rental value growth) and reports only the cash flow from a fully diversified portfolio of leases. Individual properties, with specific lease terms and generating differing levels of rental value growth, would deliver varying patterns of income.

APPENDIX A: DISCUSSION OF METHODOLOGY AND MARKET ASSUMPTIONS

Letting periods

The lower frictional cost at entry and shorter commitment period should mean briefer vacancy periods between lettings for shorter leases.

Shorter leases also allow occupiers to dispose of surplus space at the end of the lease and, in a general economic downswing, there is an increased risk that they do so. Office rents would quickly respond to this reduced level of demand and, under this scenario, whilst occupancy may not fall precipitately, the overall cash flow from an office let on short leases would fall quickly as new lettings are made on the lower rental level.

With little hard data to rely on, the first assumption is for vacancy periods of 18 months for a 10-year lease, 12 months for a five-year lease, six months for a two-year lease and three months for a one-year lease, rising in a downswing to 36, 24, 12 and six months respectively.

Tenant renewal rate

A tenant renewal rate of 40%[11] is assumed on a 10-year lease, falling to 20% in a downswing. The tenant renewal rates[12] are then set for other lease terms to give the same long-term vacancy rate (18.5% when market rents are falling and 7.8% when market rents are rising[13]).

Tenant default rate

The tenant default rate is set at 0.25% when rental value growth is positive, rising to 0.75%[14] when rental value growth is negative.

Table A2: Model Assumptions

Lease term	10-year		Five-year		Two-year		One-year	
Rent review basis	Five yearly, upward only, market rent		n/a		Annual indexation (2% y/y)		n/a	
New lease length (no break)	10 years		Five years		Two years		One year	
	In years of positive/ negative rental value growth							
	+ve	-ve	+ve	-ve	+ve	-ve	+ve	-ve
Tenant renewal rate	40%	20%	53%	35%	61%	45%	61%	45%
Vacancy period (months)	18	36	12	24	6	12	3	6
Tenant default rate (% of rent)	0.25%	0.75%	0.25%	0.75%	0.25%	0.75%	0.25%	0.75%

[11] The MSCI Lease Events Review reports tenant office renewal rates averaging 24% on a weighted basis and 32% on an unweighted basis over the 23 years to 2020.

[12] British Land reported a 68% tenant retention rate on their Storey serviced office format in their 2020 Report and Accounts

[13] In effect, it is assumed that tenant length of occupancy is unaffected by the lease term.

[14] RES Lease Consortium

APPENDIX A: DISCUSSION OF METHODOLOGY AND MARKET ASSUMPTIONS

Occupation densities

A higher rent is achieved for office space let with a Category A+ or B fit-out. Conventionally, this space is leased on shorter lease terms (an occupier is unlikely to want to incur significant fit-out costs whilst only committing to a short lease) accompanied by a higher density of occupation.

The IPF Report indicates a typical occupation density of 11.1 m^2 (120 ft^2) for a conventional lease, 7.4 m^2 (80 ft^2) for managed space and 4.6 m^2 (50 ft^2) for coworking space. Achieving the same rent per person would equate to a 50% premium for managed space and a 140% premium for coworking space.

To secure this rental premium requires a fully fitted office, with access to services. Achieving such high occupancy densities in a managed environment is challenging as some space is inevitably lost (the gross-to-net) to create individual offices.

Large occupiers are becoming progressively attracted by the increased flexibility and higher occupation densities on at least a portion of their real estate portfolios. It is often stated that their staff are happy to accept higher densities in return for a lively, and often better managed, environment.

A reluctance to work in a high density setting for health reasons, post the pandemic, has not been cited by any of the operators in their report and accounts. Indeed, anecdotally, operators have (unsurprisingly) been increasing the number of desks in an effort to restore profitability. There has been a more general increase in emphasis on employee wellbeing and enhanced cleaning regimes have been instigated.

However, in the longer term, there is a risk that occupiers might find higher densities negatively impact productivity. Whilst there is no evidence to support this at present, working preferences may evolve and lead to changes in levels of productivity. Consequently, current perceptions of the advantages of flexible occupancy may shift[15].

Fit-out

Operators will incur the additional costs of fitting-out the space. A high density fit-out will be both more expensive and entail a higher rate of wear-and-tear due to the higher density of occupation. The provision of a value-add product should, however, deliver a healthy margin.

Office layouts can contribute to staff productivity and retention. Operators that are skilled in devising layouts that provide a boost to productivity should, in theory, be able to achieve a higher rent.

Fit-out costs will inevitably vary from building to building and operator to operator. As an illustration, a fit-out cost equivalent to 20% of the market rent each year, with a 30% rise in rent, is assumed.

[15] A report by the British Council for Offices (BCO) recommends a new method for calculating the amount of space needed per person in the post-pandemic world of flexible working. The research claims to identify a 'sweet spot' of 10-12m^2. per person. This will account for the rise in people working from home and hot-desking when in the office, while simultaneously ensuring the workspace meets modern employers' requirements to promote productivity and wellbeing, as well as targets to minimise carbon emissions

APPENDIX A: DISCUSSION OF METHODOLOGY AND MARKET ASSUMPTIONS

Service cost versus provision

In order to use any space, in any location, occupiers require services from desks (Category B fit-out) to security, technology, mail management, reception staff and cleaners.

Whilst some services are essential, most have an element of choice between the level/quality of service and cost. On a traditional lease, the occupier makes many of these choices for themselves. When the building is multi-let, the landlord provides some services (mostly on shared space, such as the reception area/staffing) and levies a separate charge on the occupiers for the cost of providing the services.

There is no aspect of traditional leasing that has been the source of quite such annoyance to occupiers as the charges made for the provision of services. Sanderson quotes, "The perennial dissatisfaction with value for money for service charges is clear[16]".

On a traditional leased property, the service charge is seen as a cost to be minimised on the tenants' behalf.

With a flexible leasing model, the services are an opportunity to achieve a higher cash flow.

A premium for services?

The flexible leasing model requires many more services to be provided to the occupier. The price paid by the customer for essential services is 'bundled' with the desk charges for the space.

This raises the possibility that occupiers will pay a premium for service and that the service provider can extract this surplus, achieving an enhanced return through either:

- economies of scale or expertise, to deliver a higher quality/lower cost service; or
- discriminatory pricing, to achieve higher revenue.

Economies of scale either allow the provision of better services for the same cost or of the same level of service at a lower cost.

The larger the operator, the higher the probability of achieving economies of scale. However, data on the existence of economies of scale is scant to almost non-existent with such information regarded by operators as commercially sensitive.

In theory, the existence of economies of scale should mean that properties managed by larger operators will deliver a higher net income.

This does not imply that a property run by a larger operator should receive a higher valuation: a provider cannot sell a building and their expertise. However, a building let to a large operator may achieve a higher price if the owner benefits from the higher cash flow through a profit-sharing arrangement.

[16] Determinants of satisfaction amongst tenants of UK offices, Danielle Claire Sanderson, Victoria Mary Edwards, Journal of Corporate Real Estate, May 2016

APPENDIX A: DISCUSSION OF METHODOLOGY AND MARKET ASSUMPTIONS

Active landlords and operators can also price discriminate by charging different prices depending on the:

- number of desks leased, e.g., lower unit price when greater quantity is bought;
- time of use, e.g., higher price for meeting rooms at peak times;
- age profile, e.g., discounts for start-ups;
- time when unit is leased, e.g., discounts for an early leasing commitment; and
- availability in the centre.

The main principle behind this price discrimination is that an operator is making use of different price elasticities of demand. If some customers have a very inelastic demand, they will be prepared to pay a higher price. If the provider can set higher prices for these occupiers, it can increase its revenue.

Larger centres, offering more opportunity for price discrimination and more economies of scale, would be expected to generate the greatest income premium.

With little hard data available, assumptions have been made for the cost of delivering services, at 10% of rental value[17], and the profit margin, at 50%.

Agglomeration benefits

Coworking, one part of the broader flexible space market, also offers the potential for providing an additional value to occupiers through agglomeration benefits that can be captured in a higher rent. Just as agglomerations increase the value of a whole metro area, such as the City of London, so coworking has the potential to achieve this in the microcosm of a single building.

Centres that specialise in companies from specific industries, such as De Beauvoir Block for the creative industries or build online communities, will maximise the additional value from coworking.

Prestige

Offices command a higher rent if its location, or the building, is valued more highly by prospective tenants (for example, the marketing benefit from a prestigious address or the contribution of quality of the environment to support staff productivity and retention).

One simple means of achieving an additional income stream from a prestigious location is the sale of the address to multiple firms.

A strong operator owner or operator brand is a means of creating further marketing value to occupiers, which could be captured by the industry's leading operators.

Offering the ability to book space and meeting rooms in multiple locations also adds value to occupiers, reducing their costs. This value can be captured by large, multi-national operators.

[17] IWG report overhead as a percentage of revenue of just over 10% in 2018 and 2019

APPENDIX A: DISCUSSION OF METHODOLOGY AND MARKET ASSUMPTIONS

Summary of flexible leasing cost and rent assumptions

Table A3 summarises the cost and additional rent associated with the fit-out and services. Rates are also added to the simulation, at 30% of rental value, which are included in the rent charged for a flexible lease.

Table A3: Model Assumptions – Service Costs and Additional Gross Rent

	Premium	Costs
Cat B fit-out	30% of rental value	20% of rental value
Services	15% of rental value	10% of rental value
Rates	30% of rental value	30% of rental value

Table A4 provides an illustration of premia and costs. Assuming a traditional office rent per square metre per calendar month (per m², pcm) of £68.00, at an occupation density of 7.4 (being the average floorspace, in m², per full-time equivalent member of staff), the office rent per workstation is the equivalent of £503 per m², pcm. If a serviced office provider achieves a workstation rental of £552 per month at a density of 4.6, this would represent a rental premium, before costs, of 75% (i.e., £119 per m², pcm) over the traditional office rent; after costs, the premium reduces to 15% (or £78.20 per m², pcm).

Table A4: Illustration of Rental Premium and Costs

	Premium, per m², pcm	Costs, per m², pcm	Net, per m², pcm
Cat B	£20.40 (30% of FRI rent)	£13.60 (20% of FRI rent)	
Rates	£20.40 (30% of FRI rent)	£20.40 (30% of FRI rent)	
Services	£10.20 (30% of FRI rent)	£6.80 (10% of FRI rent)	
TOTAL	£51.00	£40.80	£10.20
% of traditional office rent	75%	60%	15%

Note: Assumes traditional lease rent of £68.00 per m², pcm

APPENDIX A: DISCUSSION OF METHODOLOGY AND MARKET ASSUMPTIONS

A flexible lease operator is liable for empty rates and the costs of the fit-out and delivering the services on any vacant space. On the basis of these assumptions, at an occupancy rate of 80% and above, an office will generate a higher net operating income if leased flexibly.

New letting fees of 15% of gross rent are also included.

Discount rate

The increased volatility of the cash flow for shorter, flexible leases should be reflected in a higher required return, reflected either as a premium in a traditional valuation yield or in the discount rate for a DCF valuation.

To calibrate the approach, an additional volatility premium is assumed relative to a 1% volatility risk premium for City of London offices. To quote from the IPF Paper, What is Fair Value, April 2015[18]: *"It is worth noting at the outset that there are inherent measurement difficulties in estimating required returns. The precise impact of depreciation can vary widely and required compensation for risk and illiquidity will differ between investors, so are essentially intangible – indeed, these are the subject of several separate IPF research papers. The estimates provided here aim to take this research into account; however, it is important to recognise that opinions differ and alternative assumptions, both higher and lower, can also be justified. The framework provided within this paper can readily be adapted for these different assumptions."*

Leasing to an operator on a traditional lease

A more passive approach by a landlord is to let a building to an operator on a traditional lease.

At first glance, all parties would seem to gain from an arrangement whereby an operator takes a long lease and re-lets on flexible terms at a desk charge in excess of rent and costs: the landlord's underlying investor achieves the stable cash flow they prefer; the occupiers receive the flexibility they require; and the operator earns a profit from their services.

The 'Achilles heel' of this arrangement is whether the rent payable to the landlord, at any point over the course of a lease, will exceed the operator's cash flow for long enough to bankrupt the operator – either overall (if the operator provides a full parental guarantee for the term of the lease) or at a building level where the individual centre is underperforming. The cash flow risk may have been transferred from the landlord to the operator but, if the operator is unable to bear this risk, the landlord has not achieved the stability of income that they sought.

There are two possibilities in the event that the operator is unable to survive. Firstly, that the operator seeks a rent reduction, perhaps through a company voluntary arrangement (CVA). For example, in 2003, Regus disposed of its profitable UK operation and filed for Chapter 11 bankruptcy in the US. Secondly, that the owner is left with an unprofitable serviced office operation (at the time of transference), which will require time and cost to manage. On the upside, the building the landlord is left holding will have benefitted from a full fit-out.

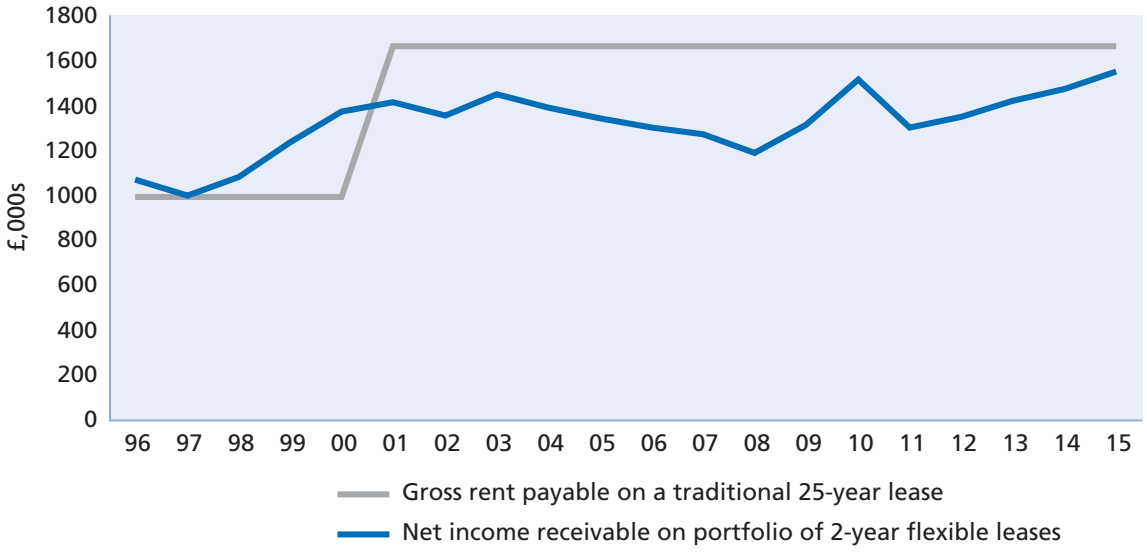
Through the Covid pandemic, operators went through much-publicised portfolio rationalisation programmes and surrender discussions with landlords. As an indication of the extent of the issues in recent years, WeWork dissolved 37 of its 112 UK special purpose vehicles (SPVs).

[18] IPF Short Paper, What is Fair Value?, April 2015

APPENDIX A: DISCUSSION OF METHODOLOGY AND MARKET ASSUMPTIONS

The effect of a default in a downswing can be extreme. For example, Figure A1 compares the gross rent payable on a 25-year lease with the net rent receivable on a portfolio of two-year flexible leases starting in 1996. After the first review, in 2001, market rents fall precipitously but the upwards-only rent review on the 25-year lease prevents the rent from falling. The operator is then unable to generate a sufficient net income to cover the gross rent payable to the landlord for the remainder of the lease.

Figure A1: Net Income from City Office Portfolio of Two-year Flexible Leases versus Gross Rent Payable on a 25-year Traditional Lease



Source: MSCI, RES
Note: End December 1995 net effective market rent = £1,000,000

If any rental discount on the long lease is priced in the form of an upfront rent-free incentive, the result may be that the investor receives an even lower total cash flow through the term of the lease.

Whilst the above example is extreme (but not unique[19]), the level of over-renting reported by MSCI on offices regularly exceeds 10% and, often, 15% – the estimated profit margin of leasing flexibly.

To model the impact of leasing to a flexible space operator, the net income from a traditional 25-year lease has been modelled assuming a 15% chance per annum of operator default in a modest downswing (rental value growth between 0% and -5% per annum), rising to 20% per annum for rental value growth between -5% and -10% per annum and to 25% for rental value growth lower than -10% per annum.

[19] According to MSCI, City office market rents fell by more than 15% in each of the five years after 1987-1992, 2000-2002 and 2006-08

APPENDIX B: SUMMARY OF SIMULATION ASSUMPTIONS

This appendix details the portfolio assumptions used in the modelling of both traditional and flexible leases. The assumptions are also presented in Table A5.

Rental income for portfolios of differing lease terms is simulated using MSCI rental value growth data from 1996 to 2021.

Traditional leases

- For simplicity, incentives are applied over the course of the whole lease.
- A five-year, upward only rent review is applied to the 10-year leases and annual indexation, set at 2%, is applied to the two-year leases.
- The vacancy period is set to 18 months for a 10-year lease, 12 months for a five-year lease, six months on a two-year lease and three months on a one-year lease when rental growth in the following year is positive and 36, 24, 12 and six months respectively when rental growth in the following year is positive.
- A tenant renewal rate of 60% on a 10-year lease is assumed, falling to 40% when market rents are falling. The tenant renewal rates are then set for other lease terms to give the same long-term vacancy rate (rising to 13.8% when market rents are falling and 5.2% when market rents are rising).
- The tenant default rate is set at 0.25% pa when rental value growth is positive, rising to 0.75% pa when rental value growth is negative.
- Lettings and renewal fees are set to 4% and 2%. Rent review fees are set to 3%.

Flexible leases

- A fit-out cost equivalent to 20% of the market rent each year and a 30% rise in rent are assumed for the flexible leases.
- The cost of delivering services is assumed at 10% of market rent with a 50% profit margin.
- Rates of 30% of market rent are included in the rent on a flexible lease and payable by the landlord / operator after three months.
- Lettings and renewal fees are set at 15% and nil, respectively.

APPENDIX B: SUMMARY OF SIMULATION ASSUMPTIONS

Table A5: Portfolio Assumptions

Lease term	10-year		Five-year		Two-year		One-year	
Rent free period (months)	Nil		Nil		Nil		Nil	
Rent review basis	five yearly, upward only, market rent		n/a		Annual indexation (2% y/y)		n/a	
New lease length (no break)	10 years		Five years		Two years		One year	
	In years of positive/ negative rental value growth							
	+ve	-ve	+ve	-ve	+ve	-ve	+ve	-ve
Tenant renewal rate	60%	40%	69%	52%	74%	58%	74%	58%
Vacancy period (months)	18	36	12	24	6	12	3	6
Tenant default rate (% of rent)	0.25%	0.75%	0.25%	0.75%	0.25%	0.75%	0.25%	0.75%
Fees / costs						**Serviced**		**Serviced**
Letting fees	4%		4%		4%	15%	4%	15%
Renewal fees	2%		2%		2%	Nil	2%	Nil
Rent review fees	3%		3%		3%	n/a	3%	n/a
Operating costs	3%		3%		3%	Nil	3%	Nil
Vacant costs	10%		10%		10%	Nil	10%	Nil
				Fit-out				
				Rental premium, pa		30%		30%
				Costs, pa		20%		20%
				Services				
				Rental premium, pa		15%		15%
				Costs, pa		10%		10%

Note: All premia, fees and costs expressed as a proportion of rental value, except operating costs which are expressed as a percentage of gross rent.

RESEARCH

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