PANDA HOUSE VIABILITY - IMPACT OF VARYING CAPITALISATION YIELDS

13/01/2021

Prepared by James Brown

Yield	Residual Land Value - Dr Lee (all of Dr Lee's Other Assumptions Retained) - £millions	Residual Land Value - Mr Brown (all of Mr Brown's Other Assumptions Retained) - £millions
5.2	5% 3.4	9 1.54
5.0	0% 4.0	4 2.09
4.7	5% 4.6	5 2.71
4.5	0% 5.3	2 3.48
Mr Brown considers yields below thi	<u>is line to be implausible: see the c</u>	appended reports
from JLL at p.4 and Knight Frank		
4.2	5% 6.0	7 4.15
4.0	0% 6.9	2 5.01
3.7	5% 7.8	5.98
3.5	0% 8.9	7 7.09
3.2	5% 10.2	4 8.37



UK Living

Capital Markets _{Q4 2019}



Introduction

In 2019 JLL brought together student housing, coliving, multifamily and healthcare under one team to represent the full lifecycle of Living. These sectors all depend on macro demographic trends such as urbanisation, an ageing population and changing household formation, which thanks to a shortage of stock, means that investors are finding these sectors increasingly attractive.

The JLL Living Quarterly Bulletin aims to provide an update on the key issues in each sector for all our clients, whether you are interested in just one sector or the whole Living market.

If you have any comments or feedback, we would love to hear from you and we look forward to sharing the next steps of our Living journey.



Nick Whitten
Head of UK Living Research

"The scale of Living investment in 2019, accounting for 22% of the total commercial real estate market, is a vindication for JLL's decision to put all Living focused teams into one division. Now that the fog of political uncertainty that has surrounded the market starts to clear, we are looking forward to Living getting even bigger in 2020.

The student housing sector continues to attract strong interest with several exciting opportunities expected to come to market this year, while multifamily as the largest Living sector will still be very much development focused. We can also expect more to come from coliving and retirement living as investors seek to offer customers a broader range of products to meet their Living needs."

UK Living investment in 2019:

22%
of all investment totalling
£11.2 bn

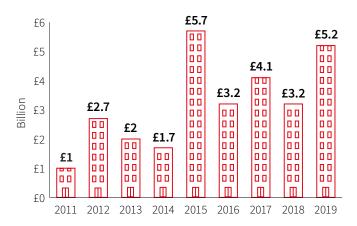


Simon Scott
Lead Director, UK Living Capital Markets

Student Housing

2019 showed near record total transaction volumes reaching $\pounds 5.2$ billion, the second highest year on record. However, the total does not tell the full story as the number of transactions was down 33% from 2018, reflecting a slowdown in granular activity.

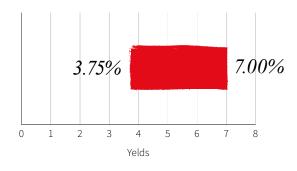
Student housing investment



Source: JLL

The headline story of the year was Unite Students acquisition of CPPIB's interest in Liberty Living for £2.2 billion, and to date marked the single largest transaction in the UK PBSA sector. Goldman Sachs and The Wellcome Trust will hope to eclipse this in 2020 with the sale or IPO of the iQ student platform which is likely to be in excess of £4 billion.

JLL headline yields



Other key portfolio deals in 2019 include the DWS purchase of the 3,195 bed Vita portfolio for £590 million, and the Student Castle portfolio which was acquired by SPH for £448 million and reflected approximately £190,000 per bed. This was SPH's second significant portfolio transaction of the year.

London continued to show its appeal with the sale of Paul Street East in Shoreditch at 3.85% to Greystar and The Project in Hoxton being bought by M&G for £73 million late in 2019. Whilst development activity in the capital is significantly reduced there are signs that The London Plan might take a softer stance to University Partnerships. News of any relaxation in the London Plan will be welcomed by developers, but there will remain numerous other challenges and this will continue to fuel demand for quality trading assets.

Sentiment in the sector over 2019 has not been completely immune to the wider capital markets slowdown. Many investors have exercised caution with Brexit and then the General Election dominating decision making. Owners were not prepared to entertain any form of price discounting that buyers would potentially feel covered any negative impact of the political backdrop which lead to delays or inactivity. Early signs in 2020 are positive. Following the General Election and Conservative majority, investor sentiments has an air of confidence which is anticipated to lead to increased activity in the sector.

The core fundamentals for the UK PBSA sector remain strong. Demand continues to grow with the latest 2018/19 HESA data highlighting a stable increase in full time student numbers. The $\underline{\textbf{JLL UK Student Housing report}}$ forecasts an extra 500,000 full time students by 2030. JLL estimates that 2020 could see transaction totals in excess of £7.5 billion with iQ being one of the main focuses in H1.



Key contact:

Huw Forrest
Director, Student Housing



Research focus UK Student Housing Report 2019



Student housing continues to offer **income producing opportunities** at scale with experienced operators and asset managers.



Despite a five year decline in domestic 18-year olds, the sector has seen an increase of

114,000UK full time students over the same period.



JLL predicts there will be a further

500,000 full time students by 2030.



There ar

650,500purpose built student accommodation (PBSA) beds in the UK.



36%

of university towns have an average direct let PBSA rent below £125 per week, compared to **55%** in 2013/14.



10%

swing from students in HMOs to PBSA would require an additional **100,000** units.



Construction volumes have fallen by

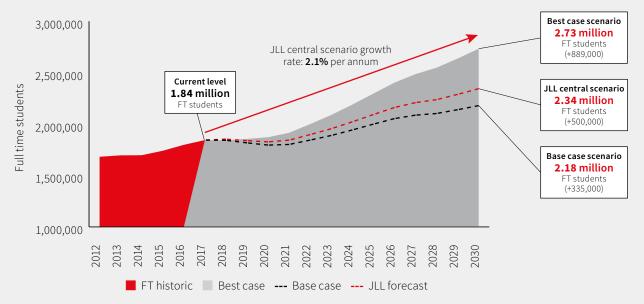
25%

in the last three years and new development faces further pressure.



Faced with the **challenge of higher tuition fees** and
weakening demographics,
demand for higher education
has shown **robust growth**

JLL full time student demand forecasts



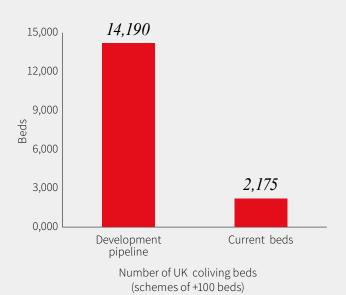
Source: JLL, ONS, HESA, UCAS

Read more on the student housing market in the full research paper at **jll.co.uk/uk-student-housing-report-2019**.

The sector continues to gather momentum and this quarter saw student housing developer Crosslane enter the market with a development pipeline of 1,700 beds, while The Collective and DTZ Investors launched a £650 million fund to purchase and build in London. This is on top of The Collective securing two new consents in Stratford and Lambeth respectively.

JLL's own research identifies the UK as the largest coliving market in Europe, with London, Manchester and Birmingham all key hotspots. At present we are tracking over 16,000 beds, either operational or in the pipeline, across the UK.

Coliving supply UK



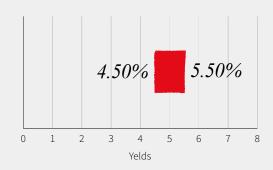
Source: JLL

With development viability such a key issue at present, we can expect more student housing developers to enter the coliving market and opening their brands to young professionals in the wider private rented sector. In November, Curlew changed its planning application for 315 beds in Exeter to coliving from PBSA, while Fusion's 850 bed mixed coliving and student development in Sheffield topped out in the same month.

The ambiguity surrounding which use class the sector falls into is also contributing to its appeal with investors in complimentary sectors. Having secured a PBSA sui generis consent for Old Oak, the Collective is now pursuing consents under C1 hospitality use, along with several other developers. Meanwhile, amongst others, Node is preferring to focus on coliving under a C3 residential use class.

Much depends on the brand and the markets in which it operates, both in the UK and internationally. Local authorities are also going to help shape how the sector grows via the planning process as the majority of pipeline is still yet to gain consent. There are now also examples of serviced office providers and serviced apartment operators entering the coliving market in other countries, trends we can expect to see replicated in the UK in 2020.

JLL headline yields





Multifamily

Multifamily cemented its place as one of the largest Living sectors in 2019 with £5 billion of transactions, making the UK the second largest market in Europe.

Forward funding is still a key component of the market, accounting for 89% of all deals last year, compared to 77% in 2018. Opportunities to purchase income producing assets, particularly at scale, remain limited but will increase as the sector continues to grow.

Despite this, the pipeline of deals is starting to dry up across the market, both in London and the regions, so opportunities for the market to increase further in 2020 may appear limited at first.

Private renters by age group

35 30 825 25 98 10 5 0 16-24 25-34 35-44 45-64 65-74 75+ Age

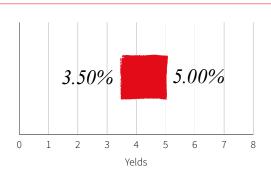
Source: JLL

Buyers active in the sector this year range from UK institutions to private equity. Moorfield recently launched its More brand, covering 785 mainly operational units in Newcastle and Manchester, while Sigma Capital purchased two development sites in London in October with a gross development value of £43.8 million.

The result of the General Election means that some of the proposed policies aimed at the sector such as rent controls and right to buy for private tenants are no longer a consideration. However, the scale of the housing crisis and the importance of the youth vote, especially in urban areas, means that with the current government we can still expect more tenant focused legislation.

One key proposal includes the lifetime deposit which moves with the tenant. With Help to Buy expected to be reviewed in 2023, all eyes will be on whether renting will gain more policy support as a viable alternative to home ownership.

JLL headline yields





Key contact:

Alix Green

Director, Multifamily



Senior Living

The scale of the potential retirement living market in the UK means that there is a considerable volume of money looking to enter the market. However, a long-standing issue has been the limited number of opportunities for investors typically used to buying an operational platform or assets at scale.

The other alternative is to develop a platform. Goldman Sachs' Riverstone Living brand added a second scheme to its development portfolio in August in a forward funding deal with the Berkeley Group, set to deliver 190 units with a gross development value of £300 million. In August, Schroders and Octopus Real Estate entered into a joint venture to provide equity for the development of four sites worth £400 million with the Audley Group.

One key issue to arise this year is the ruling that money from event fees (deferred management costs) be included when assessing affordable housing viability for LifeCare Residences £97 million West Hampstead scheme. This will have several implications for the growth of the sector, particularly in the capital, and is likely to escalate the move towards retirement rental platforms.

The elderly care market remains fragmented. The market share of the three largest operators remains low compared to other markets at less than 12%. Two of the most active buyers in 2019 have been the specialist REITs, Target and Impact, who have invested over £2.57 billion in care homes between them in 2019.

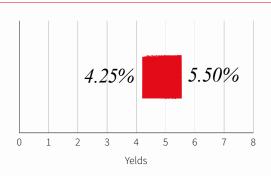
Additional over 65s as a proportion of UK population increase 2018 - 2020

51%

Barchester, one of the big three care operators, purchased 24 care homes from Brighterkind for £165 million in November but there have been no other largescale transactions since Belgian investor Aedifica entered the market with a £450 million purchase of 93 care homes in December last year.

Noticeable for its absence from the 2019 General Election compared to 2017 was the topic of social care. The government put forward proposals in the Queen's Speech for cross party consensus on a sustainable solution to this issue. This suggests a consensus is unlikely to be agreed for some time. In the meantime, the private pay sector is well placed to grow with the reliance on rising levels of housing equity to underpin care funding for the foreseeable future.

JLL headline yields





Key contact:

Verity Knight
Director, Healthcare





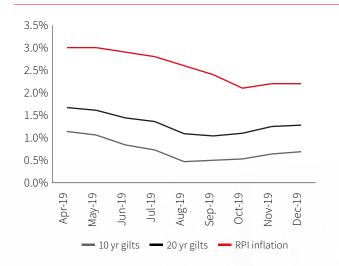
Long Income

2019 was a strong year for long income investments characterised by the increased number of investors seeking to enter this particular sector in the market.

The market can be broken into "Annuity" and "Sub Annuity" deals dependent upon the credit status of the tenant and the length of lease. Both sectors are seeing a steady influx of capital seeking inflation linked returns across virtually all sectors. The Living sector as a whole, with its operational characteristics, provides ample opportunity to create long term indexed leases backed by the underlying fundamentals of the operational property.

Pricing across the sector remained aggressive, helped by the low gilt market. Longer term money (30 year gilts) peaked in November 2018 at 1.95% but fell to 1.04% in September 2019. They have since settled at 1.28% (December 2018). However with the reduction in inflation, RPI in December 2019 was 2.2% compared to 3.0% in April, meaning pricing for index linked products remained relatively level in the final quarter of 2019.

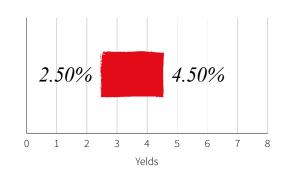
Long income



Public sector tenants, remain particularly sought after in the market place, with record pricing being achieved for leases with 50 year terms and RPI indexation. Leased residential deals, either affordable housing or build to rent, have also been achieving record yields with insatiable appetite from the investment market.

With low relatively stable gilt levels we expect to see continuing investor interest in all forms of long income with a particular focus on the Living sector, and the attractive fundamentals it provides to long term sustainable income streams.

JLL headline yields





Key contact: Martin Le Grice **Head of Long Income Solutions**



Outlook



After three years of uncertainty, the UK has now left the EU on the 31st January. With the Withdrawal Agreement passed, the focus will now shift to what future trading agreement we will have with the EU following the end of the transition period in December 2020.

The Government is insisting that an extensive free trade agreement can be done. While certainly ambitious, the future relationship negotiations are different to the Article 50 process and there is cautious optimism that the basis of a deal can be reached that works for both parties within the narrow timeframe ahead.



In March, the Chancellor will reveal the first budget of the new government. The early rumours about ripping up the fiscal rules and prioritising infrastracture for the North and Midlands suggests that we can expect some new projects. Addressing the housing crisis could also result in some degree of planning reform. Combined, there could be a number of proposals which will support the Living sectors and boost investor confidence over the next five years.



March will also see the new Governor of the Bank of England, Andrew Bailey, take over the reins. Amid the backdrop of weakening global economic sentiment, he will be hoping that his eight-year tenure is less dramatic than those of his two predecessors, Mark Carney and Sir Mervyn King. In the meantime, despite some mounting pressure to cut interest rates, the Bank of England kept the base rate unchanged at 0.75% at the end of January.



Sustainability was one of the key themes themes at JLL's 2020 Predictions event in January and will remain a prominent issue in 2020 and beyond. Blackrock's CEO Larry Fink, in his annual letter to investors made this point very clear. More investors are including sustainability into their decision making process and the impact investment market continues to grow. We can expect a lot more activity in this part of the market in 2020.



Will the real estate investment market snap back in 2020 and make up for the inertia of last year? An early sign of a change of sentiment would be the iQ student housing platform coming on to the market. The scale of investor demand for UK Living assets from across the globe suggests that there will be significant volumes of capital looking for opportunities in 2020.

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YIELD GUIDE DECEMBER 2020



Sector	Dec-19	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Change	Market Sentimen
ligh Street Retail										
ond Street	2.50% - 2.75%	2.75% +	2.75% +	2.75% +	2.75% +	2.75% +	2.75%	2.75%		STABLE
xford Street	2.75% - 3.00%	3.00% - 3.25%	3.00% - 3.25%	3.00% - 3.25%	3.00% - 3.25%	3.00% - 3.25%	3.25%	3.25%		NEGATIVE
rime Shops (Bath, Brighton, Cambridge, Glasgow, Oxford)	5.25%	6.25% - 6.50%	6.25% - 6.50%	6.25% - 6.50%	6.25% - 6.50%	6.25% - 6.50%	6.25% - 6.50%	6.25% - 6.50%		NEGATIVE
egional Cities (Birmingham, Manchester)	5.50% - 5.75%	6.25% - 6.50%	6.25% - 6.50%	6.25% - 6.50%	6.25% - 6.50%	6.25% - 6.50%	6.25% - 6.50%	6.25% - 6.50%		NEGATIVE
ood Secondary (Truro, Leamington Spa, Colchester etc)	7.50%	8.25% +	8.25% +	8.25% +	8.25% +	8.25% +	8.25% +	8.25% +		NEGATIVE
econdary / Tertiary	10.00% ++	10.00% ++	10.00% ++	10.00% ++	10.00% ++	10.00% ++	10.00% ++	10.00% ++		NEGATIVE
<u> </u>	10.00% ++	10.00% ++	10.00% ++	10.00% ++	10.00% ++	10.00% ++	10.00% ++	10.00% ++		NEGATIVE
hopping Centres										
egional Scheme	5.75%	7.00% +	7.00% +	7.00% +	7.00% +	7.00% +	7.00% +	7.00% +		NEGATIVE
ub-Regional Scheme	7.00%	8.25% +	8.25% +	8.25% +	8.25% +	8.25% +	8.25% +	8.25% +		NEGATIVE
ocal Scheme (successful)	8.75%	9.50% +	9.50% +	9.50% +	9.50% +	9.50% +	9.50% +	9.50% +		NEGATIVE
ocal Scheme (challenged)	11.00%	12.50% +	12.50% +	12.50% +	12.50% +	12.50% +	12.50% +	12.50% +		NEGATIVE
leighbourhood Scheme (assumes <25% of income from supermarket)	8.75%	9.50% - 9.75% +	9.50% - 9.75% +	9.50% - 9.75% +	9.50% - 9.75% +	9.50% - 9.75% +	9.50% - 9.75% +	9.50% - 9.75% +		NEGATIVE
ut of Town Retail										
pen A1/Fashion Parks	6.50%	7.00% +	7.00% +	7.00% +	7.00% +	7.00% +	7.00% +	7.00% +		NEGATIVE
econdary Open A1 Parks	8.00%	8.75%	8.75%	8.75%	8.75%	8.75%	8.75%	8.75%		NEGATIVE
ulky Goods Parks	6.50%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%		STABLE
econdary Bulky Goods Parks	8.00%	8.50% +	8.50% +	8.50% +	8.50% +	8.50% +	8.50% +	8.50% +		NEGATIVE
olus Open A1 (15 year income)	6.00%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%		STABLE
olus Bulky (15 year income)	6.50%	6.75%	6.75%	6.75%	6.75%	6.75%	6.75%	6.75%		STABLE
	0.50%	0.73%	0.73%	0.75%	0.73%	0.7576	0.75%	0.73%		STABLE
eisure										
rime Leisure Parks	5.25% +	6.25% - 6.50%	6.50% +	6.50% +	6.50% +	6.75% - 7.00%	7.00% +	7.00% +		NEGATIVE
ood Secondary Leisure Parks	6.25% +	7.25% - 7.50%	7.50% +	7.50% +	7.50% +	7.75% - 8.00%	8.00% +	8.00% +		NEGATIVE
econdary / Tertiary Leisure Parks	7.25% +	9.25% - 9.50%	9.50% +	9.50% +	9.50% +	9.75% - 10.00%	10.00% +	10.00% +		NEGATIVE
pecialist Sectors										
ept. Stores Prime (with fixed uplifts [NIY])	8.50%	10.00% ++	10.00% ++	10.00% ++	10.00% ++	10.00% ++	10.00% ++	10.00% ++		NEGATIVE
ar Showrooms (20 yrs with fixed uplifts & dealer covenant)	4.75%	5.25% +	5.25% +	5.25% +	5.25% +	5.25% +	5.50%	5.50%		NEGATIVE
udget Hotels London (Fixed / RPI uplifts 20 yr+ term, strong covenant)	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%		NEGATIVE
udget Hotels Regional (Fixed / RPI uplifts 20 yr+ term, strong covenant)	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%		NEGATIVE
tudent Accommodation (Prime London - Direct Let)	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%		NEGATIVE
tudent Accommodation (Prime Regional - Direct Let)	5.25% -	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%		NEGATIVE
tudent Accommodation (Prime London - 25 yr lease, Annual RPI)	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%		STABLE
tudent Accommodation (Prime Regional - 25 yr lease, Annual RPI)	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%		STABLE
lealthcare (Elderly Care, 30 yr term, indexed linked reviews)	3.75%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%		STABLE
	3.7370	3.30%	3.3070	3.3070	3.30%	3.5070	3.3070	3.3070		STABLE
oodstores										
nnual RPI increases [NIY] (25 year income)	4.25% -	4.25% -	4.25% -	4.25% -	4.25% -	4.25% -	4.00% - 4.25%	4.00%	-0.25%	POSITIVE
pen market reviews	4.75% -	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%		STABLE
/arehouse & Industrial Space										
rime Distribution/Warehousing (20 year income [NIY] with fixed uplifts)	4.00%	4.00% -	4.00% -	4.00% -	4.00% -	4.00% -	3.75%	3.50%	-0.25%	POSITIVE
rime Distribution/Warehousing (15 year income)	4.25%	4.25% +	4.25% +	4.25% +	4.25%	4.25%	4.00%	4.00%		POSITIVE
econdary Distribution (10 year income)	5.00%	5.50%	5.50% +	5.50% +	5.50%	5.50%	5.50%	5.00% -5.25%	-0.25% +	POSITIVE
E Estate (exc London & Heathrow)	4.00%	4.25% +	4.25%	4.25%	4.25%	4.25% -	4.00% - 4.25%	4.00% - 4.25%		POSITIVE
Good Modern RoUK Estate	4.50%	4.75% - 5.00%	4.75% - 5.00%	4.75% - 5.00%	4.75% - 5.00%	4.75% - 5.00%	4.75% - 5.00%	4.50% - 4.75%	-0.25%	POSITIVE
econdary Estates	6.00% +	6.25% +	6.25% +	6.25% +	6.25% +	6.25% +	6.25% +	6.00%	-0.25%	STABLE
ffices										
ity Prime	4.00% - 4.25%	4.00% - 4.25%	4.00% - 4.25%	4.00% - 4.25%	4.00% - 4.25%	4.00% - 4.25%	4.00% - 4.25%	4.00% - 4.25%		STABLE
vest End: Prime (Mayfair & St James's)	4.00% - 4.25% 3.50% - 3.75%	4.00% - 4.25% 3.50% - 3.75%	3.50% - 3.75%	4.00% - 4.25% 3.50% - 3.75%	3.50% - 3.75%	3.50% - 3.75%	4.00% - 4.25% 3.50% - 3.75%	3.50% - 3.75%		STABLE
/est End: Prime (Mayrair & St James S) /est End: Non-core (Soho & Fitzrovia)	4.00% - 4.25%	4.00% - 4.25%	4.00% - 4.25%	4.00% - 4.25%	4.00% - 4.25%	4.00% - 4.25%	4.00% - 4.25%	4.00% - 4.25%		STABLE
	4.00% - 4.25%	4.00% - 4.25% 5.00%	4.00% - 4.25% 5.00%	4.00% - 4.25% 5.00%	4.00% - 4.25% 5.00%	4.00% - 4.25% 5.00%	4.00% - 4.25% 5.00%	4.00% - 4.25% 5.00%		
lajor Regional Cities (Single let, 15 years)									. 0.250/	NEGATIVE
lajor Regional Cities (Multi-let, 5 year WAULT)	5.00%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.75%	+0.25%	NEGATIVE
E Towns (Single let, 15 years)	5.00% +	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%		NEGATIVE
E Towns (Multi-let, 5 year WAULT)	5.50%	5.75%	5.75%	5.75%	5.75% - 6.00%	6.00%	6.00%	6.00%		NEGATIVE
E Business Parks (Single let, 15 years)	5.00% +	5.25% +	5.25% +	5.25% +	5.25% +	5.25% +	5.25% +	5.25% +		NEGATIVE
E Business Parks (Multi-let, 5 year WAULT)	6.00%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%		NEGATIVE
onds & Rates										
ibor 3 mth (07/12/2020)	0.78%	0.22%	0.09%	0.07%	0.06%	0.05%	0.04%	0.03%		
ase rate (07/12/2020)	0.75%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%		
year swap rates (07/12/2020)	0.88%	0.37%	0.21%	0.17%	0.16%	0.18%	0.22%	0.23%		
y	0.69%	0.34%	0.19%	0.17%	0.20%	0.17%	0.27%	0.28%		

This yield guide is for indicative purposes only and was prepared on 7 December 2020.



The outbreak of the Novel Coronavirus (COVID-19), declared by the World Health Organisation as a "Global Pandemic" on 11 March 2020, has and continues to impact many aspects of daily life and the global economy - with some real estate markets ploally. Nevertheless, property markets are mostly functioning again, with transaction volumes and other relevant evidence returning to adequate levels and on 9 September 2020 the Material Valuation Uncertainty Clause was lifted from all UK real estate excluding some assets valued with reference to trading potential. A valuation of such a property may therefore still be reported as being subject to 'material valuation uncertainty' as defined by VPS 3 and VPGA 10 of the RICS Valuation - Global Standards; consequently, less certainty - and a higher degree of caution - should be attached to the valuations of these assets than would normally be the case. Given the unknown future impact that COVID-19 might have on the real estate market and the difficulty in differentiating between short term impacts and long-term structural changes, we recommend keeping valuations under requiar review.

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