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# The debt funding gap in the UK commercial real estate sector

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**Abstract:** This article summarises the findings of the potential UK commercial real estate debt funding gap using a multisource and multimethod data collection approach to contrast and compare estimates for the potential shortfall in debt funding 2022 - 2026 due to a decline in property values. Bayes Real Estate Research Centre estimate shows the UK debt funding gap for commercial real estate loans over the next 1-5 years is c£27 - 37 bn, or approximately £5-7 bn per year. Most debt is assumed to be held by UK institutional investors.

## 1 Determining the impact of rising interest rates on real estate debt equity

Since the beginning of 2022, global financial conditions have tightened significantly, and central banks across the world have tightened monetary policy. Market interest rates and corporate bond spreads have risen sharply, reflecting expectations of further policy tightening in response to renewed risks of more persistent elevated inflation and increasing credit risk.

General economic theory suggests that the decade of quantitative easing (2010 - 2020), which was supporting the recovery of the economy from the GFC 2008/09, has had several effects on asset pricing:

• Direct impact on asset prices of investors rebalancing their portfolios in response to the Bank of England's QE-related asset purchases.

• Liquidity premia: the presence of the central bank in the market as a significant buyer of assets would improve market functioning and thereby reduce premia for illiquidity.

• Bond yields repriced, with yields close to zero.

• There is a strong long-term relationship between interest rates and commercial real estate (CRE) capitalisation rates (investment yields). On a relative value basis, multi-asset investors had very low required rate of return for CRE due to low bond yields. This allowed for further declines in initial yields, and values to increase.

• Prolonged QE programmes decrease uncertainty in the short-term around potential interest rate rises and currency fluctuations.

The market in H1 2022 has reacted to increased interest rates with the repricing of equities, bonds and real estate asset values. For highly leveraged assets such as real estate this represents several downside risks:

• Asset value are likely to decline across all sectors.

• An increasing interest rate cost burden for borrowers and constraints rental growth.

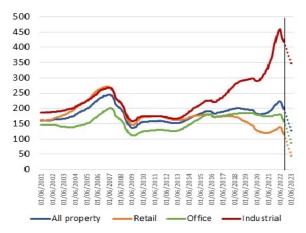
• Short to medium term funding becomes very expensive.

• Potential defaults due to non-payment of interest costs rise.

• A potential debt funding gap at refinancing at same LTV between old and new, lower property valuation.

Real Estate like other asset classes has experienced constant value increases and yield depression (Figure 1). Whilst retail and office property values have not recovered to their pre Global Financial Crisis 2008/09 peak, some property types such as logistics are now more expensive than since the last 30 years. Recent sector growth shows the steep increase of logistics property over the last 12 months, showing the value double since the last peak in 2007.

Figure 1: MSCI Capital Value Index (1987=100)



Dotted lines represent the Bayes 2022/23 forecast Source: MSCI UK Monthly data

### 2 The importance of real estate debt to the UK financial sector

The residential mortgage sector in the UK, which captures lending to private individuals account for  $\pounds 1.6$ tr (BoE, 2022), with an annual new lending volume of  $\pounds 200 - 300$ bn. In comparison the UK gilt market is  $\pounds 2.1$ tr (Statista, 2021). In addition to private residential mortgages the institutional commercial real estate investment market finances itself via secured bank debt and bonds. The IPF estimates there is approximately  $\pounds 918$ bn of UK commercial property, which on average is financed with

36% debt, resulting in £330bn of debt. The secured mortgage lending market is still the largest funding source for this debt, financing 73% while 27% is provided through traded bonds.

#### 3 Historic evidence of loan losses

As a result of the GFC 08/09, banks were forced to deleverage their balance sheets between 2009 - 2013 and calculating and revising their loss calculations from this period. The highest cumulative loan losses were reported in 2011 with £32bn, representing 12% of outstanding loan books (Bayes CRE lending report, 2011).

In 2015, the Bank of England reported that UK banks have taken £18.6 billion cumulative write downs on loans to non-financial corporates investing in CRE over the period 2008-2015 representing a loss of 8.8% of total outstanding CRE loans, summarised in the IPF report on Changing Sources of Real Estate Debt Capital and Evercore estimated that banks sold £37 billion in CRE loans in the 2012–2016 period.

In 2019, AEW estimated the UK commercial real estate debt funding gap to be around £30bn, or 16% of outstanding loans for the 2020-2023 period. The approach was based on measuring the mismatch between the outstanding principal debt amount with the amount available for refinancing assuming a decline of property capital values on a sector specific basis. The Bayes Real Estate Research Centre has adopted a multisource and multimethod data collection approach to contrast and compare estimates for the next funding gap 2022 - 2024.

#### 4 Total UK real estate asset estimation

Properties most affected by increasing interest rates are especially low yielding assets, which can either indicate a prime asset, or a struggling asset with already high vacancy rate. The IPF structure of the property market report 2020 shows a total of  $\pounds$ 918bn of commercial property stock and  $\pounds$ 7.2tr of residential stock.

The most relevant stock is considered investment stock which is held by UK and overseas investors (UK: £352bn, Overseas £156bn). The largest share goes to pooled investment vehicles 83bn or 16% of total including residential investment adding up to a total of £93bn, followed by REITS 76bn (15%). UK pensions and insurance companies are holding a share of 8% each, however, some are also invested through pooled investment vehicles.

In addition, there is £43bn of PRS of institutional quality and £34bn of student housing. In total approx. £77bn in held in pension funds, pooled investment funds and other institutional funds. The institutional investment sector also holds approx.  $\pounds 12 - 20$ bn in hotel assets.

Table 1: Total	UK Property	Investment Stock	(£bn)
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	Total stock	Debt
UK investment stock	352	176
Overseas	156	78
Alternative assets	77	42
Total	585	322

Source: IPF summary report, 2022

This debt figure estimate is very close to the above calculated figure, however £92bn of debt is provided through bonds, which will be excluded from the next analysis steps. Concluding from the above, the majority of the debt is primarily held by UK institutions.

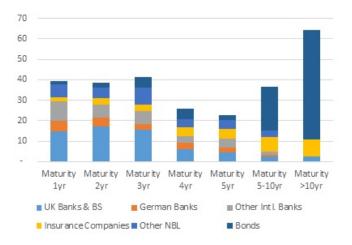
Sector	Split (%)	Value 2021 (£)	Decline	New Value 2023 (£)	Debt 2021	New Debt 2023	Funding gap	Funding gap (% )
Retail	35%	205	36%	131	78	69	8	11%
Offices	43%	252	44%	141	96	75	21	22%
Industrial	12%	70	42%	41	27	22	5	19%
Other	10%	59	36%	37	22	20	2	11%
Total		585		350	222	186	37	17%

Source: IPF summary report, 2022

### 5 The effect of the debt funding gap in different property types

Further the IPF report provides an asset type split as shown in Table 2. Applying the maximum pricing decline experienced in 2008/09 by the UK property market shown in the MSCI capital value index, the new market values are shown in Table 2.

Of the £222bn of debt not all is maturing within 12 months, hence £37bn of additional funding is required over a 1-5 year time horizon resulting in approximately £7.3bn per year. Putting this into perspective this represents approximately the annual new lending capacity of UK debt funds. However, these sector estimates may also include some development property and properties funded by equity. Hence, this assumes the worst case scenario. This scenario can be validated and adjusted by using the outstanding debt reported to the Bayes CRE lending survey. Consulting the latest market results of the Bayes Real Estate Debt research shows that the 79 lenders in the survey are reporting a combined loan book amount of £178bn, of which approximately 75% is attributed to four key property types, retail, office, logistics and residential. Adding development debt brings the full amount to £200bn. With this the Bayes CRE lending report captures 84% of total market debt (based on previous estimate above of total secured market debt of



Source: Bayes CRE Lending report Mid-Year 2022

£238bn). The survey captures solely loans provided to institutional real estate investors, such as REITS, investment funds, pension and insurance fund. It is prudent to assume that not all properties are going to be affected, hence a haircut of 30% has been applied on the total debt figure (table 3), leaving £95bn of debt at risk. Following the report statistics, 80% of outstanding debt is going to mature with 1 - 5 years (up to 2027).

These £76bn of debt is expected to be against properties at risk of falling short of interest rate payments at their current income and debt levels. Under the current economic scenarios rental growth is unlikely to materialise for many investors, hence the assumption is that property values will need to decline to achieve a minimum interest payment cover ratio (ICR) - in this scenario 1.3x.

The property sectors with most debt maturing are offices and residential.

#### 6 Estimating the interest payment gap

Current interest calculation is showing that with the 5-year Sonia swap of 5.16% property ICR cover ratios are falling below 1x for all key sectors, requiring property values to fall and property net income yields to adjust. Minimum coverage of 1.3x is achieved if across property sectors values

	Total Loan book by segment	Total Assumed Affected	Debt to mature 1 - 5yrs
Retail	25	17	14
Office	50	35	28
industrial	21	15	12
Residential	39	27	22
Total debt	135	95	76

Source: Bayes CRE Lending report Mid-Year 2022

Table 4: Interest payment gap

	Interest cost (60% LTV)	Income yield	ICR	Interest cost (60% LTV)	Income yield	ICR	Yield change
Prime office	7.6%	6.0%	1.3x	7.6%	4.0%	0.9x	2.0%
Secondary office	8.6%	6.5%	1.3x	8.6%	5.7%	1.1x	0.8%
Prime logistics	7.5%	6.0%	1.3x	7.5%	3.3%	0.7x	2.7%
Residential	8.0%	6.5%	1.3x	8.0%	3.7%	0.8x	2.8%
Hotel	9.2%	7.0%	1.3x	9.2%	3.8%	0.7x	3.2%

Source: Bayes CRE Lending report Mid-Year 2022

decline by 36%, which is in line with the previous levels observed in the GFC 08/09 (estimatation of property value decline see Figure 1 above).

The new loans based on these lower property values, will result on lower debt quantum per asset thus leading to a funding gap. Bayes estimates are conservative allowing for 60% LTV of new debt on assets, which is higher than the current level of funding, thus assuming some of the funding gap is closed by allowing for slightly higher LTV's with the commitment of deleveraging through amortisation.

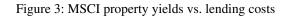
The required property value adjustment (table 4) is largest for logistics properties, for which values have increased significantly since the pandemic. The lower adjust for retail is due to the large price

Figure 2: Maturing Debt 1-5 years (£bn)

Old value New yield yield decline -33% Office 4% 6% Retail 6% 7% -12% Logistic 3% 6% -45% Residential 4% 7% -43% Hotel 4% 7% -46%

Table 5: Required property value adjustment

Source: Bayes CRE Lending report Mid-Year 2022





Source: MSCI UK Monthly data and Bayes CRE Lending report Mid-Year 2022

decline already happening in the sector over the past years.

Figure 3 shows that historically, lending costs are now exceeding costs in 2007 due higher loan margins, while property net yields for many sectors even below 2007 levels.

The above calculations show that assuming a property market correction of 36% on average, this leads to £49bn of debt (out of £76bn maturing debt) to be refinanced in the next five years, leaving a funding gap of £27bn or £5bn per year. Overall the above calculations and approaches to the topic show an estimated debt funding cap of £5 – 7bn per year, which will mostly affect UK institutions holding office, logistic and residential investment property. The funding gap can either be closed by

additional equity or through subordinated, mezzanine debt. The increase in mezzanine debt in the market is generally restricted through the high coupon rates attached to it, which may not make the financing economically viable for the property owner. It would also mean a rapid expansion of the subordinated debt market increasing by 2x times its current market size.

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