

Executive Summary YE 2017

Important Issues and Conclusion

The UK property lending market is one of the most diversified markets compared to other countries, but also one of the most sophisticated and specialised ones. The UK debt market has experienced some significant amount of diversification and specialisation over the last 2-3 years. Until 2008, 95% of lending was undertaken by banks, by 2017, 25% of secured property lending was undertaken by non-bank lenders which includes Insurance Companies and Debt Funds. At the same time the total debt has been reduced by 36% from the peak in 2008 due to tightened lending practices, which have been enforced through various regulations.

At year-end 2017 the total outstanding debt remained stable at £164.5bn retained on balance sheet and reported to the survey, £19.1bn of outstanding CMBS and £28.2bn of secured property debt identified from pillar 3 disclosure reports and financial statements. New origination was flat between 2016 & 2017 with £44.4bn.

General overview

- Despite lending activity during the first half of 2017 being slow (£17.6bn) the transactions picked up during the second half completing £26.8bn of new lending. Altogether £44.5bn of new loan originations were completed by year-end 2017.
- The figure of total origination is slightly understated by an additional £34.5bn of undrawn commitments, which mostly relate to development funding (compared to 2016 with £26.6bn). Hence overall, more new business has been originated, but has not been drawn yet.
- The total outstanding loan book has remained stable between 2016 & 2017, indicating lenders are replacing their maturing loans with new lending but not expanding significantly. However total committed real estate debt has grown to £199bn, due to undrawn facilities.
- It was frequently commented by respondents to this research that the lending market together with the underlying property investment market is considered to have reached its peak, but as long as interest rates remain low real estate markets will remain buoyant.
 Lenders showed more concern over changes in real estate markets such as shorter office leases, flexible working spaces, changes in retail and shopping behaviour.
- Market liquidity is still strong and pricing for prime locations and properties is very

competitive. There is increasing demand from investors for higher LTV to take out equity. While banks cannot respond to this demand, Insurance Companies and Other NBL's are the lenders to go to.

- An additional trend for lenders in search for additional yield and beating competitive loan pricing markets has become the use of loan-on-loan leverage. Fund level leverage is especially available to Other NBLs. This has also become an opportunity for additional business by the banks, because they can lend to a fund instead of a single property providing them with additional risk mitigation.
- Average loan LTV ratios remain below 60% for all property types. Lenders are making more differentiation between property types, especially retail property is being penalised with higher margin and lower LTV.
- Development funding is clearly on an upwards cycle and is expected to continue to grow in 2018. UK Banks & BS are the key suppliers of development funding in the UK. They were responsible for 57% of all residential development funding and 44% of commercial development funding; in total they completed £4.8bn of development lending transactions during 2017. The total development funding supplied by All Lenders during 2017 was £8.7bn, compared to 2016 with £7.7bn.
- Regulatory capital requirements are still in the focus of bank lenders. They continue to lend at very low LTVs and short term. Longer term financing requires more regulatory capital making lending to real estate more expensive. A few banks have used internal securitisation as a form of achieving capital relief from real estate lending.

Loan Book and Market Size

- Between year-end 2016 & 2017 total loan books grew from £191.5bn (including both drawn and undrawn amounts) to £199bn. This represents a healthy increase of 4%. The increase is entirely due to the increase in undrawn amounts of £34.5bn related to development funding.
- The aggregated value of outstanding drawn debt recorded in loan books and secured only by UK commercial property remained stable at £164.5bn. The increased awareness of regulatory capital costs has resulted in lenders focusing more on limiting their size of real estate loans on balance sheet, either through internal securitisation, external syndication and loan participations, or by focusing on short term loan facilities.

Table 1: Total value of outstanding loan books (£m) YE 2017

Lenders	Total outstanding loans	Senior	Junior subordinated	Undrawn amounts	Total book size
UK Banks & BS	74,815	74,795	20	21,594	96,409
German Banks	18,851	18,806	45	1,063	19,914
Other International Banks	23,709	23,709	-	1,430	25,139
North American Banks	7,114	7,114	-	1,572	8,686
All Banks	124,488	124,424	65	25,660	150,148
Insurance Companies	23,922	23,223	699	706	24,628
Other Non-bank Lenders	16,103	13,631	2,472	8,141	24,244
All Lenders	164,513	161,278	3,235	34,507	199,020

Source: Cass, 2017

- The outstanding loan book value of £164.5bn at year-end 2017 was allocated as follows; £124.5bn held by Banks & BS (75.5%), £23.9bn (14.5%) by Insurance Companies and £16.1bn (9.8%) by Other Non-bank Lenders.
- Junior subordinated lending represented 2% of outstanding loans, of which 75% was held by Other Non-bank Lenders. Their split of loan books with regards to senior vs. junior, subordinated lending was 86% vs 14%. This makes them the most important market player for junior, subordinated finance.
- It is extremely difficult to ascertain the total size of the commercial property lending market in the UK. As part of the process of widening the scope of this research to make it as comprehensive as possible, in addition to £164.4bn collected by the research the following amounts of outstanding debt have been identified:
 - Approximately £28.2bn of debt has been identified from the published pillar 3 disclosure reports and financial statements of non-contributing organisations.
 - At year-end 2017 Fitch Ratings provided data on the total outstanding balance of UK CMBS at year-end 2017 which was approximately £19.1bn. The amount of outstanding CMBS peaked in 2006 with £50bn outstanding debt and has been constantly reducing since the Global Financial Crisis (GFC) 2008/09.
- Thus, at year-end 2017, an estimated approximate total value of 211.4bn (£208.7bn, 2016) of outstanding debt secured by commercial property has been identified by this research. This represents an increase of 1.5% but is on par with 2015. This excludes unsecured credit lines to property companies and private placements.
- In addition, a further £34.5bn of loans were committed but not drawn at year-end 2017, a much larger amount than in 2016 with only £26.6bn.
- UK Banks & BS held 45% of outstanding debt retained on balance sheet and secured by commercial property, German Banks 11%, Other International Banks 14%, North American Lenders 4%, Insurance Companies 15% and Other Non-bank Lenders 10%.

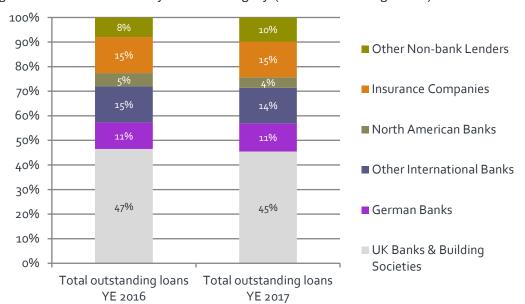


Figure 1: Debt allocation by lender category (% of outstanding loans)

Source: Cass 2017

Loan Originations

- During 2017, £44.5bn of new loan origination including refinancing on commercial terms was recorded as having been undertaken. This is on par with 2016.
- At year-end 2017, of the new loan originations of £44.5bn, £34.2bn was originated by Banks & BS, £4.3bn Insurance Companies and £6bn by Other Non-bank Lenders.
- The 12 most active lenders undertook 63% of new loan originations; this is out of a total
 of 76 active lenders during year-end 2017, which makes the UK lending market highly
 diversified.
- The total of 63% of new loan origination volume was undertaken by 5 UK Banks & BS, 3 German Banks, 1 North American Bank, 2 Other Non-bank Lenders and 1 Other International Bank.
- Overall it is worth noting that 51% of the total origination volume was refinancing of loans and 49% was for new acquisitions. In comparison in 2016 refinancing took a share of 61% of new business origination. Especially North American Banks derived 48% of their business from new acquisition finance compared to 2016 when only 34% come from new acquisitions. Other Non-bank Lenders sourced 54% of their new origination volume from new acquisitions.

Table 2: Total origination volume (£m) 2017

	YE 2016 (£m)	MY 2017 (£m)	YE 2017 (£m)	% change
UK Banks & BS	20,713	8,118	21,424	3%
German Banks	5,710	2,050	5,740	1%
Other International Banks	5,652	2,395	3,751	-34%
North American Banks	3,342	652	3,247	-3%
Insurance Companies	4,646	1,582	4,225	-9%
Other Non-bank Lenders	4,421	2,863	6,063	37%
All Lenders	44,484	17,659	44,450	0.0%

- In 2017, Other International Banks, Insurance Companies and North American Banks experienced a decline y-o-y in their origination volume. This resulted in a decline in origination share for North American Banks to 7% from 8% and for Other International Banks to 8% from 13%. Other Non-bank Lenders reported an increase to 14% from 10%.
- However the survey identified a significant amount of insurance money indirectly invested in real estate loans via Other Non-bank Lenders. Adjusting the market shares accordingly only 5% of total originations were accounted for by Other Non-bank Lenders and backed by private equity from family offices, sovereign wealth funds, while 18% of money invested came from Insurance Companies.
- In 2017, 2% of the total debt originated was junior subordinated debt, accounting for £3.2bn. The largest originators of junior debt were Other NBL's.
- Of the £33.2 of loan originations undertaken by Banks & BS, 80% was allocated to investment projects, 4% to commercial development, and 14% to residential development.
- Insurance Companies dedicated 11% (5% in 2016) of their new lending to non-investment property, all of which was allocated to residential development funding. Overall their loan books are becoming more diversified, especially in the area of alternative asset classes such as student housing, healthcare, where there is reduced market competition and therefore premium pricing can be achieved on buy-to-hold assets suitable for long-term financing.
- Of the £6bn of loan originations undertaken by Other Non-bank Lenders, 65% was allocated to investment projects, 15% to commercial development and 19% to residential development. This is further evidence of the specialisation of this lender group.

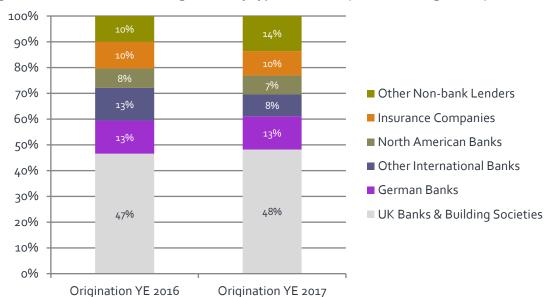


Figure 2: Allocation of new origination by type of lender (% of total origination)

Source: Cass 2017

Securitisations, Syndications and Club Deals

- During 2017, syndication and participation markets were very quiet. Approximately £1.5bn of debt was reported as being syndicated compared to £4.2bn in 2016. In addition, approximately £7.3bn was reported as the value of participations in club deals versus £10bn in 2016. The most active lenders in the syndication market as well as club deal participations were UK Banks & BS followed by Other International Banks. In total the amount reported as syndication or participation were the lowest since 2013.
- In 2017 the survey recorded £4.4bn of securitisations, mainly reported by UK Banks & BS. All of these were for risk capital relief purposes. One notable public securitisation in 2017 was the securitisation of a logistics portfolio by Bank of America Merrill Lynch of £350m (representing a 66% LTV). However, some Other NBL's, Insurance Companies and North American Banks have reported an interest on investors' sides to buy CMBS bonds instead of syndicated loans. Some lenders reported specific placements of securitised bonds.

Structure of Loan Books and Loan Performance

- At year-end 2017, the large majority (78%) of loan exposure was held in loans up to 60% LTV. At the same time, 72% of the loan exposure held on balance sheet achieved an interest cover ratio (ICR) of above 2.00x and 81% of loan exposure achieves an ICR of 1.8x and above. The amount of non-performing loans is stable with 1-2% of the total exposure, which can be considered structural under-performance.
- The value of loans in breach of financial covenants and those in default at year-end 2017

- reported to the research was approximately £2.4bn and represented 3.8% of the total aggregated loan book of those who responded. This compares with £10.4bn and 7% reported to the research at year-end 2015 and has been declining steadily since.
- The loan maturity profile shows a slight peak in 2020 for loans maturing in 3 years. This is expected given the large amount of new originations during 2015. During the next 5 years between 2017 and 2022 inclusive, 73% of all outstanding debt is due for repayment. This compares to 74% at year-end 2016. This proportion has grown significantly higher from 2009 onwards. At year-ends 2006 & 2007 the proportion of debt due to mature within the following five years was 61% and 60% respectively. Borrowers are still focused on quick financing turnaround to take advantage of declining property yields and low interest rates rather than locking in low rates for the long term.
- Any potential risk currently comes with an expected interest rate rise, which is going to have an impact on debt servicing levels for floating rate loans. These currently account for £28bn or 18% of the total outstanding loans books.

Senior Debt: Loan terms for Investment Property offered by All Lenders

- Interest rate margins have been falling since 2012 and reached a post GFC low at midyear 2016. At year-end 2016, the average senior margin for loans secured by a prime office was recorded at 198bps for All Lenders. At year-end 2017 the average senior margin for prime office was 203bps. Overall lenders reported margin pressure for lower LTV levels but tried to maintain pricing levels wherever possible.
- Loan margins against secondary properties were significantly higher with an average margin of 293bps for secondary offices, 285bps for secondary retail and 296bps for secondary industrial loans.
- For 10-year loans many lenders made no distinction, and on average these were priced as much as 15-25bps higher than 5-year loans.
- The most competitive pricing was offered on senior loans secured by prime office property by German Banks with 158bps, which is a decline of 5bps compared to year-end 2016. This was followed by North American Banks with an average margin of 187bps and UK Banks & BS with 201bps. While UK Banks & BS commented that their lending is generally priced above 200bps, exceptional deals can be priced lower.
- The overall average LTV ratio recorded for deals during year-end 2017 was 57% for senior prime office loans. During 2017, average maximum LTV ratios continued to decline across loans secured by all commercial property investment sectors, however some lenders offer higher LTV on a whole loan basis. The highest average LTV was reported by Insurance Companies with 61% and the lowest by German banks with 56% LTV. The overall average LTV for a loan secured by prime office property was 57%.
- Average maximum senior loan LTVs for loans secured by secondary properties have fallen to below 60% for office, retail and industrial property and reached 57% at year-end 2017.

• The majority of lenders charged an average upfront fee of less than 100bps, resulting in an average of 89bps on a 5-year investment loan with an LTV of 50% - 65%. The lowest fees were offered by German Banks with an average of 77bps followed by Insurance Companies with 86bps for prime office property loans. The minimum fee was 50bps.

Table 3: Key financing terms year-end 2017

Senior margins (bps)	Total average (bps)	60% LTV (bps)	Arrangement fee (average, bps)
Prime office	203	188	88
Prime retail	214	201	88
Prime Industrial	228	214	90
Secondary office	293	306	105
Secondary retail	285	291	107
Secondary industrial	296	269	103
Residential Inv.	241	256	97
Hotel	259	259	98
Student Housing	249	245	99

Junior Debt and Subordinated Debt Finance loan terms

- Risk appetite seems to have declined, with bank lenders only occasionally quoting terms for junior subordinated lending. It is mostly Insurance Companies and Other Non-bank Lenders that provide terms across all property types. In total 27 lenders provided junior loan terms at year-end 2017. Often it is difficult to detect junior financing, because some loans are originated as whole loans and are split later when the lender sees an opportunity.
- At year-end 2017 the average maximum LTV ratio for junior loans increased from 73% at year-end 2016 to 77% quoted by All Lenders. Highest LTVs were available from Other NBLs (up to 80%) and Insurance Companies (77%).
- The most competitive junior margins were available for loans against prime office property with 741bps. Loans backed by secondary office property were priced at 799bps. Highest margins were quoted for secondary retail properties with 836pbs. Typical fees for subordinated lending were between 120bps and 179bps.
- On an all in IRR basis junior subordinated pricing ranges from 9.6% to 10.9%. The pricing gab between senior and junior for loans backed by prime office has narrowed to 539bps.

Other Investment Finance terms by All Lenders

• In 2017 finance terms for residential investment were offered by 24 lenders compared to 17 at the end of 2016. The average loan margin for a senior loan was 241bps, an increase of 17bps from year-end 2016, with an arrangement fee of 97bps at an average LTV of 59%. Lowest margins were offered by Insurance Companies with 180bps followed by UK Banks & BS with 201bps. Highest margins were offered by Other International Banks with

273bps.

- Junior terms were offered for residential investment at an average margin of 778bps, with an average LTV of 70%. Insurance Companies offered up to 80% LTV.
- 35 lenders also provided terms for hotel investment loans. For senior loans the average margin was 259bps at an average LTV of 58%. Margins ranged from the lowest offered by German Banks of 220bps followed by Insurance Companies with 237bps. Other Nonbank Lenders priced these loans at 294bps.
- Another 29 lenders also provided terms for student housing. The average margin was 249bps with an average LTV of 58%. The lowest margins were quoted by German Banks with 210bps, followed by Other Non-bank Lenders providing margins at 253bps for 57% LTV loans.

Commercial Development Finance: Loan terms offered by All Lenders

- At year-end 2017, 26 organisations provided data for finance of fully pre-let development.
 This compares with 20 organisations recorded at year-end 2016. The average interest
 rate margin was 447bps, which was an increase of 46bps reported at year-end 2016. The
 average LTC (loan-to-cost based on GDV) ratio was 69% and the average arrangement
 fee 133bps.
- Typical terms for up to 60% LTC are 100bps arrangement fee + 100bps exit fee. For higher LTC ratios the arrangement and exit fee go up to 150bps.
- 16 organisations provided data for loans for 50% pre-let: 50% speculative development schemes at year-end 2017. The average interest rate margin was 525bps with an LTC ratio of up to 68% and an average arrangement fee of 143bps. In comparison the average margin year-end 2016 was 480bps.
- 12 organisations provided terms for speculative developments with an average margin of 601bps, 154bps arrangement fee and an average LTC ratio of 64%. In comparison, the average margin year-end 2016 was 556bps.
- Those organisations prepared to offer junior debt for a fully pre-let commercial development were offering a range of 75% to 85% LTC ratio at an interest rate margin of 933bps and an arrangement fee of 150bps or an equivalent IRR of 13.5%.

Loan Terms for Residential Development offered by All Lenders

- At year-end 2017 a total of 28 lenders provided terms for residential development. For senior loans the average LTC ratio for All Lenders was 71%. Average interest rate margins declined from 525bps recorded at year-end 2016 to 467bps at year-end 2017 together with an exit fee of 123pbs and an arrangement fee of 125bps.
- Margins from North American Banks were lowest at 300bps, German Banks offered 363bps and Other Non-bank Lenders were offering the highest margins with 641bps, however at an increased LTC of 80% for a senior facility.

 Junior finance for residential developments was offered by 11 lenders with a LTC ratio up to 90% at an average margin of 11%, plus an exit fee of 165bps and an arrangement fee of 137bps.

Outlook 2017 and concerns

- When asked about their pricing levels during 2017, 47% of lenders responded that they
 decreased pricing over the 12 months in 2017 and another 30% have at least maintained
 pricing. For 2018, 76% expect to maintain pricing and 17% believe pricing will further
 decrease.
- There are notably more lenders considering options for securitisation (14%), and more
 deals have been completed outside the UK. Especially Other International Banks and
 North American Banks are looking at these options.
- Lenders believe that the property cycle has reached a peak, especially in Central London.
 With property yields already very low and declining also for secondary property, it is
 difficult to add more than 45-55% leverage to achieve a sustainable interest coverage
 ratio. However, on a relative basis the UK still offers good value for risk in comparison
 with the rest of Europe.

Table 4: Key ratios across Europe

	London City	Munich	Paris	Madrid	Milan	Amsterdam	Warsaw
Prime yield	4.20%	3.30%	3.00%	4.00%	3.80%	3.80%	5.00%
Lending margin	1.60%	2.00%	2.90%	2.80%	2.30%	2.30%	2.80%
LTV	55%	62%	63%	59%	60%	62%	57%
Margin & swap	2.70%	2.30%	3.30%	3.20%	2.70%	2.70%	3.20%
ICR	2.9	2.3	1.4	2.1	2.3	2.3	2.8
Debt Yield	7.70%	5.30%	4.80%	6.80%	6.30%	6.00%	8.80%

Source: Cass, Savills, JLL

- Lenders are trying to address the changes in real estate markets, such as flexible office space, retail shopping behaviour etc., these new property types do not fit the typical bank credit models and require lenders to think "outside the box".
- Interest rates are also on the agenda of general concerns, as this might affect the performance of some loans.