

JLL Research Report

Global Debt Market Update: Key Perspectives and Trends



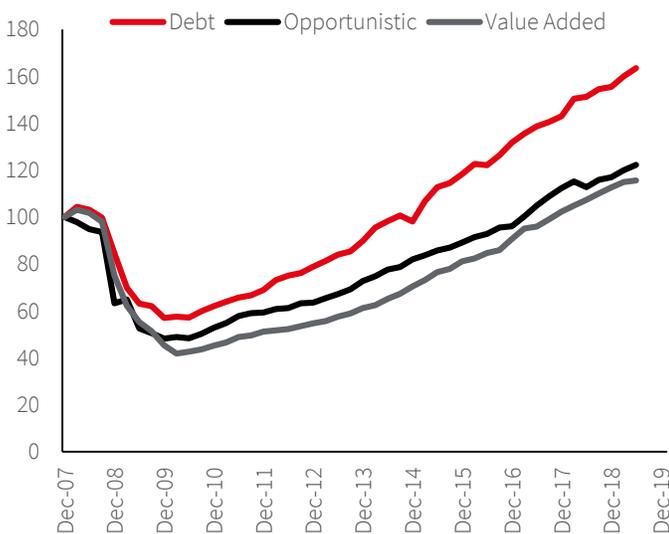
Global Debt Market Update

As low interest rates continue to be the norm across much of the developed world, real estate debt markets are liquid as investors remain committed to credit strategies and deal flow increases in an extended cycle

Since 2007, private closed-end real estate debt funds have consistently outperformed other real estate investment strategies by a significant margin.

Returns on invested capital for debt funds have outpaced both opportunistic and value-added strategies by an average of 25.0% and 35.8% respectively between 2007 and the second quarter of 2019. As the cycle continues to extend, and interest rates remain at historic lows, debt opportunities are becoming more plentiful as many investors are increasingly looking to refinance and pull equity out of investments.

Preqin Quarterly Index



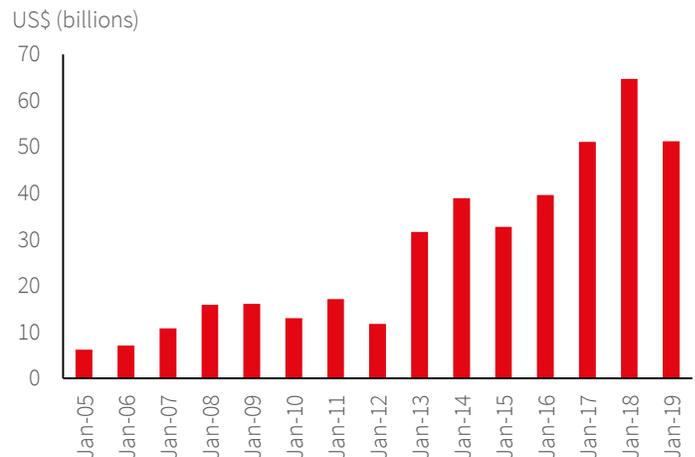
Source: Preqin

Debt funds are taking hold of the opportunity, calling up unprecedented volumes of capital. In 2018 alone, capital called by debt funds reached \$37.4 billion, a record level and more than the total volume raised in that year.

As funds deploy capital, due to greater opportunities in the market as investors look to take advantage of the low

interest rate environment, dry powder levels have declined, with 2019 seeing unspent capital volumes declining by 20.9%. With the low-rate environment expected to carry on into 2020, debt funds will likely continue to be active in global commercial real estate markets, though spreads are likely to come under further pressure as lenders continue to compete for loans.

Global Dry Powder for Real Estate Debt



Source: Preqin

With LIBOR set to be phased out by 2021, alternative reference rates are coming into focus.

In the U.S., the Federal Reserve has chosen the 'Secured Overnight Financing Rate' (SOFR) benchmark as an alternative to LIBOR. While LIBOR continues to play a significant role in lending markets, SOFR issuance has steadily grown, reaching US\$241 billion in 2019 compared to just \$10 billion in 2018.

The market has been dominated by banks, with the Federal Home Loan Bank System and Federal Home Loan Mortgage Corporation issuing a combined US\$161 billion in SOFR-linked securities, accounting for 67% of all issuance in 2019.

Fannie Mae and Freddie Mac have also announced that they plan to follow suit and offer several new SOFR-linked adjustable-rate mortgage products. This move will give considerable weight to the acceptance of SOFR as the preferred replacement to LIBOR in the U.S. for commercial real estate debt, given the significant role both lenders play in debt markets today.

In the UK, the 'Sterling Overnight Index Average' (SONIA) was chosen in 2017 as the alternative to LIBOR. Although it has been in existence since 1997, SONIA had seen limited use as a benchmark index in the floating rate note market though this has picked up significantly since the announcement. In 2018, SONIA issuance totaled US\$11.2 billion. This then more than tripled in 2019 to US\$46.4 billion.

While many lenders in the UK are still referencing LIBOR for new loans, SONIA received a boost in 2019 when Deutsche Bank originated its first loan referencing it, refinancing Kennedy Wilson's acquisition of Ditton Park, an office complex located west of London. The loan references a compounded average of SONIA set in arrears with a five business day lag. Not only is this Deutsche Bank's first SONIA-linked origination, it also represents one of the first

transactions in the market to reference an average of SONIA and provides further credibility to the benchmark.

Stakeholders in Asia have taken note of the ongoing SOFR developments given that the USD market has considerable influence on Asian Rate markets. But the transition to a new benchmark is more complex in comparison to the US or Europe. Asia is more fragmented in its approach to reference rate transitions, with different implementation speeds and multiple rates.

The transition to a new set of overnight risk free rates is moving faster in major financial centers – including Tokyo, Hong Kong and Singapore, whereas the progress is moving slower in emerging markets. Markets are also adopting a wide range of options, including SORA in Singapore, TONA in Japan and AONIA in Australia, increasing the complexity.

While we continue to see progress in the developed regions of Asia, the developing markets are falling behind as they take the "wait and see" approach. Many have pegged large portfolios to US or European rates, and will be hit hard should their central banks fail to consider adequate fallback provisions.

U.S. Market Trends

New caps for Fannie and Freddie

The Federal Housing Finance Agency, the regulator of Government Sponsored Enterprises (GSEs) Fannie Mae and Freddie Mac, announced new caps on the amount of loans both can purchase. For the five quarters starting from October 2019 until the end of 2020, Fannie and Freddie will be limited to a total of US\$100 billion in loan acquisitions each.

The previous cap was set at US\$35 billion though exemptions were made for "green loans" which finance energy and water efficiency improvements, leading to total issuance far in excess of the intended cap. In 2018, GSE lending reached US\$142.3 billion, more than double

the US\$70 billion cap. Under the new regulations, exemptions for "green loans" will be removed and all loan purchases will count towards the cap. The move ensures that GSEs will continue to provide liquidity in lending markets following a period of relative uncertainty and is a favorable development that is expected to continue to underpin liquidity in the multi-housing market in particular.

Interest rate cuts prompt increase in CMBS defeasance

After three interest rate cuts in 2019, CMBS borrowers are taking advantage of the low-rate environment. According to Fitch Ratings, defeasance volume through the first three quarters of 2019 totaled US\$10.9 billion, US\$10 million more than the

full year total for 2018. Activity picked up in the third quarter, following the July rate cut.

Private-label multi-borrower loans rated by Fitch that defeased this year have had a Weighted Average Coupon (WAC) of 4.87%, compared to a WAC of 4.51% for new issuance this year. Notably, the shift in interest rates since the summer brought the WAC for loans issued in the second half of the year down considerably, to 4.13% compared to 4.84% for loans issued in the first half of the year, prior to any rate cuts. With U.S. interest rates projected to remain low through 2020, we can expect to see elevated levels of defeasance in the coming quarters.

Canada Market Trends

Lenders look to core markets as part of a 'flight to quality'

The supply of debt capital was widely available in the Canadian market in 2019. However, both foreign and domestic lenders are demonstrating more cautious behavior. We have seen a 'flight to quality' with a focus on sponsorship, stability of cash flow, asset quality, and preferential location.

Capital is increasingly skewed towards the office, multifamily, and industrial sectors, and shying away from non-core and non-grocery-anchored retail. Geographically, there is a widening gap between core markets such as Toronto, Vancouver, and Montreal, and other Canadian markets in terms of perceived risk. As investors are seeing the business cycle near its

peak, the largest funds are moving their allocations towards these core markets to mitigate portfolio risk

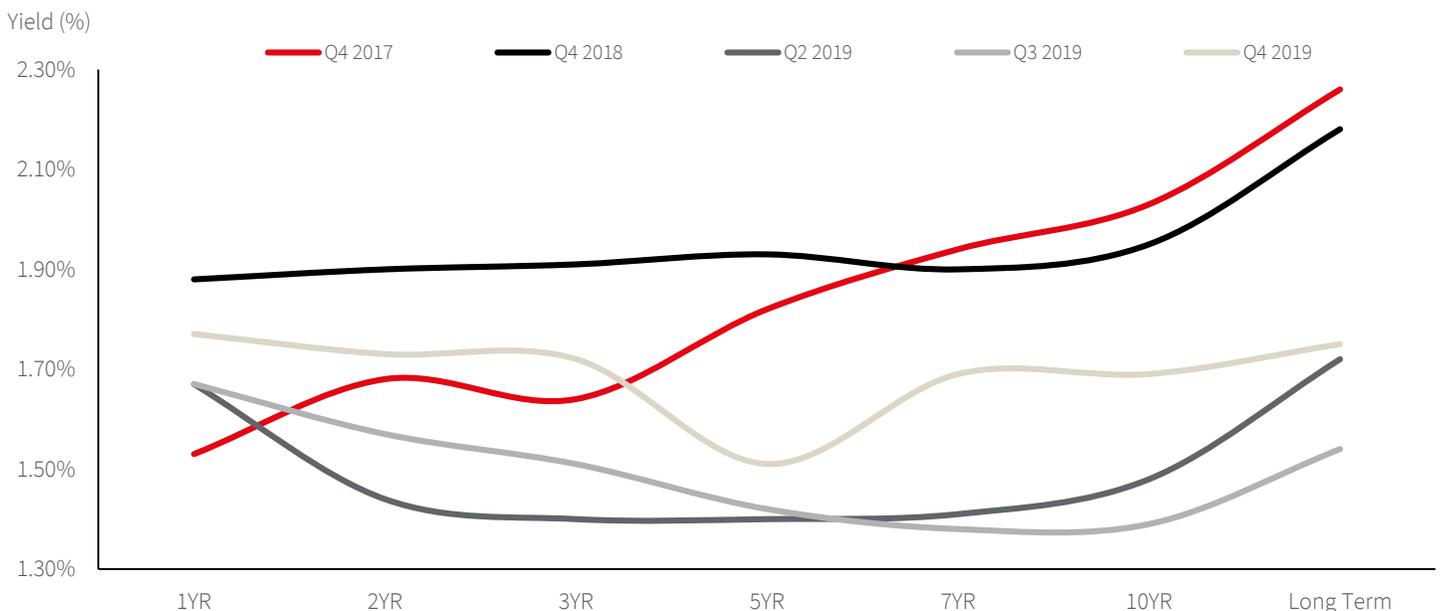
Yield curve inversion continues

One year ago, there was a consensus that Canadian interest rates would continue to rise. Yet uncertainty with respect to the export market and broader global trade, as well as high household indebtedness, have caused the Bank of Canada to postpone these plans and analysts are now forecasting one rate cut for 2020. Meanwhile, government bond yields have fluctuated since the beginning of the year. The yield on the Government of Canada 10-year bond decreased by roughly 70 bps, or 40%, through the first 8 months of 2019 but bounced back by about 50 bps between September and the end of 2019.

The Canadian yield curve has been inverted since July and the current differential between the 2-year and 10-year bonds is about 13 bps. This can signal a potential economic slowdown, resulting in investors taking a more cautious approach to their strategy, with many aiming to lock in longer dated mortgage terms where appropriate.

Notwithstanding the movement in government debt yields, credit spreads have remained steady with plenty of capital competing for investment opportunities, providing borrowers with an attractive borrowing environment.

Government of Canada Yield Curve



Source: Bank of Canada

EMEA Market Trends

Credit remains abundant as demand for fixed rate loans rises

Credit remains abundantly available, motivated by the continued growth of dry powder held by European debt funds as a more defensive strategy. We expect the capital already committed will be deployed into the market, however the latest figures from Preqin suggest European dry powder activity for debt funds has plateaued in part by the existing level of capital already in the market. Dry powder activity for debt funds peaked in 2018, reaching nearly €18bn, but in 2019 stabilized closer to the historic 5-year average.

In recent months we have seen increased demand for fixed rate, longer-term financing as real estate investors lock in attractive financing terms as a late cycle strategy in Europe. Fixed rate loans now account for 25% of Europe's real estate lending market, up from 15% around five years ago, according to JLL estimates.

Negative yielding corporate and government debt has investors looking for yield

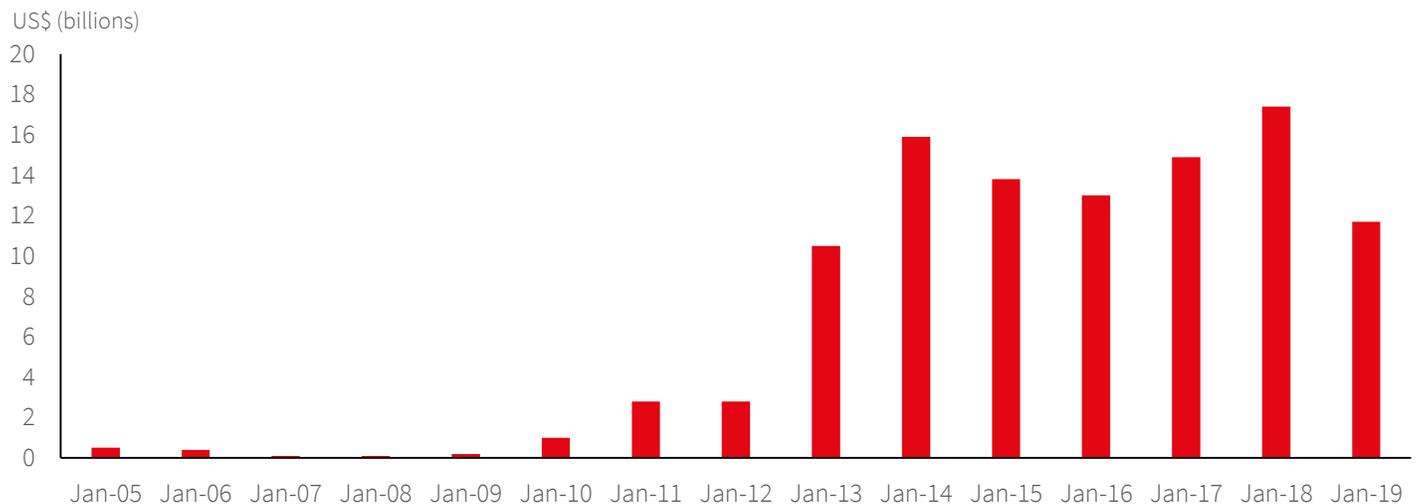
The ongoing political and economic headwinds continue sending yields into negative territory and central banks in Europe are at risk of facing a low interest rate environment for longer. To combat the possibility of this risk, a growing number of central banks are exploring the reintroduction of economic stimulus packages to generate growth. Most recently, the European Central Bank (ECB) cut rates from -40bps to -50bps and revived its bond buying program, roughly buying €20 billion per month starting in November.

The proliferation of negative yielding holdings in Europe make it increasingly difficult for money managers to manage and grow their portfolios. To mitigate the increased complexity, investors are exploring real estate, particularly long-dated real estate debt in prime locations, as an alternative to the bond market.

Rise in the sell-off of senior tranches

The European real estate lending market has begun to see more debt funds structuring whole loans and then selling off a senior tranche but retaining a subordinate piece in a strategy to achieve higher returns. For example, a debt fund could extend a €70m whole loan (70% LTV) at a 3.50% margin, sell a €50M 50% LTV senior piece priced at 2.00% margin, while retaining the €20M subordinated tranche. This approach allows debt funds to manufacture 8% levered IRR's while only taking 70% LTV risk. Notable examples of this include Bentall GreenOak's €63m financing of Wingate House in Soho, London, a loan JLL's debt advisory team arranged on behalf of BC Partners and Seaforth Land.

European Dry Powder for Real Estate Debt



Source: Preqin

Living sectors come into focus as financing needs become more apparent

Co-Living: There continues to be more capital to deploy than there are quality deals, and in response lenders are becoming creative in their capital deployment strategies. Co-living, a sector once viewed as being on the fringe of real estate, has become an extension of conventional student housing in terms of pricing and structuring, and lenders are becoming more comfortable with financing these types of assets. Though it is still nascent, loan margins for co-living are still 50-100bps wider than student housing and build-to-rent multi-housing in similar locations.

Healthcare: The healthcare sector has gained interest from investors in recent years due to the aging demographics in parts of Europe and the higher yields achieved compared with more mature real estate sectors. Additionally, a rising number of markets in Europe are being impacted by the chronic shortage of healthcare beds and limited pipeline of new supply. In response, lenders are exploring different options to arrange financing for healthcare assets as the level of capital targeting living increases.

Flexible Office Space: In response to the recent uncertainty surrounding some of the largest flexible office operators, buildings with higher concentrations of flexible office space will remain a challenge to finance compared with their competitive peers.

European debt market highlights by country

Germany

- German debt funds are increasingly competitive in the Polish market, driven by proximity and strong occupier fundamentals. Poland benefits from being a leading country in Europe for employment in back office and tech support. Many of the companies which have a considerable presence in Poland are credit rated and have strong track records. Furthermore, the continued Brexit uncertainty has shied German lenders away from the UK where they remain much more conservative than earlier in the cycle.
- German lenders in the UK remain focused on stabilized assets with high-quality long-let buildings to strong covenants. More clarity around Brexit will hopefully drive German banks back into core plus and value-add UK lending, but at this time they remain hesitant to materially adjust their strategy.

UK

- Despite ongoing uncertainty surrounding Brexit, the UK's regional cities are attracting lender interest, most notably from domestic lenders. These groups are exploring Manchester, Leeds and Birmingham, among other cities, in an effort to obtain additional yield above what is available in London, with a focus on student accommodation, pre-let/existing office and development projects.

Netherlands

- Most Dutch banks remain cautious but will consider sensibly underwritten schemes across the primary asset classes. That said, borrowers with a limited track record and experience with bank lenders are bounded by a smaller number of lenders willing to lend and will often pay meaningfully higher interest rates. German banks have been active in the Netherlands and are often more likely to offer attractive pricing. French banks are also active participants in the Dutch market, but only for very high-quality real estate.

Asia Pacific market trends

Lower rates drives some lenders up the risk curve

The debt landscape has shifted over 2019 as most major markets underwent some form of monetary policy easing. Base rates continued to decline across the region and opened yield spreads on stabilized assets. The market has also become more aligned with expectations that rates will be lower for longer, so investors have been less cautious about medium-term interest rate rises in their underwriting.

The reduction in base rates has also impacted total return-based lenders. As a result, a number of non-bank lenders have chased returns higher up the risk curve, particularly in the junior note, mezzanine and development finance space. On the other hand, there have been some pockets of distress in Asia Pacific and lenders are also keeping a keen eye on

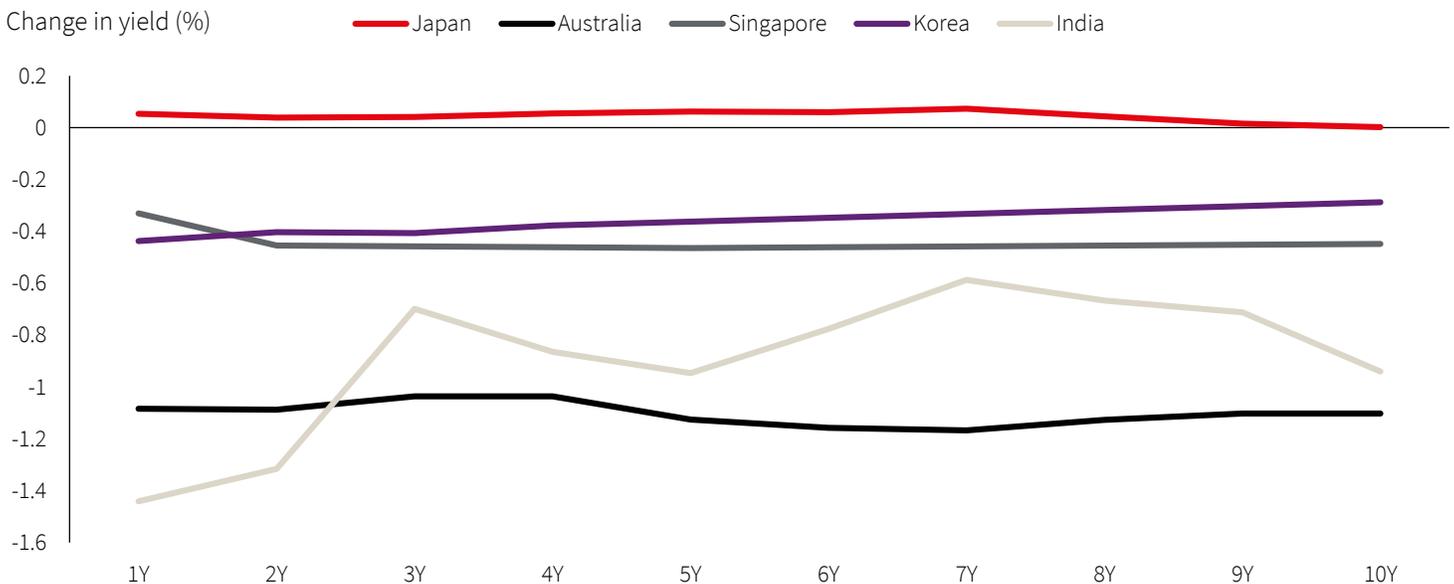
geopolitical issues regarding the US-China trade discussion, the ongoing Hong Kong protests and other domestic policies impacting commercial real estate markets.

Bank originations on the rise

Banks have become more assertive in their lending practices. There is evidence of banks simplifying their lending terms, offering higher loan to value ratios and relaxing other covenants around income cost ratios, recourse and loan tenors. We believe this was driven by both lower base rates and rising competition. While total transaction volumes across the region are up on last year, the number of deals has fallen, meaning there are less loan origination opportunities. There has also been a pick-up in partial stake deals across the region, whereby existing loan facilities are maintained.

The rate reductions seen across a number of markets may also support the case for more pockets of yield compression in 2020, particularly as investors are increasingly confident in their expectation that we are in a 'lower for longer' environment. With banks becoming more aggressive, this could also further support yield compression as higher return investors look to utilize increasing leverage limits or the availability of mezzanine finance. Yield curves would suggest little evidence for any core markets seeing significant rate rises during 2020.

Change in government bond yield



Asia Pacific debt market highlights by country

Australia

- The Reserve Bank of Australia has cut rates three times over the past year, from 1.5% to a record low 0.75%. This has flowed through to longer-dated swaps and has flattened out the yield curve.
- Financing for stabilized assets is now below 3% all-in, for the first time on record. This has opened up yield spreads to commercial real estate assets and provided for a sugar-hit to the equity investors. While this made it more difficult for non-bank lenders to reach their return requirements, there are some segments where the banks remain cautious.
- We continue to expect alternative financiers to be more active in alternative sectors, particularly those that are more operationally intensive

China

- Debt markets remain bifurcated: stronger borrowers in core assets are still achieving competitive debt terms, but development finance remains under pressure. More developers have been issuing bonds but spreads on bond issuance has been across a wider spectrum than usual. Participants in the bond market are pricing in higher risk many of the mid-tier developers that are often already highly leveraged.
- Credit growth to the commercial real estate sector from the banks has been muted as commercial banks continue to focus on reducing their exposures and selling down NPL portfolios.

India

- There remains a large stockpile of non-performing assets, with credit more difficult to source. Banks remain reluctant to growth their real estate exposures and NBFC exposure has flattened out following the fallout of the NBFC crisis.

Singapore

- Liquidity from the banks is strong and pricing has become more aggressive. However, banks are struggling to find suitable opportunities, as much of the deal flow this year has been across a small number of mega-deals.

Vietnam

- A number of major Asian banks have been looking at Vietnam as a growth market, and see it as a potential beneficiary of the China-US trade dispute. The economy has been performing well, with growth targets of 7% between 2021-2025. Vietnam is signing several free trade agreements and its manufacturing sector continues to benefit from supply chain shifts over the coming years.
- Lenders continue to develop their growth strategies in the market, as there are still some concerns around the process of taking security of assets and transparency of enforcement procedures.

Hong Kong

- Lenders are becoming increasingly cautious, with valuations expected to fall over the coming 12 months. While most core assets have fairly conservative levels of leverage, the operating performance of retail and hotel assets have been noticeably impacted by the ongoing protests.
- Banks may look to reduce their exposures or sell down riskier assets. This could however present opportunities for debt funds and other alternative lenders to acquire whole loans or loan portfolios at discounts to current valuations.



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