REAL ESTATE

'Mastering the real estate cycle'

By Chris Urwin

For today's investor

AVIVA INVESTORS

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Main responsibilities

Chris leads the research team, overseeing analysis to identify value and understand risk in real assets. His team play a key role in identifying opportunities, building strategies and creating research models to guide investment decision making.

Experience and qualifications

Prior to joining Aviva Investors, Chris worked for CBRE where he was a senior analyst responsible for market trends in commercial property market. Before that, he worked as a economist at the institute of Public Policy Research where he was responsible for economic input for the centre's research into city centre residential markets, commercial property in deprived area, city governance and urban competitiveness. He has also worked as an assistant economist with HM Customs and Excise, focusing on the impact of changes to the indirect tax regime.

Chris holds and MA in Economic History and a BA (Econ) in Economics from the University of Manchester, and is a member of the Society of Property Researchers.

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1 Introduction

The cyclical nature of real estate markets creates opportunities. Well-informed and disciplined investors can therefore outperform if risk is managed appropriately through the cycle. However, assessing where we are in the cycle and then managing cyclical risk is notoriously difficult.

This paper sets out to provide answers and explores:

- how, in theory, real estate investors should manage cyclical risk;
- how, in practice, that can be difficult; and
- introduces a tool that helps foster a better understanding of where a market is in the cycle.

2 The cyclicality of real estate

Figure 1 below clearly shows that, while the income component of return is relatively stable, the capital return is not. This makes total returns volatile and as shown in figure 2, they are more likely to mirror equity markets than the bond market. So the question that follows is why?

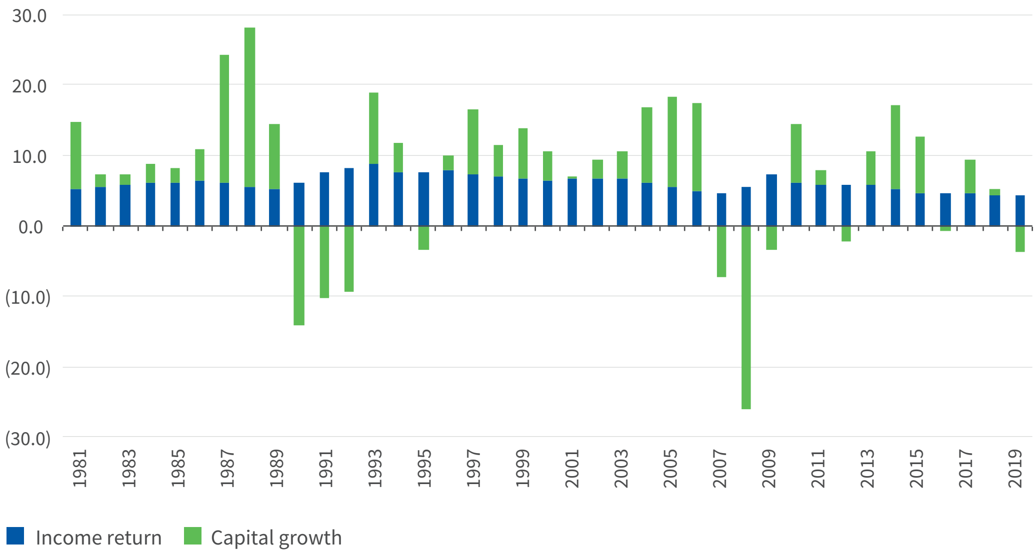
A degree of cyclicality follows from occupier demand with rental growth tied to the performance of the underlying economy. The behaviour of investors, particularly their susceptibility to fear and greed, can also exacerbate these undulations. This is true of many asset classes, but two factors make real estate more cyclical, as illustrated by previous cycle in figure 3.

Firstly, the nature of development. It takes time to construct buildings so you can have prolonged periods where the demand for office, retail, logistics or residential space can far outweigh the supply. But there are also periods when over-optimistic estimations of future demand lead to an excess of supply.

Secondly, the widespread use of leverage. Real estate is particularly well suited to the use of leverage. Properties are real assets with an intrinsic value and therefore act as strong collateral. So real estate strategies are often levered, adding to the volatility of returns.

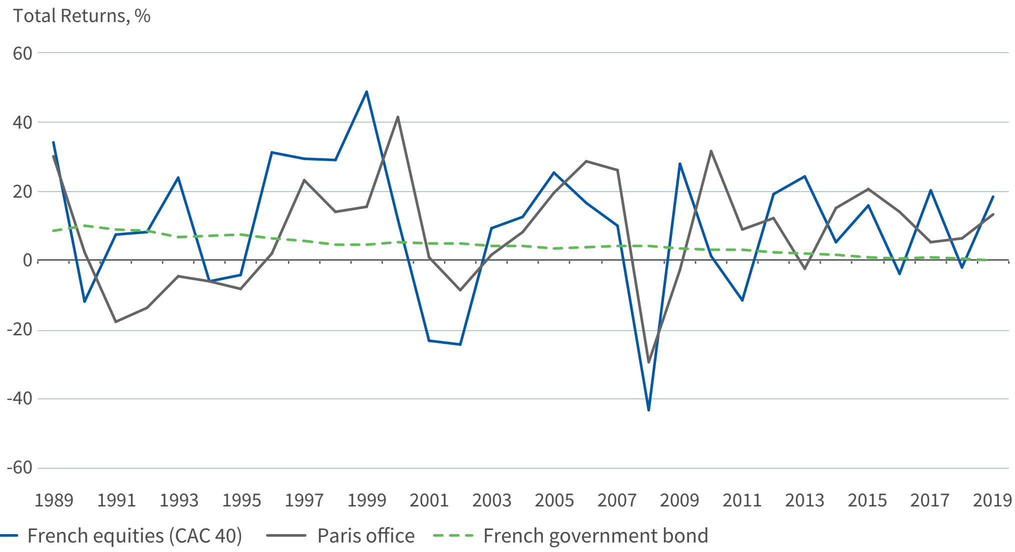
Figure 1. **The UK real estate cycle, 1981-2019**

MSCI UK Annual Property Index



Source: MSCI March 2020.

Figure 2. **The volatility between different asset classes**

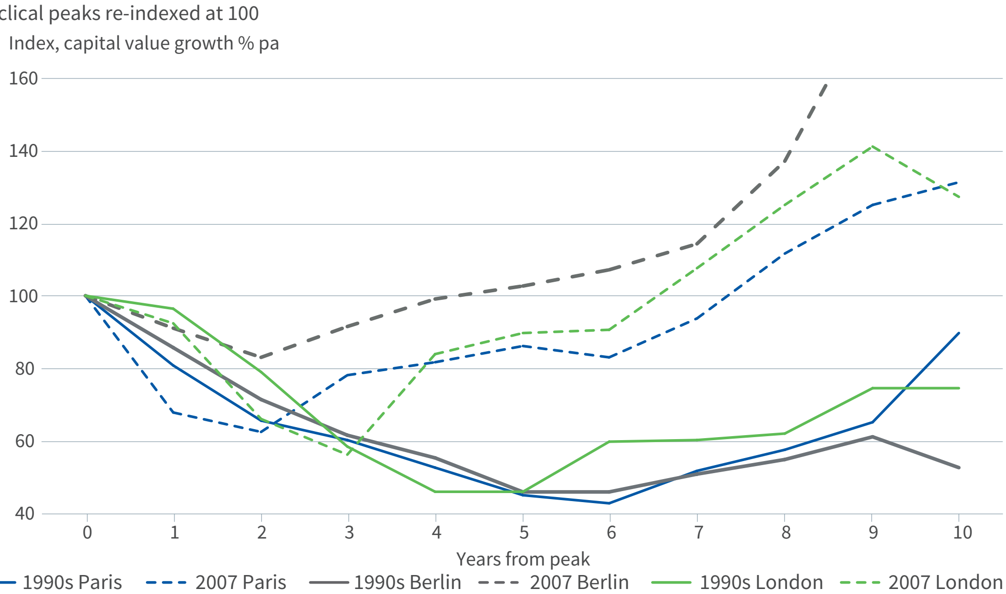


Source: PMA, Datastream March 2020.

A high degree of cyclicality, combined with the inefficiency of a private market that lacks transparency, creates opportunity for active investors. Optimal real estate strategies should actively manage exposure to different types of risk through the cycle. This includes vacancy and income risk, as well as development risk and leverage.

Figure 3. **Boom and bust in capital values** (Cyclical peaks re-indexed at 100)

Cyclical peaks re-indexed at 100



Source: Aviva Investors.

3 The theory: How to manage risk through the cycle

Drawing definitive conclusions from the available data is not possible. However, academic literature seems to suggest that over the long-run, value-added strategies fail to provide enhanced risk-adjusted returns when compared to core strategies. Indeed, they have tended to underperform.[1] Other studies have shown that riskier strategies (value-added or opportunistic) can outperform core strategies over certain periods of time. But these studies also indicate that superior returns are driven primarily by market conditions and the use of cheap debt rather than, for example, investment style or property type.[2] The implication is that riskier strategies should only be deployed judiciously and that timing is critical to success.

In real estate investing, there are times to be aggressive and times to be defensive. Generally speaking, we should become more aggressive when the cycle is depressed. And in times of euphoria, we should adopt a more cautious approach; we should act to limit potential future losses rather than ensuring full participation in gains.

So, investment decisions in each stage of the cycle should be made with an eye to likely conditions in the next stage.

Vacancy risk

A property that is vacant, part vacant or is likely to experience vacancy soon is a risky investment. Such an asset offers little certainty around future income streams as it is unclear when a rental agreement will be in place, or what inducements will be deployed and what rental level will be agreed upon. The ability of a landlord to mitigate this risk will depend on the level of occupier demand and the amount of competing space, among many other factors.

Vacancy risk is likely to be under-appreciated during a boom period. The market is likely to have an excessively optimistic view about the strength of fundamentals, leasing prospects and rental growth. Real estate investors should sell vacancy risk when the cycle is at such a mature stage. So when the cycle slumps and the market weakens, real estate investors should aim to be holding low levels of exposure to vacancy risk. Investors with low levels of vacancy and long unexpired lease terms are likely to be rewarded over this period.

But, as the market reaches a trough, it may prove an opportune time to start to take on increased exposure to vacancy risk. As at this time, market pricing is likely to be excessively weak for assets with high vacancy risk. During the recovery phase, it is usually beneficial for fund managers to hold and increase exposure to vacancy risk as leasing prospects are set to improve.

Development risk

Development funding is a particularly risky form of real estate investing. While development opportunities can take multiple forms, they typically expose an investor to both vacancy and construction risk. Not only does a landlord need to find a tenant for a building, they also may have to deal with any cost over-runs or delays while the property is being constructed. Some development opportunities will involve planning risk too.

There is an old adage: “what a wise man does in the beginning, a fool does in the end”, and it applies well to development risk, which is typically best rewarded if taken at relatively early stages in the cycle. There are three key reasons why. Firstly, development risk is prone to being over estimated at such points in the cycle, providing an attractive entry point. Secondly, build costs may be somewhat lower when there is less demand for construction labour and materials. Thirdly, space should be delivered into a healthy occupier market a time when there is relatively little competition from competing schemes.

Conversely, development opportunities explored when the cycle is mature can underdeliver. The marketplace for development opportunities is much more competitive at such a time meaning investors may be at risk of overpaying. Build costs can be somewhat higher as broad development activity competes for construction labour and materials. And there is a risk that when the development completes it is competing with many other schemes and at a time when, potentially, tenant demand is starting to weaken.

1 “Real Estate Returns by Strategy: Have Value-Added and Opportunistic Funds Pulled Their Weight?”, J.L Pagliari Jr, Real Estate Economics, December 2016.

2 “Is Value-Added and Opportunistic Real Estate Investing Beneficial? If so, why?”, J.D. Shlling and C. H. Wurtzebach, Journal of Real Estate Research, Vol. 34, No.4 – 2012.4 Prime Logistics Bulletin Quarterly, Gerald Eve.

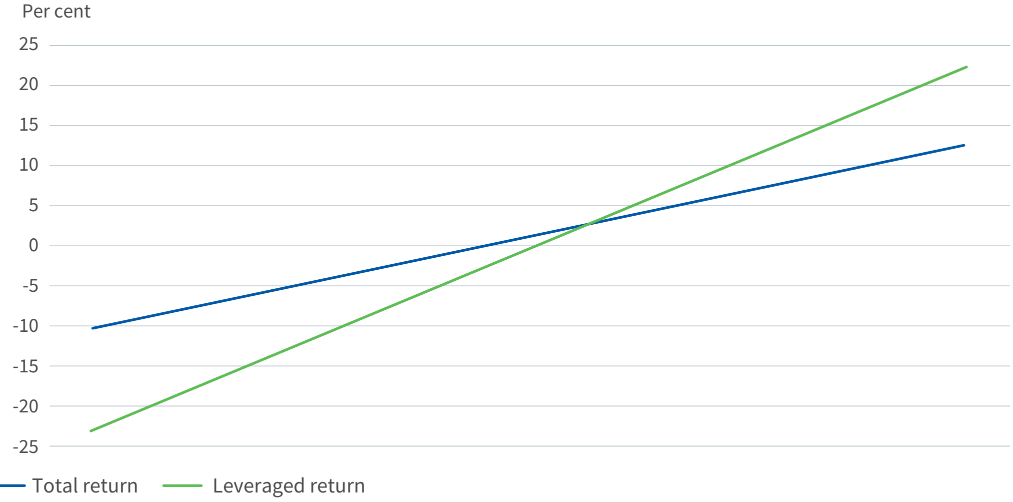
Leverage risk

Leverage can boost the prospective performance of real estate assets, as illustrated by figure 4 below. But leverage also increases the volatility of potential returns. It aids investment performance when capital values are stable and, particularly, when they are increasing. However, leverage can hurt investment performance when capital values decline. Using leverage in a counter-cyclical manner is therefore appropriate.

Investors' appetite for leverage risk should be highest when the market is relatively weak but set to improve. Specifically, this should be at the early stages of a recovery (particularly when applied to core assets). Increasing leverage at such a point in the cycle is particularly attractive if the lack of demand for debt allows for favourable loan pricing. In contrast, investors' appetite for leverage risk should be lowest when the market is strong, but the risk of a downturn is elevated.

Figure 4. **Impact of leverage on returns**

Assumptions: Interest rate on debt = 3%, Loan to Value = 50%



Source: Dr Nicole Lux 2018.

Other risks

There are a few other risks that should be managed through the cycle.

An investor can manage **liquidity risk** through the cycle, for example. The compensation investors require for illiquidity varies over time. They tend to demand excessive compensation in a downturn and insufficient compensation at the top of the market. Whether investing in secondary cities or second tier submarkets, such risks should be avoided at the peak of the market and explored at the early stages of a recovery.

Investors should also consider their exposure to markets with markedly higher **volatility risk** than is the norm. The importance of managing cycle risk in volatile markets is amplified. Again, real estate investors should be more willing to hold assets in volatile markets at the start of an upswing and less appetite when the cycle is at an advanced stage.

It is not appropriate to manage all dimensions of portfolio risk through the cycle. For example, tolerance for concentration risk, whether at the asset, geography or tenant level is not something you would expect to change over time. Appetite for risky covenants should not vary through the cycle either, given the inherent uncertainty as to when associated risk events might materialise. And it also goes without saying that there is never a good time to go out of your circle of competence and start investing in assets/markets that you do not understand. While investors' tolerance for operational risk (including business and management risk) does seem to vary through the cycle, this does not seem like an optimal strategy.

4 The practice: It is harder than it sounds

For various reasons, investors fail to position their portfolios in accordance with where they are in the cycle. It is harder than it sounds to establish the stage of the cycle the market has reached at any point in time. There are two key reasons for this: firstly, the backward-looking nature of valuations and, secondly, an array of cognitive biases. Let's take a closer look at each.

Valuation lag

Unlike in public markets where there is an observable price for all assets, real estate values are based on appraisals. These are driven by the qualitative and somewhat subjective assessment of valuers.

Clearly, valuing assets in a heterogenous asset class like property is difficult and it is appropriate that it is done in an evidence-based manner. However, real estate values are somewhat smoothed by backward-looking valuation methods. Typically, a property's value reflects transaction pricing over the last quarter and sometimes the previous two quarters. Furthermore, in the absence of plentiful new information, a valuer will tend to revert to the previous valuation. Values can therefore be somewhat anchored to the previous valuation.

Numerous studies have shown that real estate values tend to be "smoothed" relative to transaction pricing and, crucially, that in rapidly changing market conditions, valuations struggle to track prices. Real estate values therefore fail to deliver a clear signal to real estate investors as to how the cycle is progressing.

Cognitive biases

The way our minds work, plays a role in understanding how we fail to anticipate that tomorrow's market conditions will be different to today's. Firstly, investors have been shown to anchor to today's market conditions. People have short memories and struggle to realise how much change is taking place. As investors, we tend to base our assessment of future market conditions (and therefore our assessment of the present value of future cash flows) on the market conditions we see today. Investors' propensity to believe that "this time is different" is generally too great while their capacity to remember that markets are cyclical is too weak.

Secondly, in deciding how to behave, humans tend to base their actions on what others are doing. Generally, people are more inclined to follow the example of others and indulge in herd behaviour. So, if the market is displaying a high level of risk tolerance, individual investors are likely to follow suit and find ways to justify why it is appropriate to do so.

Therefore, an investment strategy based on being fearful when others are greedy and being greedy when others are fearful sounds very simple but is difficult to execute in practice. As investor Robert Arnott famously said, "In investing, what is comfortable is rarely profitable." Cyclically-aware investing is meant to feel difficult – and people often find ways to delay difficult choices, such as, in this case, failing to identify that we are at the peak of the cycle.

5 Building a tool kit for managing cyclical risk

We have established that it is difficult to know where we are in cycle, and therefore to manage risk accordingly. While forecasts can help portfolio risk management, the track record of real estate forecasters is patchy. In every sense, investors should be humble about how confident we can be about the future. But, as Howard Marks says, “while we may not know what lies ahead, investors can enhance the likelihood of success if they base their actions on a sense of where the market stands in the cycle.”

We have therefore built a cyclical risk tool that helps us establish where the market stands in the cycle in different property markets.

Clearly, each cycle is different: their length, amplitude, causes and effects all vary. However, to use some of Mark Twain’s wisdom: “History doesn’t repeat itself, but it does rhyme”. In the context of real estate, there are enough shared characteristics in each real estate cycle for us to feel confident in using historic cycles as a guide to the present one.

The stage of the cycle can be broadly determined by answering the following question: how much optimism is embedded in the market price? We can look for indicators of this in, for example:

- **The pricing of real estate.** High capital values (relative to history or other asset classes) can reflect an excessively optimistic view of future rental growth prospects, perhaps projecting a recently experienced period of strong performance into the future. Low capital values can reflect an excessively pessimistic view of future growth prospects.
- **Evidence of risk tolerance.** When real estate investors are excessively optimistic, they are likely to be more willing to invest in non-core locations or to require a smaller premium to invest in secondary real estate, for example. At times of excessive pessimism, a very large premium will be required.
- **Lending conditions.** Loose credit conditions can reflect excessive optimism on behalf of lenders as to the sustainability of real estate values and the ability of borrowers to fulfil their obligations.
- **Levels of development.** High levels of development can indicate excessive optimism on behalf of developers as to future market conditions and, in particular, rental levels.

Depending on location, we have brought together 15-17 different metrics to provide an assessment of these, and associated, factors in our cyclical risk tool. The objective of this tool is to provide a framework for thinking about cyclical risks and a broad indication of which stage of the cycle a market finds itself.

The limitations of this tool should be recognised. In particular, it is important to use this quantitative approach alongside a qualitative assessment of sentiment. Similarly, metrics with limited datasets that have not been included in this tool should not be disregarded. Where there is relevant replacement cost data or relevant Real Estate Investment Trust (REIT) market data, this should be utilised. Knowledge of the depth and ferocity of bidding for assets can also be highly informative.

Despite these caveats, this tool enables us to see that, in the round, cyclical risks are relatively elevated at present in many markets.

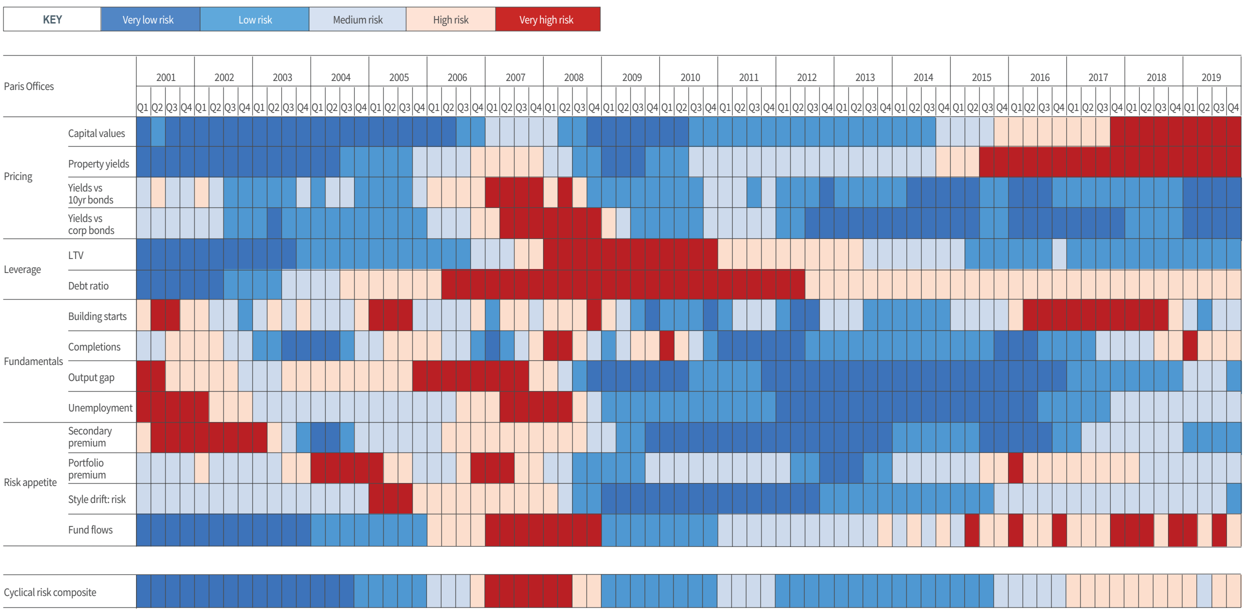
Paris

In the Paris office market, for example, our composite indicator suggests that after a long period of subdued risk following the global financial crisis, cyclical risk has been building gradually since 2015.

Today, cyclical risks are relatively elevated in the Paris office market as pricing is exceptionally strong by historical standards, building starts have been sustained at relatively high levels for some time and increasingly investors are willing to construct property on a speculative basis.

With the Paris office market at a relatively advanced stage of the cycle, it would seem appropriate for real estate investors to position defensively for the next stage of the cycle. It appears to be a good time to reduce exposure to development and leverage risk, for example. Generally, investors should act with a strong degree of caution in this market for the time being.

Figure 5. **Cyclical risk in Paris, 2001-19**



Source: Aviva Investors February 2020.

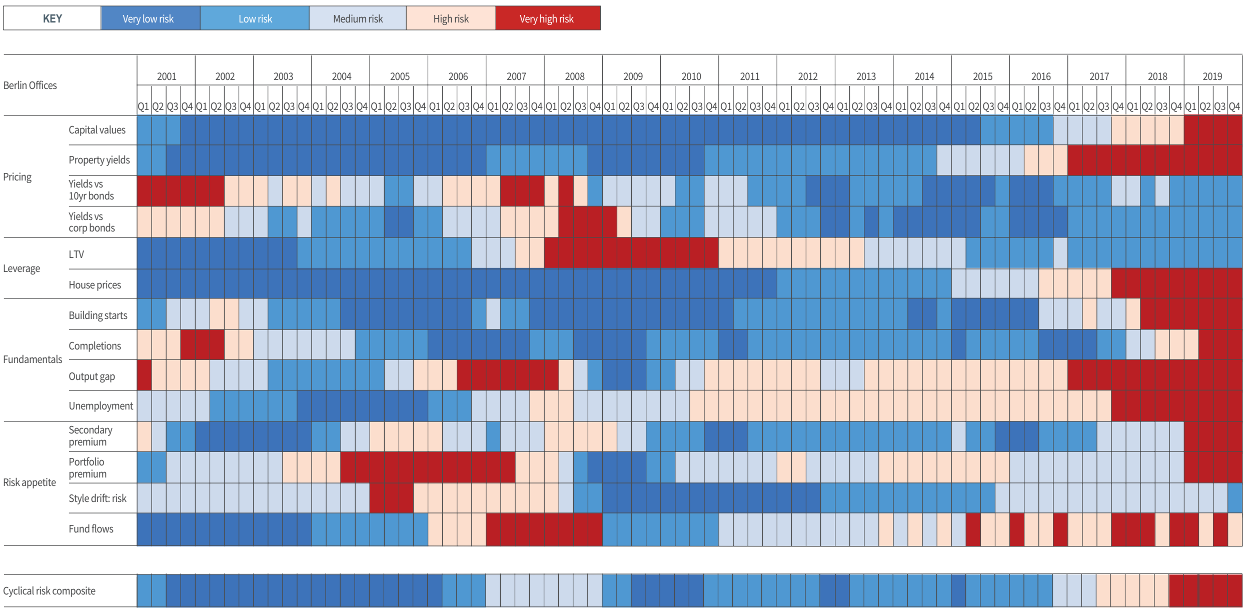
Berlin

Cyclical risk is even more elevated in Berlin than in Paris. Indeed, of the 13 cities for which we have developed this tool, only Berlin currently has higher cyclical risk than at the peak of the previous cycle. The Berlin economy is hot, real estate pricing is very stretched by historical standards and there is a lot of construction activity underway. Furthermore, there are multiple proof points to suggest that investor's risk appetite is elevated.

In Berlin, real estate investors should be defensively repositioning their portfolios with haste. It may be that today's market conditions provide an attractive exit point and that taking capital out of this hot market is the appropriate action.

It is remarkable how quickly cyclical risk seems to have increased in the Berlin market over the last two years or so. For a pro-longed period after the Global Financial Crisis, cyclical risk remained very low. This remained the case through 2015. Investors that acted in a counter-cyclical manner during this period were generally well rewarded.

Figure 6. **Cyclical risk in Berlin, 2001-19**



Source: Aviva Investors February 2020.

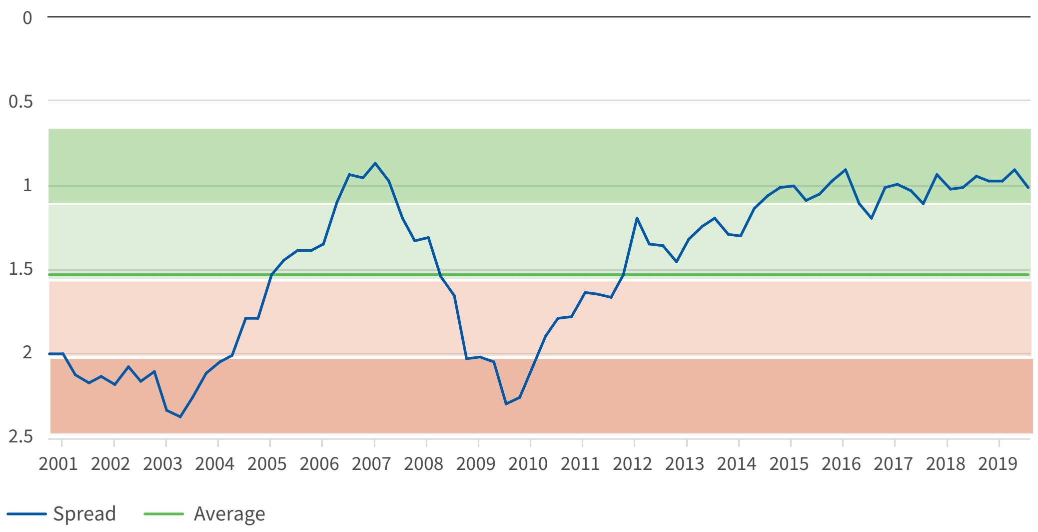
City of London

The City of London office market is cooler than other European markets. Cyclical risk is currently less elevated than in many other European markets. Currently, absolute pricing is high in an historical context and the risk appetite implied by market pricing is also high, as observed in chart below.

But the levels of leverage appear moderate and supply risks are under control. Unlike some other European markets, idiosyncratic factors, principally related to Brexit, have injected a degree of caution into the market.

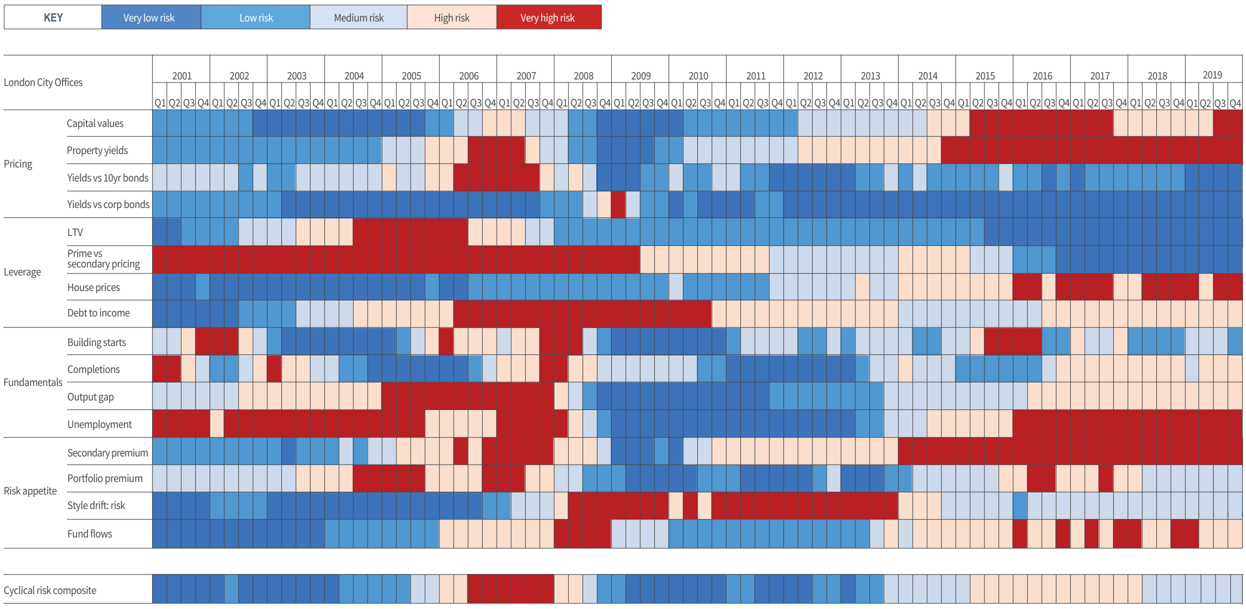
Figure 7. **Risk appetite implied by market pricing**

Spread between top (prime) and bottom (tertiary) yield quartiles



Source: MSCI March 2020.

Figure 8. **Cyclical risk in City of London, 2001-19**



Source: Aviva Investors February 2020.

European real estate investors are likely to see the City of London market as relatively attractive given that cyclical risks are modest. While a degree of Brexit-related uncertainty remains and a degree of caution is appropriate, a strong case can be made currently for investing in central London offices.

Looking back, cyclical risk was at a low in 2009/2010. History has shown that this was a good time to judiciously take on risk. For example, taking on development risk at this time would have been well rewarded. Those acquiring development exposure at that time could access deals that implied all-in-costs well below cyclically-low replacement costs. And for the last few years, such assets could be sold well in excess of replacement costs.

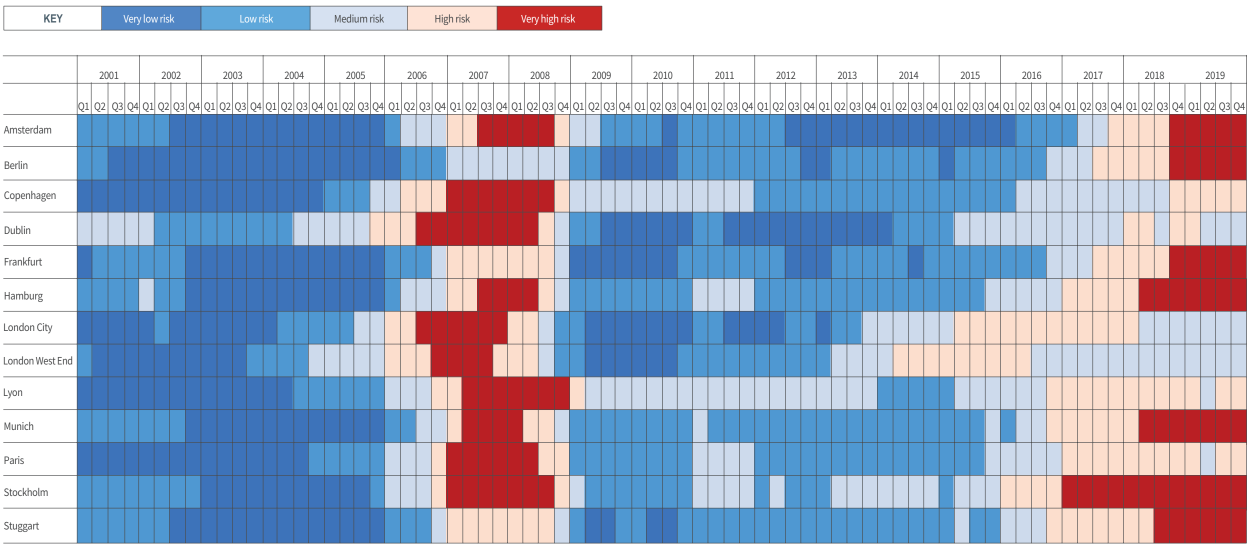
European overview

Bringing together the cyclical risk composite for a handful of the key European real estate markets shows that the cycle is at a mature stage in most markets. Cyclical risk is higher in Berlin and lower in London, but generally European real estate investors should be reducing their risk exposures, selling out of hot markets and holding cash in the expectation of more attractive entry points in the future.

Generally, this tool provides a clear understanding of the stage of the cycle for each market. Furthermore, portfolio positioning based on this understanding would generally have been beneficial and this tool has delivered appropriate signals in the past. Positioning portfolios to take on leverage, vacancy and development risk when cyclical risk was low – as in the early 2000s and 2009/10. Similarly, dialling back risk exposures when our cyclical risk indicator pointed to high or very high risk in 2006/07 would have benefited portfolio performance during the subsequent downturn.

Only time will tell whether the current readings of very high risk foretell a period of marked weakness in the European real estate market. However, it would appear prudent to be mindful of the lessons of history, remember the cyclicality of real estate and position defensively.

Figure 9. **Cyclical risk in European markets, 2001-19**



Source: Aviva Investors February 2020.

6 Strategic implications

- It is important to understand where we are in the cycle and to adjust strategy accordingly. Doing so appropriately is key to achieving outperformance in real estate.
- Managing cyclical risk is difficult, not least because it can be difficult to identify in which stage of the cycle a market is in. Practice is harder than theory.
- Assessing cyclical risk requires a lot of relevant data alongside a qualitative assessment of risk sentiment. We believe our tool gives us an advantage by allowing us to position portfolios in a cyclically-aware manner.

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