

Research Paper

Does European real estate offer inflation protection?

- > Real estate's inflation hedging properties refer to both components of return, income and capital values, but are temporal and depend on the time horizon
- > The recent high inflation resulting in unaffordable rents is an important factor that has resulted in real estate as a less effective hedge. Furthermore, the inflation-hedging properties of an individual building, sector or market can be affected by structural changes in occupational markets
- > Investors may be taking bets on the cycle in order to find supply-demand imbalances in the short term, as well as explore sector maturity and the vehicle structure as a way to enhance the inflation hedging potential of real estate

Introduction

From the global financial crisis (GFC) up to the end of 2021, inflation hovered around central bank target rates. However, at the start of 2022, it took a sharp upward turn, driven by supply constraints (partly resulting from the war in Ukraine), a switch in demand towards goods and the lingering effects of fiscal policy support associated with the Covid-19 pandemic.

The prolonged period of low inflation means that most real estate professionals working today do not have direct experience of the impact of high levels of inflation on asset pricing and economic behavior. This prompted the INREV Research Committee to hold a debate on real estate's inflation hedging properties in the context of today's macro-economic environment including tightening monetary policy and changing occupier preferences.

Starting with a definition, the committee concluded that the extent to which real estate offers inflation protection is temporal, resulting in a different answer depending on the time horizon. In the very long term, real capital value and rental growth are close to zero. In the short term, extent of real estate's inflation-hedging properties depends on specific market conditions, including demand/ supply imbalances, structural trends and lease structures.



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A definition of inflation hedging for real estate investment

The committee's discussion began by considering how real estate's inflation hedging capability might be defined. From an investment perspective, it was agreed that to be a good hedge, changes in an asset's returns (both income and capital growth) should move in line with, or react to, a selected measurement of inflation. One contributor summarised the objective as follows:

"If I had €100 today, would it be worth at least €100 in n-years' time? The definition should be set in the context of total return rather than income return, because you might get rental growth on a CPI-linked lease but if the value of the property fell over the same period, the initial €100 investment would be worth less."

In other words, the total return from the investment should at least offset the impact of inflation on the purchasing power of the capital tied up in the investment.

But when considering the effectiveness of real estate as a hedge, it was also agreed that the time horizon needs to be considered, since real estate may provide different hedging capabilities depending on the period involved. While some participants argued that real estate's ability to react to changes in the price level was important, others suggested that as a long-term illiquid asset class it is the ability to keep pace with changes in the price level over multi-year periods that is key. In other words, for some it is sufficient for real estate to beat inflation on average over multiple years, while for others elevated short-term correlations are an essential attribute.

During the debate it was suggested that drivers of returns were important in determining whether or not real estate provides a 'true' inflation hedge. Some participants questioned if returns based on supply and demand imbalances in investor or occupier markets should be regarded as providing a valid inflation hedge. Others highlighted that given the inherent complexities associated with transmission mechanisms between changes in the price level and supply and demand dynamics, any assessment should be focused on outputs rather than inputs.





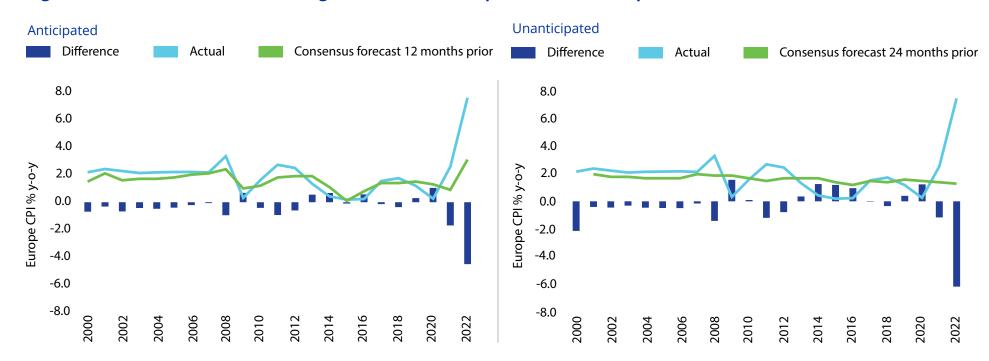
Question of whether investors need to distinguish between anticipated and unanticipated inflation was also addressed. Typically, when returns are a weak hedge against anticipated inflation, they are also a poor hedge for unanticipated inflation.

However, it was concluded that this debate is irrelevant, as investors

"don't solely acquire real estate based on future hypothetical inflation."

In other words, a strong hedge should offset both anticipated and unanticipated inflation.

Figure 1. Definition: should we distinguish between anticipated and unanticipated inflation?



Source: Consensus forecasts 2022



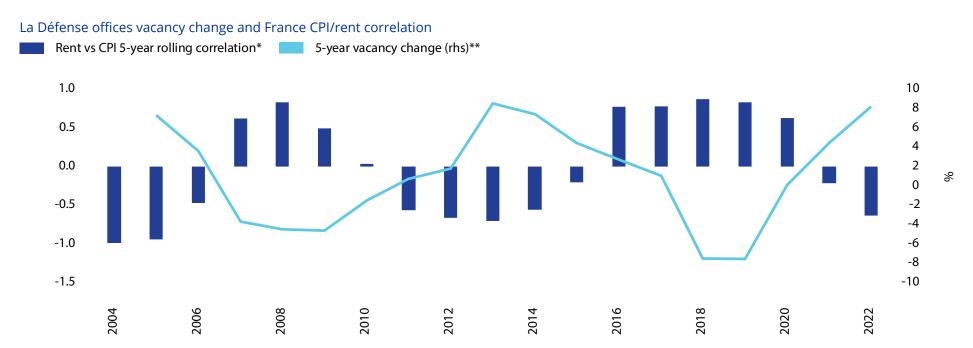
When is real estate an investment hedge?

The committee agreed that real estate's inflation hedging attributes are amplified when there is an imbalance between supply and demand. When imbalances exist, there is upward pressure on rental income and potentially on capital values. At those times when this imbalance is greatest, real estate is likely to offer the strongest hedge against inflation.

This supply-demand imbalance is not, however, a consequence of inflation, but instead relates to the market cycle. When the market is favourable for the landlord, it may be possible to reflect inflation via increasing rent to the tenant. Conversely, this may not possible if there is a large supply of real estate in the specific market concerned or if the underlying economic conditions challenge tenants' affordability. As a result, real estate's ability to offer an inflation hedge depends on both micro and

macro conditions in both occupier and investor markets. Of course, with regard to occupier markets the picture also changes depending on the structure of the underlying leases. As contracts between landlords and tenants regulate the impact of changes in market dynamics on rents payable by tenants, they also determine the impact of rising or falling market rents on incomes generated by individual properties.

Figure 2. Market Conditions: the tighter the supply/demand imbalance, the higher the degree of inflation protection



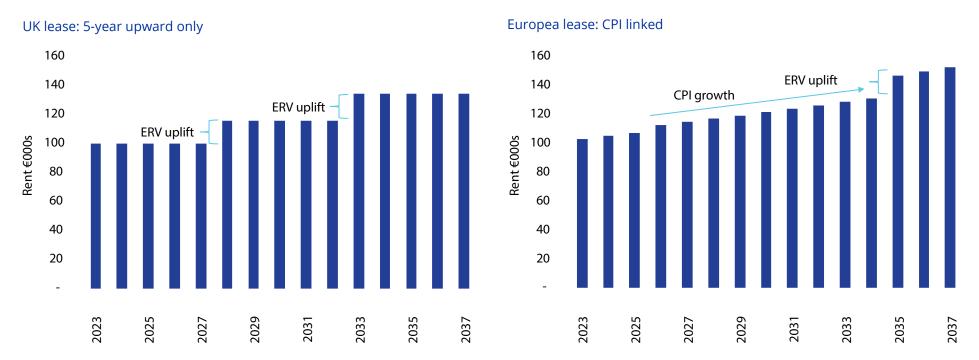
Source: Oxford Economics 2023, PMA 2023, *Correlation between rent and price level, not change **Current vacancy less vacancy t-5



In the UK, rents are typically fixed for five years, so any inflation shock will not normally be reflected in the passing rents during that period. This situation differs in continental Europe, as leases are normally linked to CPI for the duration of the lease, with a reversion to market rent thereafter.

The hedging capacities of real estate as an asset class also depend on the sector and time horizon. Studies show that in the very long-term real growth in per-square meter capital values and rents is close to zero; suggesting that while real estate might not offer a high-quality shortterm hedge with returns reacting to year-on-year changes in the price level, longer-term attributes are more compelling.

Figure 3: Lease structure: UK vs Europe





What is different in this cycle?

Since the GFC the attractiveness of has been supported by a high real yield gap with real estate offering better relative returns with fixed income.

The impact of recent high inflation on monetary policy has significantly impacted real estate capital values. One committee member observed:

"Looking ahead, as monetary policy reverses, yields should gradually correct, and rental growth (directly or indirectly related to inflation) will be capitalised as a larger component of return."

Current high inflation might be expected to feed through to the underlying real estate occupational markets: for example, retail rents should eventually hedge inflation by reflecting retailers' turnover, which will in turn reflect the price of goods. Increasingly however, retail sales no longer take place in shops. It could be argued that the rapid change in shopping habits accelerated by the pandemic was not reflected in the yields that investors were prepared to pay. In other words, the returns obtained did not provide an appropriate risk premium. This suggests that the inflation-hedging properties of an individual building, sector or market can be eroded by structural changes in occupational markets. Other such examples include the office sector with the impact of the transition towards

hybrid working and the logistics sector with the impact of the increased occupier demand associated with the transition from physical to on-line retailing.

Recent high inflation resulting in unaffordable rents is another key factor that has resulted in real estate as a less effective hedge. While landlords can theoretically raise rents in line with the inflation clauses in lease agreements, in practice the current inflationary environment has eroded household real wages and retail sales. This means that landlords are likely to be forced to make a choice on whether to maintain occupancy or revenue, possibly ignoring the inflation clauses in lease agreements.

Figure 4. Central banks supported property yield gap

Today, the only way for property to compete with other risky assets is for yields to rise Real Yield Gap Europe Office (ex UK) Net Yields EZ Real bonds* European office excl UK yields / Spreads $\%^st$ 7.0 6.0 5.0 4.0 3.0 2.0 1.0 0.0 -1.0 -2.0 -3.0

Source: PMA 2023, *Real Yield Gap = Property Yield less Real Bond Yield



Implications for investors

The cases identified by the committee have a number of implications for investors. These could include taking bets on the cycle in order to find supply-demand imbalances in the short term, potentially resulting in obtaining positive returns above inflation. However, this effect is likely to be negligible in the longer term, as studies have shown that rental and capital value growth tend to revert to zero over longer time horizons.

As the other side of the same coin, investors will also need to take heed of the relevant sector's maturity, as it can play a key role in the inflation-hedging characteristics of real estate. For example, investors rushing into logistics or currently in-favour 'alternative' sectors should carefully assess the possibility of longer-term supply-side adjustments in their decisions.

The vehicle structure through which investment takes place can also affect the hedging potential of real estate. In particular, during an inflationary environment, closed value add funds may be discouraged from pre-letting developments too early because long leases are unlikely to capture any imminent rental reversion. Shorter leases are more desirable in this kind of situation.

One committee member cites the example of:

"a developer in the high inflation environment during the 1970s, who was incentivised to keep a residential development portfolio vacant because the market rental value kept rising. As result, they could keep refinancing the project, resulting in a massive distortion between the fundamentals of the project and its value. The portfolio never delivered an income return, but the developer was able to deliver significant capital returns through indexation that never materialised."

Investors seeking a longer-term hedge will be rewarded with patience. These investors understand that in the long term, even with lengthy lags and planning restrictions, supply tends to match demand long term. This even applies to the logistics sector where over time supply side changes will offset pressure on rental values and lead to convergence with the price level.





Conclusions

- 'Real estate as an inflation hedge' refers to real estate's hedging properties with respect to both components of return, income and capital values
- > The extent of real estate's inflation hedging properties depends on the time horizon
- In the very long-term supply adjusts to demand resulting in real growth in per square metre capital values and rents reaching close to zero
- For shorter time periods the extent to which inflation can be captured in lease agreements depends on the lease type, the level of demand and supply imbalance, structural trends and changing tenant preferences
- Investors with a short-term time horizon will seek to capture inflation via any of the above market conditions. More patient core investors wait for supply side adjustments to respond to any changes in demand to achieve real returns in the very long term.

