EUROPE REAL ESTATE STRATEGIC OUTLOOK

Mid-Year 2022

IN A NUTSHELL

_ There is growing evidence that the European real estate market has entered a period of price correction, with rising yields expected to deflate prime values by around 10% to 15%. Although somewhat compensated by rent growth, this still suggests a marked reduction in total returns over the next 12 months.

_ The market faces the twin challenges of higher financing costs and slowing economic growth. Higher inflation and build costs have led us to upgrade our medium-term rental outlook, but the threat of recession poses a short-term risk, particularly for weaker assets with vulnerable income.

_ Core strategies are expected to outperform over the coming year, reinforcing their importance within a multi-asset portfolio, while value-add and impact opportunities are set to emerge as larger price adjustments are realised across grade B stock.

_ We continue to see the attraction of affordable residential, student housing, senior and co-living, while urban and niche logistics offer both resilience and strong long-term rent growth potential. In time, as price corrections are realised, office refurbishment and possibly retail repositioning should gain in attraction.

Market Outlook

After a strong end to last year, real estate has continued to perform well moving into 2022. A look at the European diversified core fund market shows that fund-level total returns increased to a post-GFC high of around 11.5% in the first three months of this year. While this continues to be driven by exceptional performance in the industrial sector, all other sectors – including retail and hotels – put in a strong showing as well.[1]

Yet the economic landscape has changed considerably during the first half of the year. After almost two years of pandemic-related disruption, recent months have seen a new set of challenges emerge. At the start of this year, European inflation had already risen due to materials and labour shortages, higher demand, and rising commodity prices. This was seen by many to be a temporary blip, with inflation expected to return to normal levels relatively quickly.

However, the invasion of Ukraine in February and ongoing war has led to significant spikes in gas, oil and other commodity prices, driving inflation to levels not seen since the early 1980s. Our central case forecast sees inflation begin to move towards target next year, together with a reduction in economic output, but with growth remaining positive throughout the next 18 months. However, the risk of an inflation-induced recession remains elevated.

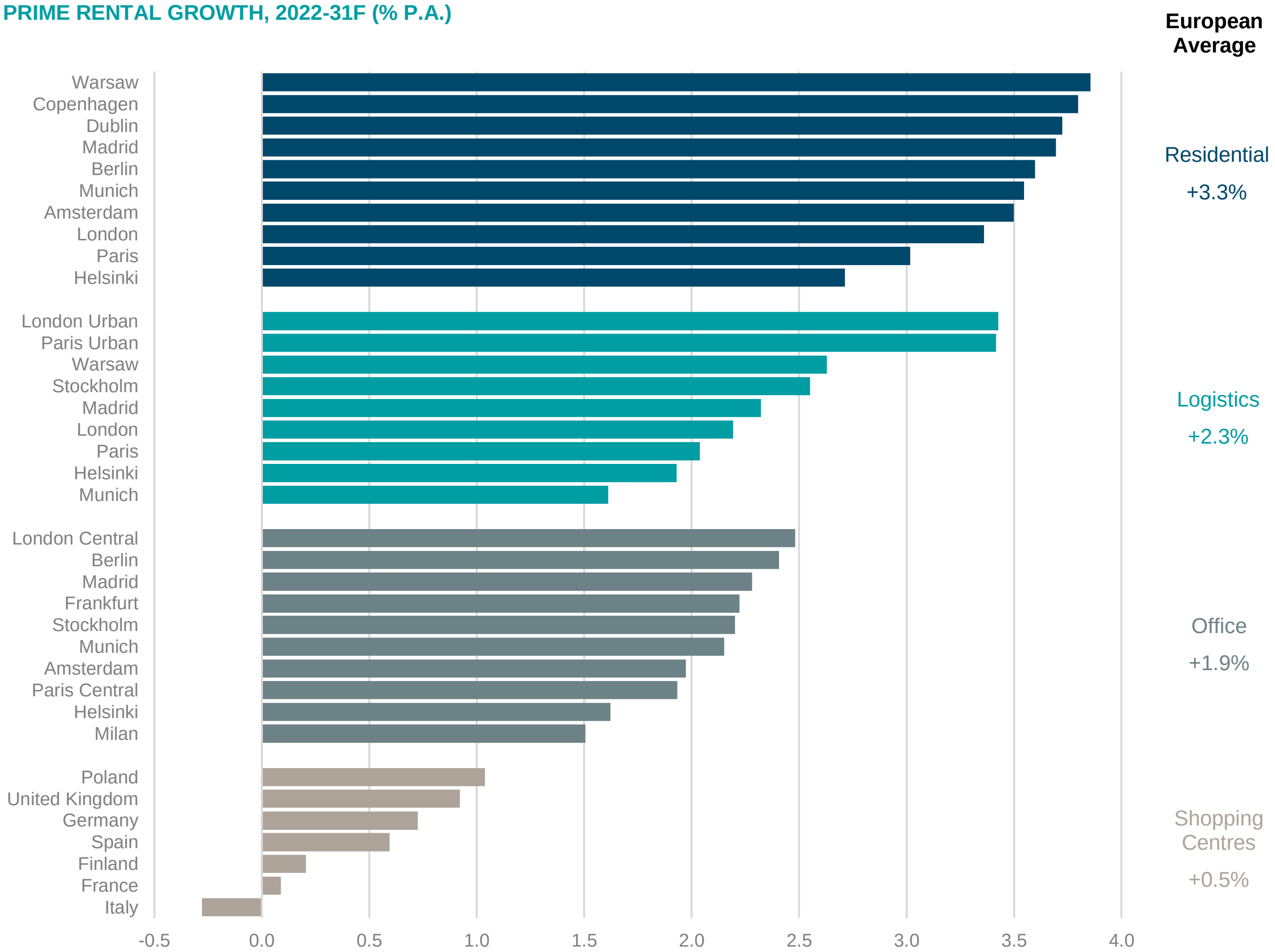
[1] MSCI, INREV, June 2022

In the rental market, some inflation can be a positive. Unlike much of the fixed income market, real estate income can change over time, particularly where leases are indexed to CPI or a variant thereof, but also in the event of a rent review or lease expiry. Residential has generally proven to offer reasonable protection against inflation over time, thanks to persistent undersupply, favourable demographic trends and typically shorter leases – providing opportunities for regular rental uplifts.

We also believe that logistics will fare well due to high demand and low levels of vacancy, with urban logistics in particular still expected to be a strong outperformer. However, with economic output being a more significant driver of performance than inflation, market rental value growth for most sectors is likely to tail off next year as GDP growth fades. The office sector has already seen rising vacancy for the last two years, and while the first quarter of this year saw the rate edge down for the first time since the end of 2019, this downward trend is likely to be short-lived. High-quality space with strong ESG credentials is still in short supply, but on average we see office rents as being less well placed to keep pace with inflation over the next 12-18 months.

In the medium term, current high construction costs and uncertainty for developers mean that development volumes are likely to fall. We had already expected net completions in the office sector to tail off over the next five years, with increased remote working dampening demand for additional new space. But with the cost of building having risen so fast, it is now our view that development activity will fall away more quickly, providing an additional positive impetus for rental growth as the economy moves into recovery mode.

PRIME RENTAL GROWTH, 2022-31F (% P.A.)



Source: DWS, July 2022.
Note: F= forecast. Forecasts are not a reliable indicator of future returns. Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect.

Another effect of higher inflation has been a swift rise in longer-term interest rates. Central banks have already begun to act against inflation by raising policy rates, although the market is pricing in further tightening in the short-to-medium term. This has led to a significant rise in long-term yields, with the German 10-year bond briefly surpassing 1.80% in June, before falling back to trade as low as 1.05% in late July.[2]

Other parts of the fixed income market have seen similar changes, with the five-year euro swap peaking at 2.3% towards the end of the second quarter, having traded at an average of just below zero for the last five years. Most significantly for real estate, this represents a sizeable increase in the cost of borrowing – a positive outcome for lenders, but for direct real estate investors relying on leverage, this is curtailing the outlook for returns. Indeed, when coupled with a rising risk-free rate and higher return requirements, a growing number of investors are now requiring a price discount.

So far, such corrections are only showing through in the data to a limited extent. The latest monthly data suggests that only in a handful of major cities have we seen yields increase across offices, logistics and multifamily residential – and value corrections in those markets are still small.[3] The exception here is perhaps retail, where yields had already moved out considerably prior to this year.

That said, anecdotal evidence would suggest that buyers are often needing to secure a substantial discount across the majority of the real estate market in order to move ahead with current deals. The listed real estate market offers some further guidance as to current expectations of where values are heading. As of early July, implied values of major European REITs were around 17% lower than the underlying operating value of their real estate,[4] with residential (excluding Germany) and logistics trading at a smaller discount than offices. As a point of reference, implied values were on average very close to operating values at the end of 2021, with logistics trading at a significant premium.

Real estate had built up something of a cushion over other fixed income investments in recent years, as spreads grew and remained comfortably above historical averages. But at current valuations, property is looking relatively less attractive. Spreads over sovereign bonds, corporate bonds and swap rates have all been eroded rapidly since the start of the year, although recent movements have shown that fixed income yields can move rapidly down as well as up. In June, the German 10-year bond showed falls of up to 40-50 basis points in a matter of days, for example. For that reason, analysis of property yields in this context should be undertaken with caution, but even taking a slightly longer-term trend, spreads have narrowed considerably and would suggest some level of correction is likely.

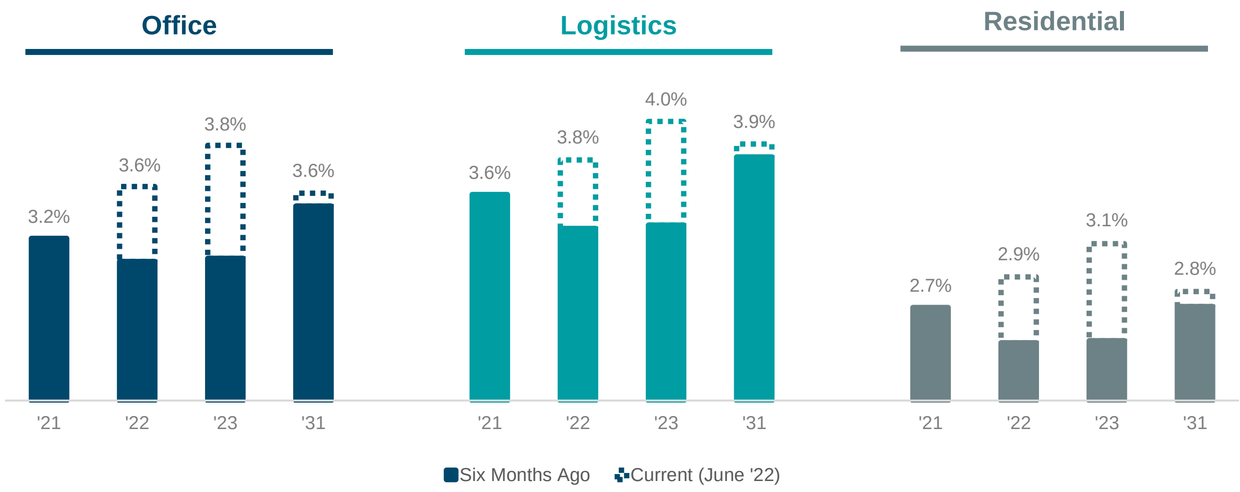
While six months ago, our expectation was that yields would compress further this year and next, this assumption has now been reversed. We now expect yields to move out across all markets and sectors over the next 18 months, as markedly higher financing costs make previous pricing unachievable.

We anticipate the largest correction in the office sector, where prime yields could move out by around 60 basis points on average, equivalent to a value decline of 15-20% (excluding the effects of rental growth). However, secondary stock would likely need to see an even greater increase in a value-add type refurbishment scenario.

That said, the structural drivers of interest rates such as demographic profile, productivity outlook and central bank inflation targets remain broadly unchanged. This leads us to believe that over the much longer term, trend rates will not change significantly. As such, while we expect a value correction in the near term, our long-term projections for property yields remain largely unchanged. This means that capital value growth is likely to be negative this year, despite stronger rent growth, but in the medium-to-long term values have been revised upwards as yields are expected to peak earlier in the cycle and rents should be bolstered by weaker supply growth.

[2] Macrobond, July 2022
[3] CBRE, July 2022
[4] Green Street, DWS, July 2022

PRIME YIELD BY SECTOR FOR 2021, 2022 AND 2031 (CURRENT VS. SIX MONTHS AGO)



Source: DWS, July 2022.
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Investment sentiment remained elevated at the start of this year. Survey evidence suggests that investors were marginally less optimistic than in the second half of 2021,[5] but investment volumes in the first quarter of this year were among the highest on record. In particular, investor demand for logistics and residential property broke new records, while office volumes also saw something of a revival.[6]

Even so, while final data is not yet available, the second quarter looks likely to finish down slightly in year-on-year terms, with perhaps only residential seeing an annual increase after a relatively quiet period last year. With investors' hurdle rates being pushed up by the increase in fixed income yields, it may take time for buyers and sellers to align in their expectations of pricing. Therefore, even with investors remaining broadly positive, we would expect a more subdued second half of the year in the investment market.

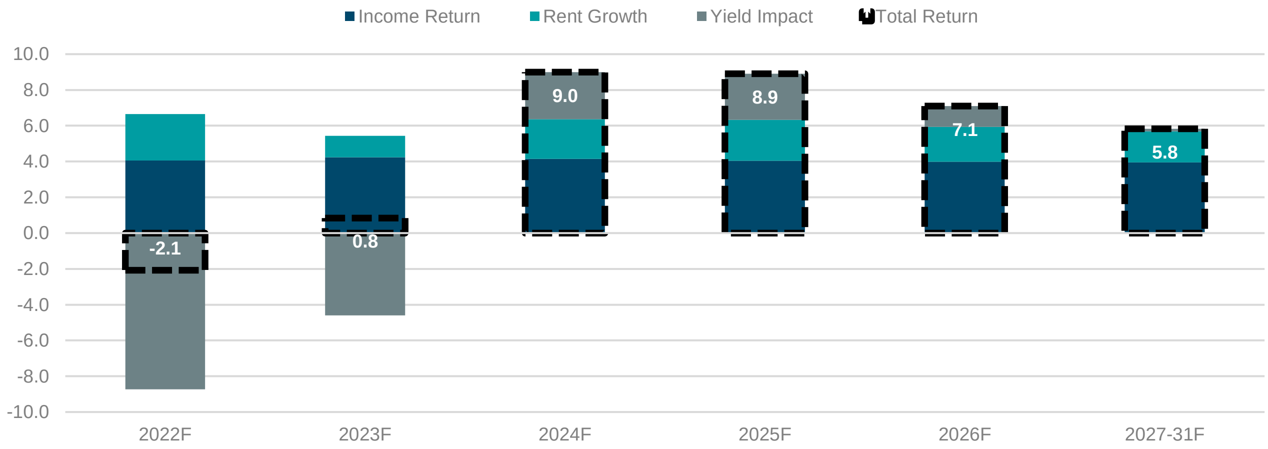
Looking ahead, while our all-property prime total return forecast remains broadly unchanged over a ten-year period (2022-31), there has been a marked change in the trajectory. We still expect prime total returns of 5.3% per annum over ten years, but we now anticipate much weaker performance in the near term and stronger returns beyond 2023.

If pricing moves in the short term to the extent that we believe it needs to, then higher rent growth and an increased income return would not be enough to counteract a potentially large negative yield impact this year, pushing returns into the red. And next year, with yields expected to move out further and rental growth set to slow, returns are still likely to be subdued.

But over the medium-to-long term, performance should receive additional support from stronger economic growth, lower construction volumes and higher income returns. And this upward revision to longer-term performance would tie in with higher return requirements stemming from rising returns on alternative investments.

[5] PMA Survey of Investor Preferences, 2022 Q1
[6] Real Capital Analytics, July 2022

EUROPEAN AVERAGE ALL PROPERTY PRIME GROSS TOTAL RETURN, 2022-31F (%)



Source: DWS, July 2022.
Notes: f = forecast. No assurance can be given that any forecast will materialise. Forecasts are not a reliable indicator of future returns. Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect.

In terms of sector performance, the residential sector still looks to offer the best opportunities overall. Following a turbulent two years, city centres are generally now fully open for business, with demand for city centre living recovering well. The sector now faces a new set of challenges, as high inflation is reducing real disposable incomes and regulatory risk is on the rise. We still see excellent opportunities for the sector as a whole, with Copenhagen, Dublin, and the Spanish and U.K. cities standing out, but we feel that in general city centre rents at the luxury end of the market could be less well insulated against weaker spending power. Nevertheless, on a risk-adjusted basis, residential remains our top performing sector over the ten-year outlook.

We also still expect the logistics sector to be an outperformer in the short term. However, pricing in some parts of the sector looks unsustainable, and with consumer spending and the wider economy expected to cool, we see less impetus behind logistics moving ahead. One exception to this is perhaps urban logistics, which has also seen pricing squeezed. But keen investor demand should offer greater protection against rising yields here, while we expect strong occupier demand and short supply to sustain markedly higher rent growth compared to big box assets in corridor locations.

Offices remain an underperformer overall, although new working practices since the pandemic and a push towards sustainability is supporting both occupier and investor demand for best-in-class buildings. Still, we expect a further weakening in the occupier market in the near term, while values could see a slightly larger adjustment than other sectors. On a risk-adjusted basis, prime office returns look less attractive than both residential and logistics based on our latest forecasts, although refurbishment of well-located grade B properties could start to look attractive if a sufficient price discount can be achieved.

Retail has had a particularly tough time over the last five years, it's decline exacerbated by the Covid pandemic. Looking ahead, the sector appears to offer strong return potential on paper but should still be approached in a highly selective manner. Certain segments are already gaining in appeal, with prime retail park yields falling in a number of locations during the second quarter – at a time when property yields are generally coming under upward pressure. The story behind shopping centres is less compelling though, and here we expect values to correct further in the short term. However, for prime assets with strong occupier appeal, an elevated income returns together with the potential that the sector will become oversold – allowing yields to come back slightly over the longer term – will surely present opportunities.

Investment Strategies

The European real estate market is in a period of transition. Having seemingly entered recovery during 2021, performance has reversed sharply in the face of rising interest rates and the prospect of recession. With a price correction underway and occupier fundamental potentially under threat, investment strategy should focus on the resilience of current assets as well as the opportunity for price dislocation. This environment reinforces the value of core real estate within a multi-asset portfolio, but also suggests that in anticipation of price correction and eventual recovery, investors should be preparing for higher-risk and impact strategies.

Resilient Core

Repricing of core.
Market less vulnerable to recession.
Strong long-term fundamentals.

- ✓ Low vacancy markets
- ✓ 10-15% price reduction from peak
- ✓ Aligned with long-term structural drivers
- ✕ Yield seeking

Price Dislocation

Pricing opportunities from flight to core.
Impact opportunities to meet future needs.
Prepare to move.

- ✓ Weaker quality assets in good locations
- ✓ 20%+ price reduction from peak
- ✓ Reposition to match long-term structural drivers
- ✕ Stranded assets

As we go into this period of weaker economic growth and possible recession, prime assets and core strategies are expected to outperform the wider market. Rising swap rates have led some to question the attraction of this lower yielding part of the market, but this underplays important features such as security of income, sustained liquidity, and inflation protection.

With sectors such as residential and logistics recording vacancy rates in the low single digits, and grade A office supply in many major cities still in short supply, these parts of the market look well set to provide a consistent income return, even in the event of recession. This doesn't mean these core assets are immune to price correction, and in most cases, we believe pricing should move lower, which could be advantageous to future returns.

It is also important that at this point in the cycle, investors don't lose sight of structural changes. Demographics, technology and sustainability will likely be key determinants of real estate demand for many years to come. With that in mind, we continue to support core portfolios, taking structurally overweight positions in residential and logistics.

Within the residential sector we favour commuter locations in and around major cities such as London, Paris, Berlin and Madrid, as well as central parts of fast-growing regional cities including Bristol, Leipzig and Valencia. Across both types of location, above average population, employment, and wage growth coupled with more affordable rents should see resilience in the face of economic downturn as well as stronger trend rent growth. In the case of regional cities, given the likelihood of reduced short-term liquidity, we also see the possibility that pricing may adjust more than the major cities, but given long-term fundamentals we believe this to be more an opportunity than a threat.

The appeal of affordable housing is somewhat replicated in the social housing segment. Our experience in Spain has shown that through partnerships with local authorities in cities like Madrid, private equity real estate can play an important part in the provision of low-cost housing, while also meeting investor risk-return requirements. The appeal of social housing is clear. With stable, government-backed and often CPI-linked income, as well as obvious social benefits, this segment could be high up on the list for many core investors. However, at a pan-European level our analysis suggests this may not be the case. Not only are there operational and regulatory challenges, but the segment is also often exceptionally local, fragmented and with many different stakeholders.

In contrast we expect more operational segments such as assisted living, student housing and co-living to become more important parts of the living sector. Supported by a selection of long-term demographic and lifestyle drivers, the income of both assisted living and student housing has also historically been less affected by recession. This argument is less clear for co-living, given the difficulties some schemes experienced during the early stages of Covid. However, even here some reports claim that when all living costs are factored in, co-living is more affordable, and thereby less exposed to economic slowdown than traditional private rental.

These categories of residential should also be less exposed to regulation. Unlike social housing, nursing homes and increasingly some private rental markets, student housing, co-living and even assisted living look less susceptible to the risk of rent control. With a yield premium over the private rented sector, appealing to those investors looking to achieve cash returns above the cost of debt, we see these as key investment targets over the coming years.

Spain, Germany, France and the Netherlands remain our preferred markets for assisted living, while graduate hubs such as London, Amsterdam, Berlin and Barcelona look best placed for the growth of co-living. We see attractive opportunities to invest in mid-market student housing across many of Europe's regional cities hosting good quality universities. Conversely, investment in more luxury student accommodation should be restricted to a select number of top universities in places like Paris, London and Amsterdam, where there is plentiful access to overseas students.

Less resilient than other sectors, and still subject to major travel disruptions, we're more cautious in our approach to the hotel sector. Nonetheless, the impressive bounce back in holiday travel over the past six months has reinforced our view that hotel revenues in major tourist destinations and gateway markets such as Berlin, Paris and Barcelona will recover quickly from Covid before resuming strong revenue growth.

Away from the living sectors, logistics also looks resilient in the face of economic disruption. The sector is not without its difficulties; low-margin distribution businesses today are facing a wave of challenges from rising costs to falling retail sales.

Nonetheless, with vacancy across most logistics markets running at record low levels, the short-term outlook remains one of rising rents.

Within logistics we have a positive view on urban and niche segments such as cold storage and self-storage. With fewer available assets and often small lot sizes, this does create challenges when attempting to gain access to these parts of the market. However, given the high barriers to entry and our expectations for future tenant demand, we believe that delivering this space into the market, even speculatively, remains attractive, particularly if pricing reflects the changing risk environment.

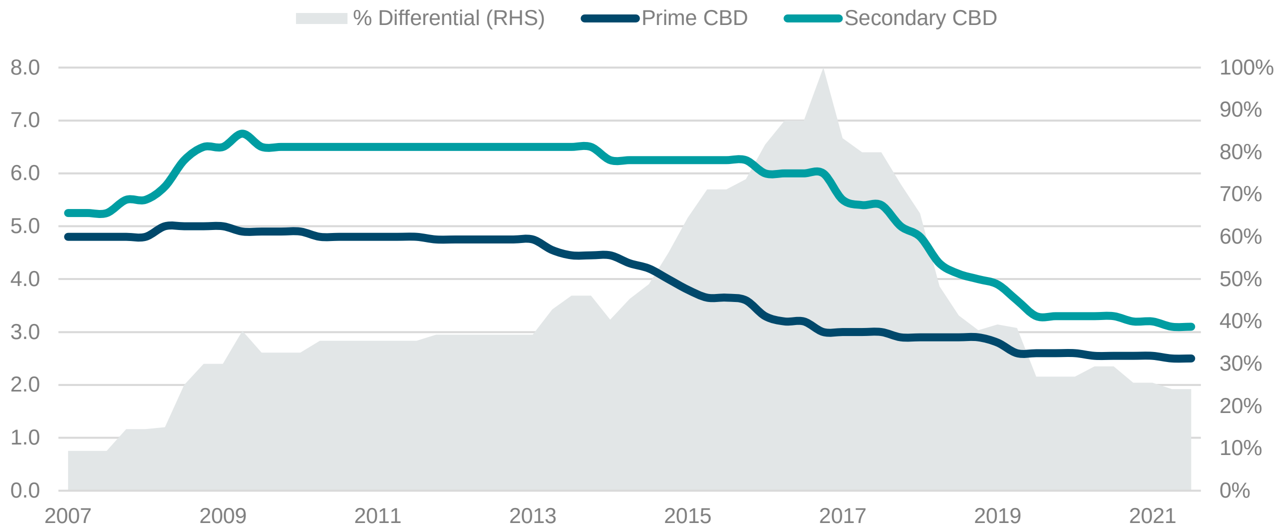
As was the case six months ago, we remain cautious on weaker corridor locations. Having been potentially overbid in recent years, despite the risk of future supply, investor sentiment towards this part of the market looks to be waning. Recent deal evidence would suggest that prices in this part of the market are already adjusting lower. In time this could create opportunities for investors to return to the market, although a focus on future supply will be important.

The office sector looks to be less resilient. Across many cities the availability of grade A space remains well below history, but with the sector tending to be pro-cyclical and with question marks over future demand, office looks vulnerable to voids and rental decline if we do see job losses.

As such, right now we're cautious on acquiring prime office stock but do see that this could open opportunities to invest in well located, grade B stock, with a plan to refurbish into next generation space. Not only do we expect a sharp reduction in the volume of new space being delivered, but we also believe there is a good chance that secondary assets will see a much larger repricing than prime.

There isn't yet much evidence of grade B repricing beyond what we're seeing for prime, as this may well require a deterioration in the occupier market. However, investors looking for a higher return should be prepared for the market to turn. Having witnessed a marked reduction in the spread between prime and secondary yields over the past five years, we believe this margin should increase in response to these elevated market risks.

GERMAN OFFICE YIELD BY ASSET QUALITY (% / % POINTS)



Source: CBRE, DWS, July 2022.

Entering at a rebased price, the potential return from refurbishment increases, particularly as we see no let-up in corporate occupiers in cities such as London, Berlin and Stockholm demanding space that meets employee wellness and net zero goals.

One concern that investors may have about this strategy is construction costs. This is a risk, but there are signs that costs could be close to their peak, as supply chain constraints ease and the economy slows. But if costs do rise further, particularly to the point where replacements costs exceed values, in time real estate rents are also likely to increase at a faster pace.

Price dislocation is unlikely to be limited to offices. Depending on how the economic slowdown plays out, many assets could see pricing fall more than our outlook for the prime segment. In most cases this will be driven by asset-specific factors such as building age, micro-location, tenant quality and voids, but this could also reflect wider market factors, with some cities and sub-sectors falling out of favour and struggling for liquidity.

At the city level, experience suggests liquidity is likely to continue to retreat towards core locations. Irrespective of strong fundamentals, in markets like Warsaw, which is facing reputational challenges due to its proximity to Ukraine, or in regional residential markets, this period of lower liquidity could create excessive reductions in price. And while we don't yet have a strong conviction towards the retail sector, having already faced heavy discounting, some parts of this market may well start to look attractive, particularly in locations where there are opportunities for alternative use.

In this environment sales will be difficult, and vendors will often be required to accept prices lower than where they had been six months ago. Given the run up in values over the past five-to-ten years, this does not necessarily mean an exit at a loss; however, unless a sale is required or an asset is judged to be in long-term decline, some investors are likely to hold off bringing assets to market.

Country Summaries

Germany	• The economy is in a highly volatile market environment, with inflation and rising interest rates vs. risk of recession, which could be exacerbated by a Russian gas cut. • Office letting is resilient, with rents driven up by pent-up demand. Price corrections of about 30 bps in the prime segment are observed due to higher financing costs.	• Prime, well-located residential and logistics assets with low vacancy rates seem comparatively more resilient in the face of recession. • Portfolio adjustments are ongoing, with more non-ESG stock coming onto the market. Stronger price corrections are expected in secondary locations over the course of 2022.
France	• The French economy is so far proving to be relatively resilient, with inflation lower than the Eurozone average and an energy sector less reliant on Russia. • Pricing of weaker corridor logistics assets looks to be under pressure; however, over the longer-term the Paris market is forecast to be one of Europe's strongest performers.	• Strong growth in the 70–84-year-old age cohort and an affluent elderly population supports investment in the French assisted living sector. • If we do see a significant repricing, the Paris office market should offer good opportunities to deliver refurbished space into a supply-constrained gateway market.
U.K. & Ireland	• Sentiment has turned negative towards the traditional core sectors, but alternatives remain in favour. Residential is expected to remain resilient despite economic uncertainty. • On the whole, Central London office fundamentals remain solid. Combined with a relatively tight supply pipeline, this should assist a medium-term recovery in pricing.	• While there are certainly short-term headwinds, extensive repricing and rental rebasing in U.K. retail over recent years should encourage a steady recovery for the sector. • A repricing in London urban logistics is to be expected, as prime yields below 3% had made the sector look overpriced. The best opportunities remain in a value-add approach.
Southern Europe	• Southern Europe is benefiting from a resurgence in tourism, with visitor numbers in Spain looking particularly strong. Domestic demand, however, has been more muted. • Political uncertainty has returned to Italy, and while we don't yet see a major impact on the real estate market, the rising bond spread could lead to some investor caution.	• Logistics rents are projected to grow in line with the European average over the next decade, although fewer constraints on supply around Madrid does represent a risk. • We remain positive on Spanish residential, although regulation is posing a risk in some locations. Regional cities like Valencia offer attractive, affordable investment options.
Benelux	• Despite a pick-up in development, the office market in Amsterdam remains relatively robust, recording notable big-name lettings to the likes of Uber and Booking.com. • The Dutch residential market (Randstad) looks well positioned, although the tax and regulatory environment is becoming more challenging for the sector.	• Given its high population density and position in Europe's trading network, Benelux logistics looks well set for rental growth. Rotterdam is vulnerable to further trade disruption. • A rapidly ageing population and growing presence of international students bodes well for future demand within operational residential, such as senior and student housing.
Nordics	• Rising inflation has prompted a hike in interest rates. While economic expectations are subsequently lower, the Nordic capital cities will outperform, driven by strong urbanisation. • Residential in the Nordic capitals is still supported by strong fundamentals. Copenhagen is anticipated to outperform, but strict regulation will discourage investors from Stockholm.	• Stockholm offices remain favourable, supported by fast-growing sectors and positive fundamentals. Repricing of secondary assets could offer opportunity for redevelopment. • The logistics sector faces growing headwinds, particularly increased costs to both consumers and occupiers, which puts increased weight behind urban logistics locations.
Central Europe	• Despite headwinds, the Polish economy has shown remarkable resilience. Warsaw in particular is expected to be an economic outperformer in a European context. • Office supply continues to fall, while strong tenant demand is pushing up prime rents. Polish logistics rents are rising, with nearshoring a potentially major trend in the CEE region.	• Residential rents benefit from a strong demand push into the rental sector, due to migration from Ukraine, high financing costs for owner occupiers and very limited regulation. • Irrespective of a positive outlook in letting markets, investor sentiment is cooling, opening opportunities in a market of limited investment depth.

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