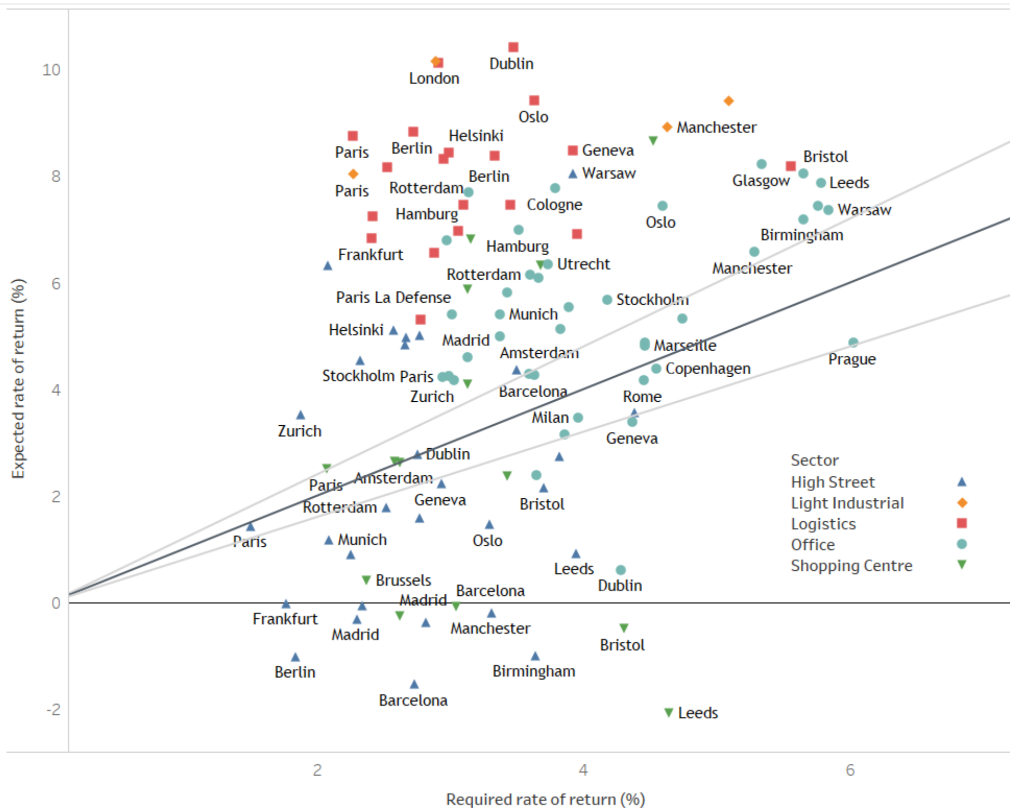
AEW

EXECUTIVE SUMMARY: ADAPTING TO LONG TERM IMPACTS

- Covid-19 negatively impacted 2020 European growth to various degrees. Regardless of its precise speed, the 2021-22 recovery is expected to be solid. But, this strength is also raising concerns on inflation.
- Despite a recent uptick in inflation, the swap market still prices central banks to keep rates low and government bond yields lower for longer as the output gap remains high.
- Compared to our 2021 outlook, we have downgraded our rental growth for offices and retail as working-from-home and e-commerce penetration are trends projected to outlast the immediate Covid-19 crisis.
- Despite this negative impact on income growth, our overall return outlook remains positive. This is driven by our expectation that prime property yields should stay low and capital values stable for the next five years.
- Our updated 2021-25 risk-adjusted return approach shows that 80 of our 106 covered markets are attractive or neutral under our base case scenario, as illustrated in the scatter chart below. This is a slight improvement from our previous analyses from Sep-20 when we had 77 of 103 markets classified as such .
- Our 2021-25 upside scenario show that 75 of 106 covered markets are attractive or neutral. This is slightly worse than the base case and downside scenarios. This is triggered by the economic upside scenario's increased bond and property yields which are not sufficiently offset by rental growth.
- As the immediate Covid-19 concerns fade, the market will adapt further to the long term changes in demand and supply as it will also deal with further climate change adaptation and mitigation.

BASE CASE 2021-25 – EXPECTED VS REQUIRED PRIME MARKET RETURNS



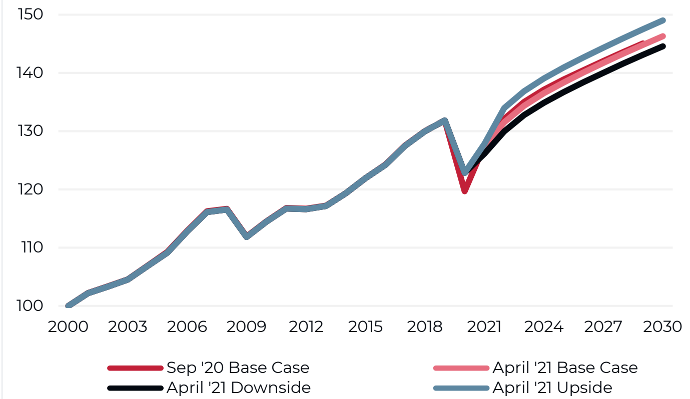
Sources: CBRE, RCA, INREV, Oxford Economics, OECD, AEW Research & Strategy

SECTION 1: ECONOMIC BACKDROP

STRONG RECOVERY, BUT DOWNSIDE RISK REMAINS

- Given the non-traditional, medical nature of the current crisis, we base our market forecasts on three different GDP scenarios to reflect the higher degree of uncertainty surrounding the precise strength of the recovery – providing our Sep-20 base case for comparison.
- In our base case, due to extended lockdowns modest 2.7% GDP growth for 2021 is followed by 3.5% in 2022 across our European 20 countries. Over the full 2021-2025 period, GDP growth is expected to normalize at 2.4% pa.
- The downside scenario assumes additional lockdowns and extended measures resulting in a weaker recovery of 2.0% and 2.8% in 2021 and 2022 respectively.
- Finally, the upside scenario accounts for a stronger recovery due to a successful vaccine rollout and lifting of restrictions showing 3.5% GDP growth in 2021 and 4.5% in 2022 over our 20 European countries universe.

European GDP index (% per annum)

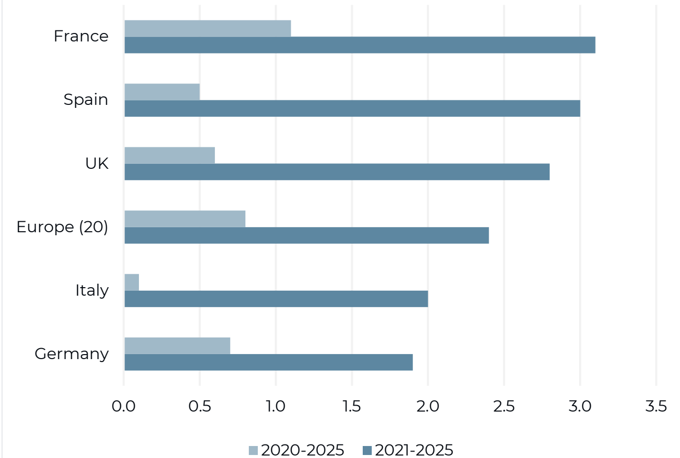


Sources: Oxford Economics, OECD and AEW Research & Strategy 2020 (September – simple growth average across 20 countries)

SOLID REBOUNDS FOR FRANCE, SPAIN & UK

- Countries hit hardest in 2020 by the Covid-19 lockdowns, like France, Spain and the UK are expected to record the strongest growth rebounds in the wake of the Covid-19 pandemic under our base case scenario.
- The United Kingdom does well as it was able to roll out an early and efficient vaccination program and has started already lifting many restrictions.
- In contrast, Germany recorded a much weaker recession in 2020 and as a consequence is also expected to record a weaker recovery than its European neighbours. Germany's 2020 GDP contracted only by about half of the -8% to -11% contractions for the other big European economies.
- National recoveries are likely to be correlated to country-specific factors such as exposure to tourism, tech and healthcare.

Real GDP growth – Base case (2020-25 vs 2021-25)

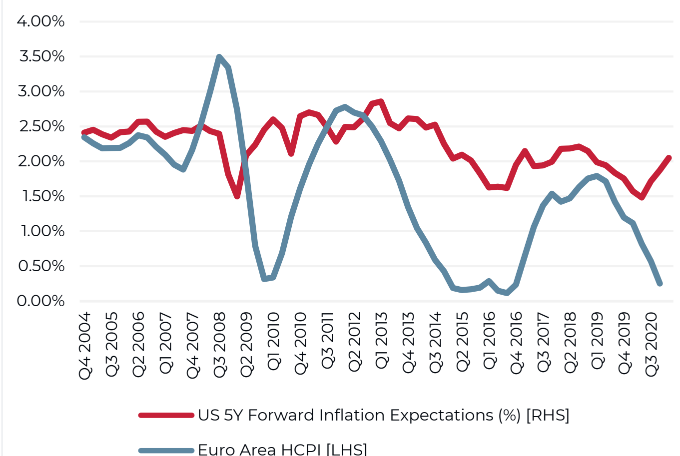


Sources: Oxford Economics, OECD and AEW Research & Strategy 2020 (September)

AS ECONOMIC GROWTH PICKS UP, INFLATION CONCERNS RE-SURFACE

- Eurozone inflation remains very low, but US inflation expectations have ticked up on the back of significant fiscal spending programs announced by the new US president as well as the lifting of restrictions and a strong rebound of economic activity in the US and China.
- Our graph illustrates the historical relationship between actual Eurozone inflation and US forward expected inflation, given that no Eurozone specific inflation expectation data is available to us.
- There are a number of reasons to assume that the historical positive correlation between US inflation expectations and Eurozone inflation might not hold in the coming 12-18 months.
- First, the slower vaccination rates in Europe compared to the US are expected to lead to a delay in the economic recovery and actual inflation across the Euro area.
- Secondly, the fiscal policy response in Europe has been much less meaningful and has not yet been validated by all relevant parties across the EU.

Eurozone actual inflation vs us inflation expectation – 2004-2020

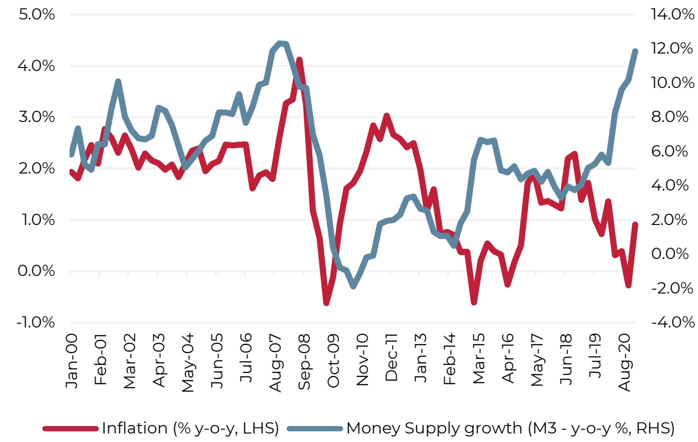


Sources: FRED St Louis, AEW Research & Strategy

MONEY SUPPLY AND INFLATION REMAIN DECOUPLED

- As highlighted before, money supply increased due to continued quantitative easing by central banks in 2020.
- Theoretically, an increase in money supply in combination with a limited ability to expand production in the short term should lead to inflation.
- Slow circulation of money supply in the economy has led to a de-coupling of the money supply and inflation.
- Underlying reasons might be related to commercial banks increasing their reserves in anticipation of future loan losses as well as households increasing savings as returns on pension assets are lower than anticipated..
- If we assume this de-coupling continues, central banks are given extra flexibility for further growth in money supply without increasing inflation.
- Finally the ECB and BoE could implement a similar new approach like the Federal Reserve increasing its policy rates only after inflation consistently remains above its target for some time.
- This means that a short term increase in inflation is unlikely to immediately trigger an increase in interest rates.

Eurozone m3 growth and inflation (Y-O-Y %)

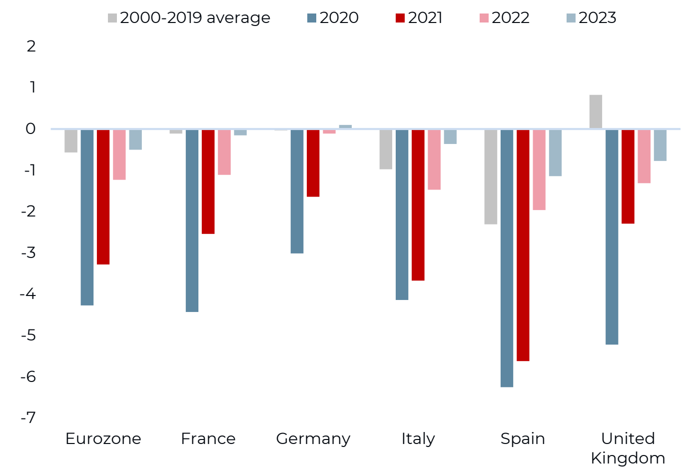


Sources: Fred St Louis, Oxford Economics and AEW Research & Strategy

SIGNIFICANT OUTPUT GAP TO CUSHION EUROZONE INFLATION

- Due to the Covid-19 crisis, we have seen a big increase in the negative output gap across most European countries to levels well ahead of their 20-year historical averages.
- This negative output gap can be interpreted as the unutilised spare capacity in the economy and provides a cushion against inflation.
- As workers are furloughed, put on less hours or non-active or even laid off there is spare capacity that can be mobilised when an economic recovery emerges without increasing wages or costs.
- This means that the anticipated increase in real economic growth post Covid-19 or money growth from continued monetary easing can be absorbed first by the available spare capacity before it will result in increased inflation.

Output gap (% of gdp)

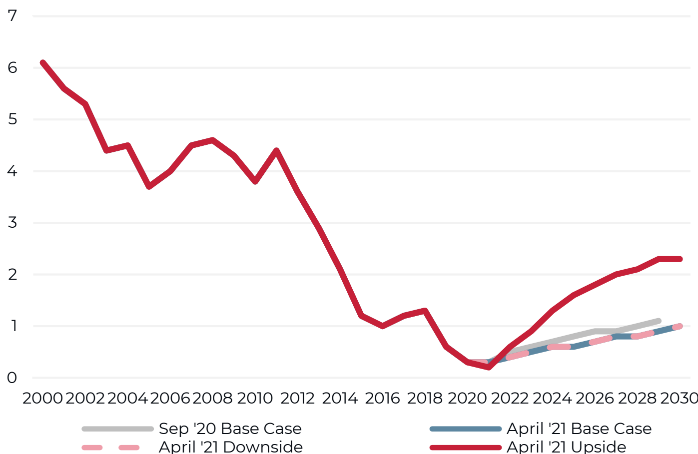


Sources: Oxford Economics and AEW Research & Strategy

SWAP-IMPLIED BOND YIELDS SIGNAL LOWER FOR LONGER

- Regardless of our own view on inflation or monetary policies, we have found it useful to look at the swap-implied bond yields in the past.
- Sophisticated investors price these swaps incorporating all available data on possible macro economic and policy scenarios. The implied government bond yields from this market can be used as an indication of future yields.
- Given that macro economic forecasts have consistently mistimed their normalisation of bond yields over the last 10-12 years, we prefer actual prices.
- Compared to our Sep-20 base case, we note the swap market has priced in slight reduction in its speed of future bond yield widening.
- In our property market modelling, this assumption of lower for longer government bond yields plays a central role in stable income yields and capital values regardless of changes in the income return.

10yr government bond yields (%, european average across 20 countries)



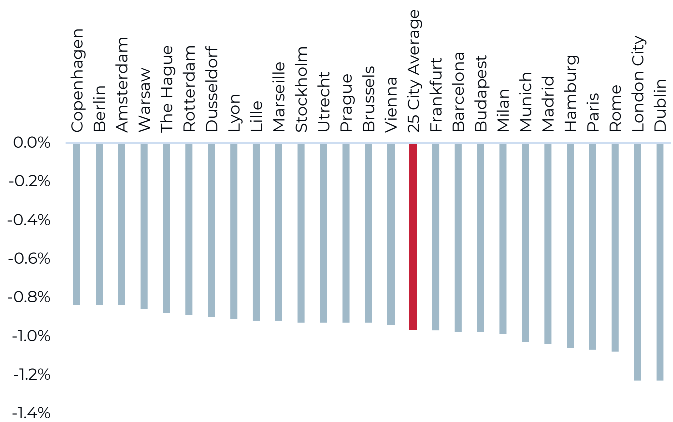
Sources: Oxford Economics, OECD, Bloomberg, AEW Research & Strategy

SECTION 2: OCCUPIER & INVESTMENT MARKET

WFH SHAVES OFF 1% PA FROM EUROPEAN OFFICE DEMAND TILL 2024

- Post Covid-19 work practices are projected to trigger a near 10% increase in the working from home (WFH) share of office workers from 2018 to 2024.
- But we assume that workers who sometimes or usually work from home will still be attending the office half the time. This means that the need for space compared to current levels will only reduce by 5% over the period.
- As a result, this means that over the six year period there will be reduction in office space requirement from WFH of 1% pa to offset the normal growth in office employment across our 25 European office markets.
- Based on their high levels of traffic congestion on a city level basis, Dublin and London are among the office markets impacted most from WFH as high traffic congestion incentivises both employers and employees to allow for more WFH in the future.
- The most WFH resilient office markets are expected to be Copenhagen, Berlin, Amsterdam and Warsaw due to low local traffic congestion

WFH-implied reduction in office-based employees from 2018 to 2024 by City (as % pa)

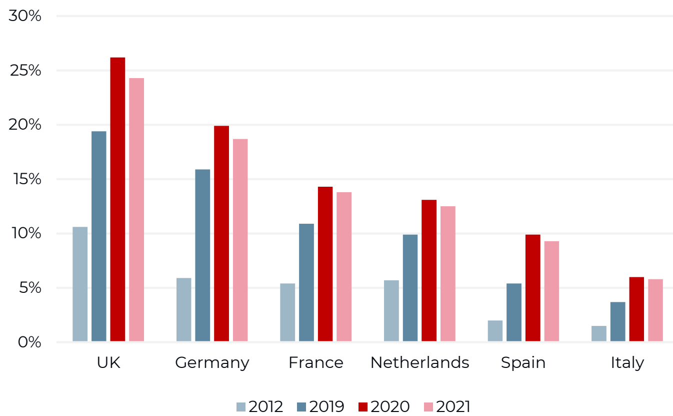


Sources: Eurofound, Eurostat & IRIX, AEW Research & Strategy

E-COMMERCE PENETRATION EXPECTED TO SLOW POST-COVID

- E-commerce has steadily increased its share of retail sales since the GFC. After doubling between 2012-2019 in most European countries, online sales penetration rates surged in 2020 amid Covid-19 lockdowns.
- As the vaccines allow for consumers to return to in-store shopping, e-commerce penetration rates are projected to come down in 2021. From 2022 onwards, ecommerce penetrations rates should resume their increase, albeit at a slower pace.
- Since most European governments will be more heavily indebted post-Covid, they are increasingly likely to finally become serious about properly taxing e-commerce platforms and levelling the playing field for in-store retail.
- Returned goods have hurt pure e-commerce platforms' profitability while omni-channel retailers will be better positioned to deal with these.
- Consequently, traditional retailers should see a boost to in-store sales in 2021-22 allowing them time to optimise their store networks and implement their omni-channel strategies.

Online sales as % of total retail sales - Post-Covid Forecasts

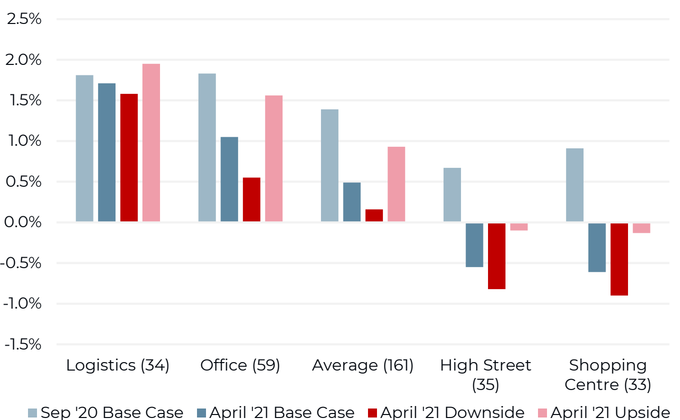


Sources: eMarketer, AEW Research & Strategy

RETAIL AND OFFICES ADAPT TO LONG TERM COVID-19 IMPACTS

- Based on the macro economic scenarios and the latest market data, our revised rental growth forecasts highlight logistics as the most resilient sector.
- With the boom of e-commerce sales since the initial lockdowns expected to last, our April-21 forecasts remain in line with last year and reach above 1.5% for the three scenarios.
- Despite the immediate Covid-19 impact, rental growth remained positive in 2020 for offices. Due to the delayed economic recovery and our long term WFH outlook, office rental growth is projected to be negative in 2021 with a weaker 2022 rebound. This explains the lower rental growth expectations over the 5-year period compared to our Sep-20 base case results.
- With the retail sector hit worse than expected in 2020 and the slow lifting of social distancing measures, our 5-year rental growth forecasts now take into account negative rental growth in 2021/2022 for both high street retail and shopping centres.
- However, widespread lease re-negotiations should lead to more sustainable rent agreements and facilitate the sector's structural adaptation.

Annualised prime rental growth forecast (5 yr., % 2021-2025)

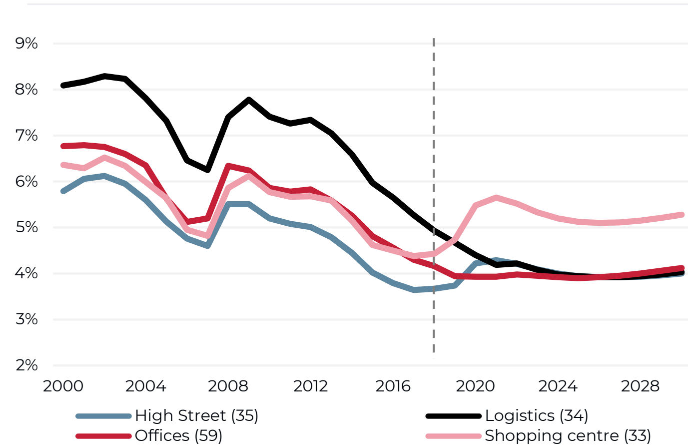


Sources: CBRE, OECD, Oxford Economics, Bloomberg, AEW Research & Strategy

LOWER FOR LONGER TO PREVENT PROPERTY YIELDS WIDENING

- Yields moved apart for different property types in 2020 as the occupier and investment segments were impacted to various degrees by the pandemic.
- Due to strong investors' appetite and occupiers' demand, logistics prime yields tightened further by 30 bps on average in 2020 despite the recession.
- Offices prime yields remained stable in 2020 at 3.9% on average.
- For the coming years, we expect yields to stabilize for these two resilient sectors, after logistics yields converge towards prime offices.
- On the other hand, the Covid-19 pandemic amplified the already on-going yield widening for retail, by 50 and 75 bps on average for high street retail and shopping centres respectively. As significant repricing was already to be seen before Covid-19, we expect retail yields to go down after a peak in 2021.
- All property types should benefit from the lower for longer government bond yields environment that limited the impact of Covid-19 in 2020, unlike in 2008, and should keep property yields at low levels for the coming years.

Average prime yields (%) – April-21 Base Case

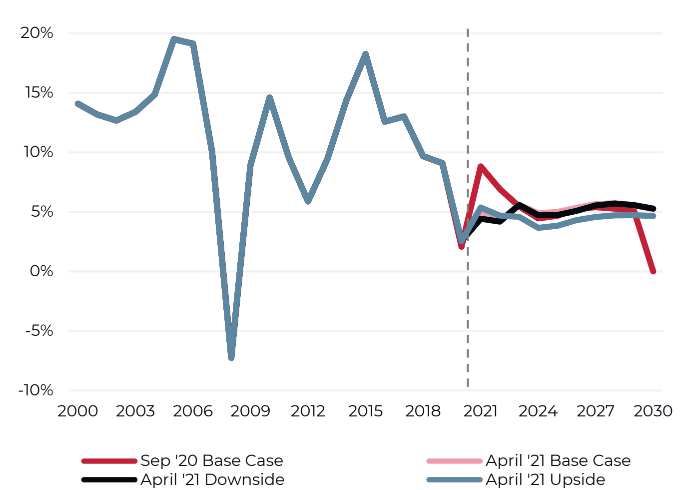


Sources: CBRE, OECD, Oxford economics, Bloomberg, AEW Research & Strategy

STRONG BOUNCE MELTS AWAY WITH LOWER RENTS & STABLE YIELDS

- Similar to previous periods, our capital returns are taking into account the new market rents as they filter into the income over time as leases roll over.
- As previously projected, 2020 prime capital returns were much less affected than during the GFC and remained positive across prime sectors.
- However, due to the slow start of the year and the delays in the vaccine rollouts in Europe, our 2021 forecasts have been revised downwards from 9% in Sep-20 to 5% across all sectors in our current base case.
- In the downside scenario, our projections show a less strong rebound in 2021 at 4.4% before following the base case trend.
- As expected, our upside economic scenario shows higher capital returns in 2021. However, it still produces an unexpected result over the full 5-year period due to the impact of long term bond yield normalization (widening). This means our upside economic scenario generates lower capital returns over the full 5 year projection period.

Average prime capital returns (%)

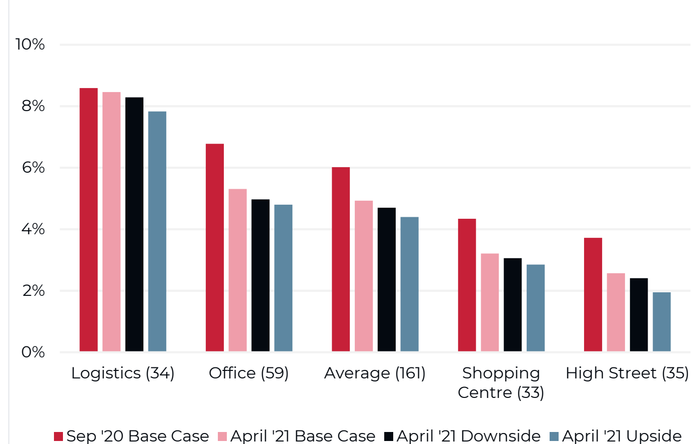


Sources: CBRE, OECD, Bloomberg, AEW Research & Strategy

UPSIDE ECONOMIC SCENARIO UNFAVOURABLE FOR RETURNS

- As before, 8-9% pa prime logistics returns for the 2021-25 period prove resilient to the impact of Covid-19 for all three scenarios consistent with its rental growth and tightening yield projections.
- Office returns were revised downward as the long term impact from WFH hits rental growth. Even with relative stability in yields, this has hit expected returns to decline to 4-5% from 7% pa in our Sep-20 base case.
- Retail returns range between 2-3% pa, with prime shopping centres doing slightly better than high street retail in all scenarios.
- Again, this revision is consistent with our more negative rental growth forecasts as e-commerce penetration stepped up significantly during the Covid-19 crisis and is not expected to reverse over the long term.
- We note that our upside economic scenario produces unfavorable returns compared to the other two scenarios, due the associated widening of yields.

Prime Total return forecast (5 yr., % 2021-2025)



Sources: CBRE, OECD, Bloomberg, AEW Research & Strategy

SECTION 3: RELATIVE VALUE VIEWS

RISK-ADJUSTED RETURN METHODOLOGY

- Our risk-adjusted return approach is based on a comparison between the required rate of return (RRR) and the expected rate of return (ERR) over the next five years for each market.
- The graph shows that the RRR, based on our 106 European markets' average stands at 350 bps while the ERR is 484 bps. This indicates that, on average, the ERR has a positive excess spread of 134 bps over the RRR.
- Furthermore, we notice that the liquidity premium is the largest component of the RRR while the risk-free rate (capped at zero for negative rates) and volatility premia have the lowest share.
- By comparing the expected rate of return (ERR) with the required rate of return (RRR), we classify markets as attractive, neutral or less attractive.
- Therefore, if the ERR is higher than the RRR and not in the neutral zone, we classify it as an attractive market and vice versa.

Required rate of return (RRR) vs expected rate of return (ERR)

Sources: CBRE, RCA, INREV, Oxford Economics, OECD, AEW Research & Strategy

WFH IMPACTS OFFICE RELATIVE VALUE

- If we consider the sector-level results across Europe in our base case, we firstly notice that all logistic markets remain attractive in both our previous 2021 Annual outlook (old) and our current mid-year 2021 update (new).
- Secondly, the office sector is impacted as more markets are classified as neutral (from seven during the annual outlook to eleven in our mid-year update). This is due to the impact of WFH on rental growth expectation on several markets. Regardless, the majority of office markets remain attractive despite this negative WFH impact.
- Finally, the picture in the retail sector is mixed with the majority of markets being less attractive as the e-commerce trends hampers income growth. However, the number of attractive markets has increased driven by re-pricing in previous quarters offering renewed opportunities in some retail markets.

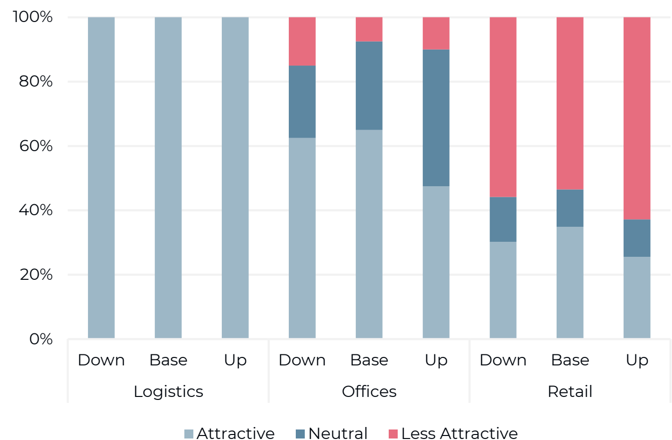
% Sector markets by attractiveness (Old vs New Base Case)

Sources: CBRE, RCA, INREV, Oxford Economics, OECD, AEW Research & Strategy

UPSIDE SCENARIO UNFAVORABLE AMID YIELD NORMALISATION

- If we then consider the difference between our base case scenario with our downside and upside scenario, we notice that the impacts are unevenly distributed across the sectors.
- First of all, and in line with our previous results, logistics seems to be unaffected by scenarios as ERR's are robust in all three scenarios.
- However, for the office sector the impact is more clear as the upside scenario is less favorable. This might be counter-intuitive, but our upside economic scenario assumes higher bond and property yields which are not sufficiently offset by higher economic growth and inflation.
- For the retail sector, we notice a similar trend in that our base case has the most attractive markets followed by the downside and upside scenario. Again, this makes sense as yield movements, especially in the current low interest rate environment, have more substantial impacts on capital values and total returns.

% Sector markets by attractiveness (Down, Base and Up Case)

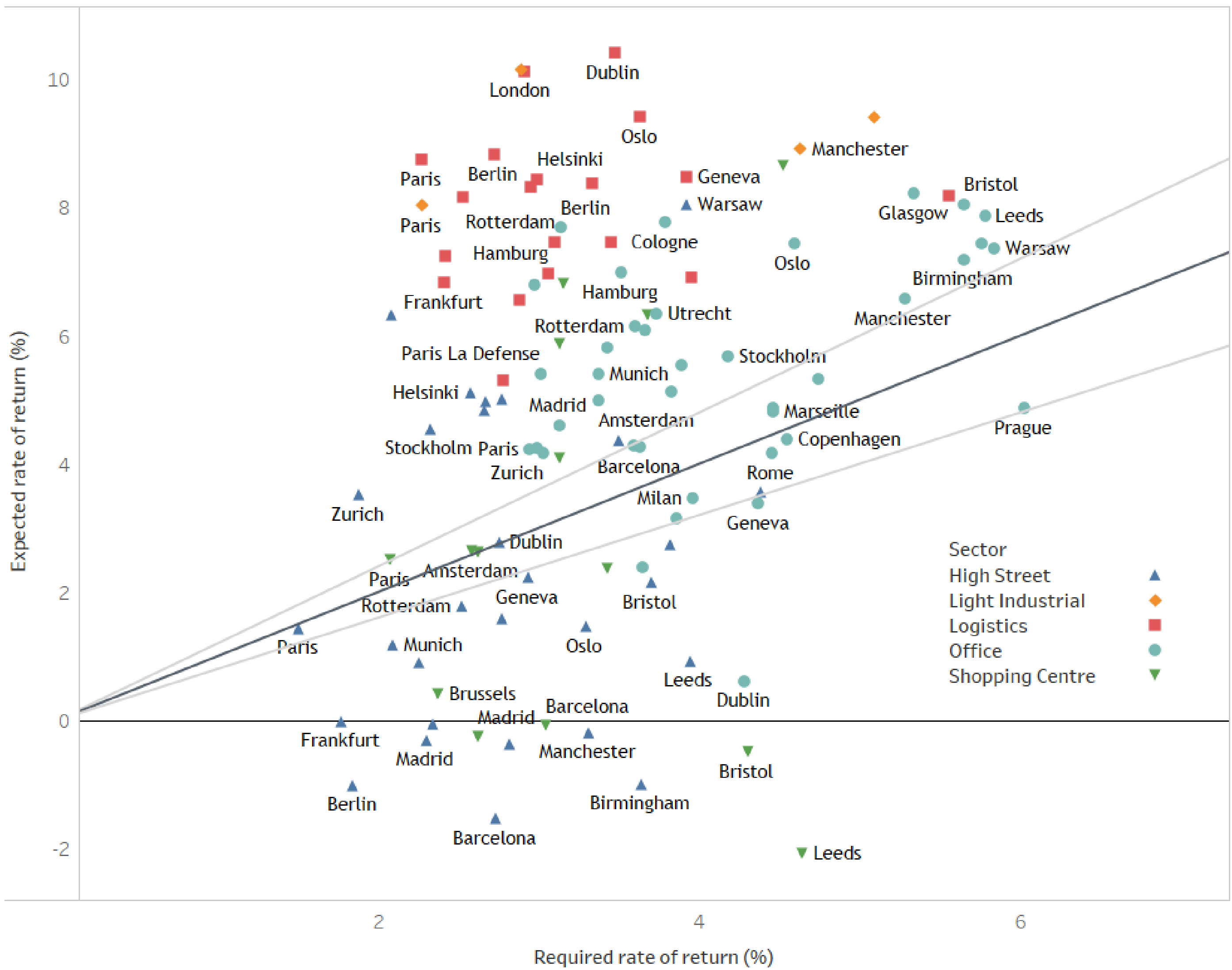


Sources: CBRE, RCA, INREV, Oxford Economics, OECD, AEW Research & Strategy

CLEAR BIFURCATION EXPECTED ACROSS PROPERTY TYPES IN AFTERMATH OF THE COVID-PANDEMIC

- When considering our base case results for our expanded universe of 106 markets (in our 2021 Annual outlook the universe was 103 markets), we highlight a small improvement compared to our 2021 Annual Outlook risk adjusted returns.
- The scatter graph works as follow: on the horizontal axis, we have the required rate of return (RRR) and on the vertical axis we have the expected rate of return (ERR) for the next five years. The grey lines indicate a range of 20% of the difference between the two, which we think is a good range where markets are not clearly over- or underpriced. In other words, markets within this middle range are labelled as neutral.
- The results indicate, as before, the strength of the logistics sector amplified by the strong growth in e-commerce and its further integration in our econometric modelling. Large urban agglomerations such as London, Paris and Berlin are expected to be among the top performers in terms of risk-adjusted returns while Dublin remains a potential benefiter of Brexit.
- Next, we see a mixed picture in the office market as WFH affects markets differently whereby regional markets seem to be more resilient than the gateway cities, a result inline with our WFH March special report.
- Finally, not unsurprisingly, we notice that the majority of high street retail and shopping centre markets are being labelled as less attractive markets driven by e-commerce. However, there are pockets of strength within the retail sector that are benefitting like Milan.

Base case 2021-25 – Expected vs Required Rate of Returns

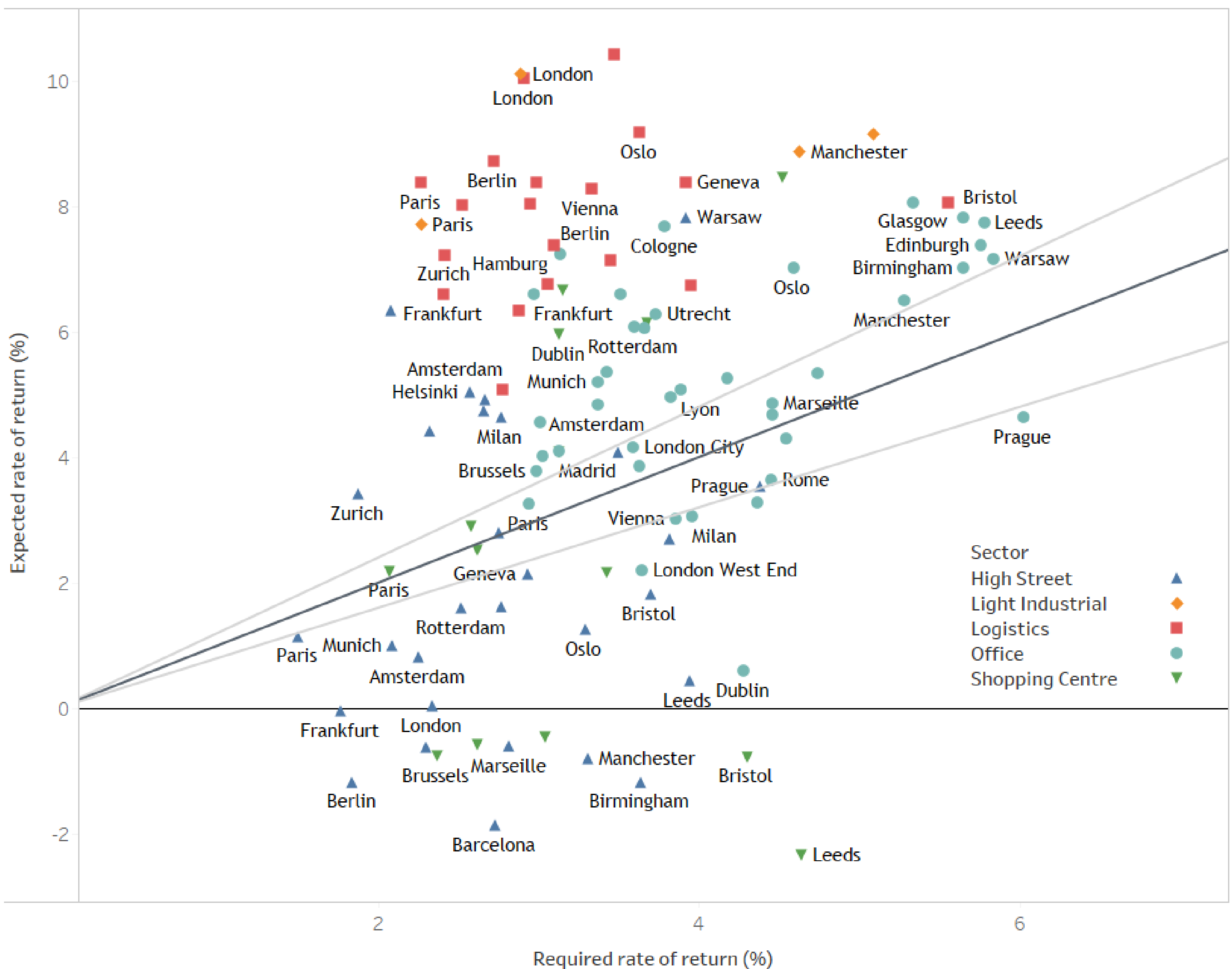


Sources: CBRE, RCA, INREV, Oxford Economics, OECD, AEW Research & Strategy

DOWNSIDE SCENARIO CONFIRMS BIFURCATION ACROSS PROPERTY TYPES

- When considering our downside scenario results, we highlight that our expected rate of returns show only a small downward adjustment compared to our base case scenario.
- As before, the scatter graph works as follow: on the horizontal axis, we have the required rate of return (RRR) and on the vertical axis we have the expected rate of return (ERR) for the next five years. The grey lines indicate a range of 20% of the difference between the two, which we think is a good range where markets are not clearly over- or underpriced. Markets within this middle range are labelled as neutral.
- First of all, the downside scenario confirms the bifurcation across property types as logistics keeps outperforming the other sectors. This makes sense, as the logistics sectors remains less prudent to changes in economic activity compared to the office and retail sector.
- Secondly, the Paris office market and Rome retail markets are among markets that have became neutral in the downside scenario from attractive in the base case scenario. This of course, is driven by the lower rental growth that is achieved as the economic recovery is expected to be lower in the downside scenario.

Downside 2021-25 – Expected vs Required Rate of Returns

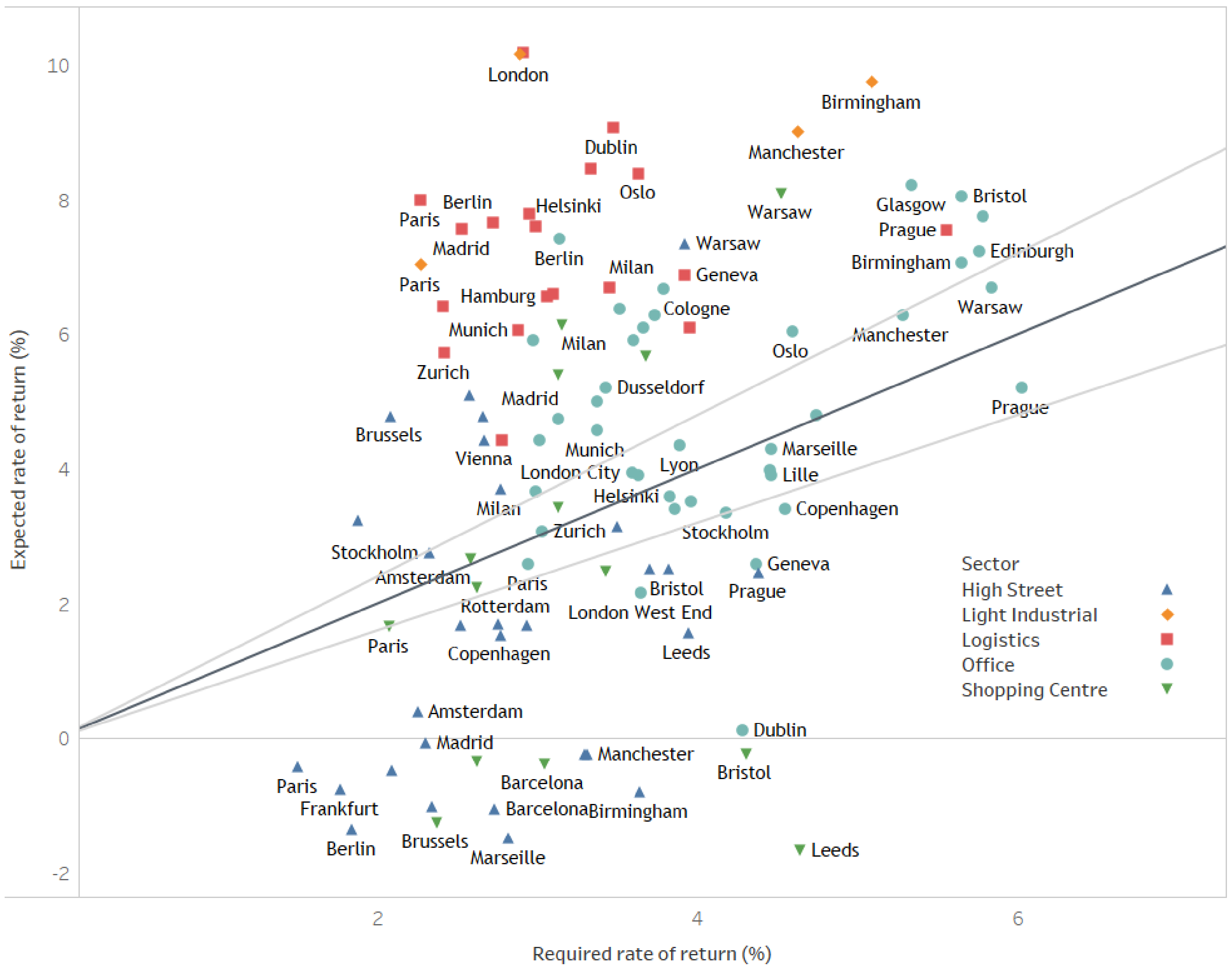


Sources: CBRE, RCA, INREV, Oxford Economics, OECD & AEW

UPSIDE SCENARIO HIGHLIGHTS IMPACT OF BOND YIELD NORMALISATION WITH LOWER EXPECTED RETURNS

- When considering our upside scenario results, we highlight that our expected returns show a downward adjustment compared to our base case scenario, especially for markets that will be more sensitive . However, this downward adjustment results in some downgrades towards less attractive markets.
- Again, the scatter graph works as follow: on the horizontal axis, we have the required rate of return (RRR) and on the vertical axis we have the expected rate of return (ERR) for the next five years. The grey lines indicate a range of 20% of the difference between the two, which we think is a good range where markets are not clearly over- or underpriced. In other words, markets within this middle range are labelled as neutral.
- First of all, the upside scenario highlights this impact of bond yield normalization as capital values will be negatively impacted and not fully offset by rental growth expectations. This means, that more markets will be less attractive compared to the base or downside scenario.
- Secondly, the Copenhagen/Stockholm and Zurich office markets are among markets that have been downgraded amid bond yield normalization. This is partially driven by the fact that these markets are low yielding markets with less favorable economic growth expectations.

Upside 2021-25 – Expected vs Required Rate of Returns



Sources: CBRE, RCA, INREV, Oxford Economics, OECD & AEW

ABOUT AEW

AEW is one of the world's largest real estate asset managers, with €69.8bn of assets under management as at 31 December 2020. AEW has over 700 employees, with its main offices located in Boston, London, Paris and Hong Kong and offers a wide range of real estate investment products including comingled funds, separate accounts and securities mandates across the full spectrum of investment strategies. AEW represents the real estate asset management platform of Natixis Investment Managers, one of the largest asset managers in the world.

As at 31 December 2020, AEW managed €34.6bn of real estate assets in Europe on behalf of a number of funds and separate accounts. AEW has over 400 employees based in 9 offices across Europe and has a long track record of successfully implementing core, value-add and opportunistic investment strategies on behalf of its clients. In the last five years, AEW has invested and divested a total volume of over €21bn of real estate across European markets.

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