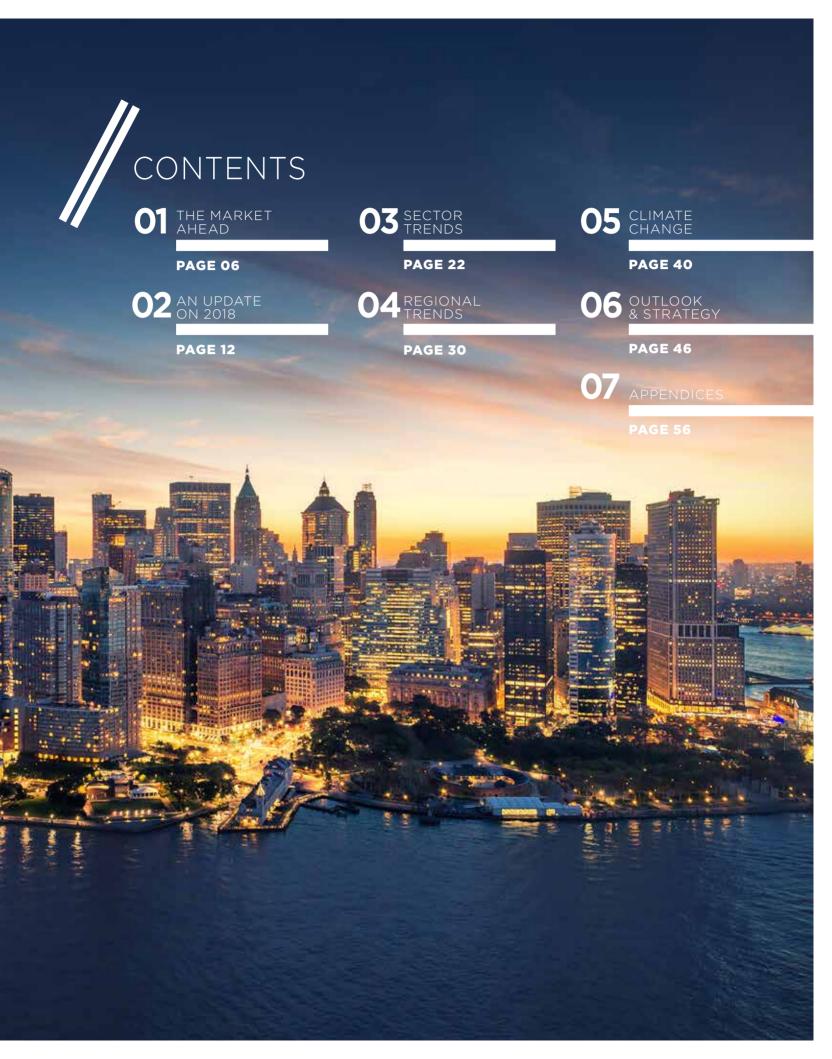


A CUSHMAN & WAKEFIELD INVESTMENT REPORT

CUSHMAN & WAKEFIELD

GLOBAL INVESTMENT ATLAS











OT THE MARKET AHEAD

2018 exceeded expectations, with global investment volumes hitting a new record high, climbing 4% on the year.

HOWEVER, CONDITIONS SOFTENED AS THE YEAR PROGRESSED, WITH Q4 SEEING AN 11% DROP IN VOLUMES COMPARED TO 2017 AND FAILING TO DELIVER ANYTHING LIKE THE BOUNCE USUALLY SEEN.

In reality all global investment markets, not just property, have been tested in recent months as monetary policy has evolved and geopolitical tensions have rumbled on. This has resulted in heightened volatility and real uncertainty in investment strategies over where risk and value lie.

With a stable, contracted income and exposure to growth and inflation, real estate is one product that continues to be attractive in this environment, and investor demand remains strong for the right product. However, defining the right product has become increasingly difficult as occupier strategies are reshaped by e-commerce, social and business change, low growth, and affordability constraints. Indeed, in today's connected and environmentally-conscious world the margins for error are tighter than ever, and the pace of change is only set to accelerate as advances in technology, living and working habits change how people interact with property and therefore what occupiers expect from their buildings.

An increasing focus is rightly being placed on flexibility and mixed-use, while the sharing economy is leading to new patterns of leasing and space configuration, and opening up new sources of income for landlords.

Hence while an abundance of capital will continue to drive the market and sustain pricing in 2019, performance will be reliant on the occupier, on innovation, and on tapping into added services.

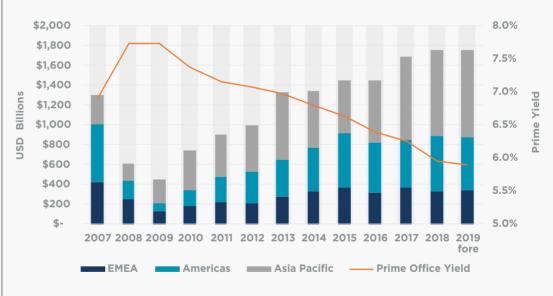


MACRO DRIVERS

The economic environment is weaker than predicted iust a few months ago. but so too is the inflation outlook on a global basis. As a result, while risk is up, the day of reckoning on interest rates for corporates and investors has again been delayed. 2019 is therefore set to see a further extension of the cycle, offering investors another chance to get their portfolio into shape for what is to come.

As a result, we anticipate a modest increase in activity as investors target a wider range of markets to find opportunity, and more sellers come forward as strategies adjust. Pricing will edge ahead; however, this will be driven by stable yields and steady rental growth for the best assets. What is certain is that capital flows will be even more dynamic, more crossborder and more about balancing quality with quantity - this will be true whether about stock, yields, talent or living standards.

FIGURE 1: GLOBAL INVESTMENT VOLUMES AND YIELDS



Source: Cushman & Wakefield, RCA

Acting on climate risk will similarly be important. With the built environment responsible for around 40% of global greenhouse gas emissions, it is critical that the sector gets its act together to help meet the Paris Accord targets, with actions including recycling, efficiency, tech monitoring, resilience and use of renewables. This can contribute to reduced running costs, better employee goodwill, brand enhancements and potentially higher capital values as evidence grows of investor preference for green buildings. This, however, has been known for some time. What is different now is that changes to policy, regulation and indeed the climate itself are likely within the lifespan of investments being made today: meaning investors must take action now and deepen their engagement with suppliers, regulators and users in the process. While an upside risk is always preferable, investors who ignore these forces, both natural and market, do so at their own peril risking a loss of liquidity, higher insurance premiums, and weakened tenant demand if no action is taken.



STRATEGY FOR 2019/20:

Given the split between cyclical drivers of arowth and interest rates on one hand, and structural forces on the other. the best way to define current strategy is as a barbell. with a focus on secure defensive stock at one end and innovative. tech-driven growth sectors at the other. with caution towards the middle as disruption gathers pace.

Investors should also be alert to the potential for cyclical growth markets to bounce as the year progresses if we do indeed see a pause in interest rate increases, more stability in China, progress on trade talks and of course some resolution to the Brexit mess.

Core investors should seek value in major gateway markets. Higher build costs are reducing the potential gains coming from development and also raising affordability issues. This will keep a lid on new supply, and put core rents for existing space under pressure. Global investors also need to include Asian gateway cities on their target list, to ensure they

are exposed to their more attractive medium-tolong term growth trends.

For **core plus and value add** opportunities, there is an attractive yield spread for some secondary markets offering growth and repositioning potential. However, selectivity is key, with a focus on larger gateway submarkets and high-quality challenger cities as well as some decentralised markets.

For opportunistic players,

selective emerging markets from Vietnam to Brazil and Russia may hold potential. However, there is also scope in more mature markets for developing and redeveloping city centre space, with an emphasis on offices and multi-family albeit in a more mixed-use environment. An increasing premium should be put on placemaking in core, value add and opportunistic strategies. Similarly, platform acquisitions and joint ventures should be a target for cross-border capital across all risk profiles, helping to marry equity with expertise.

Investors must be alert to the fact that structural forces will be driving areas of outperformance, even as the cycle slows, and therefore there is a real need to look beyond market averages to see the detail of the local market, the deal, the vendor, the lender and above all, the user.



THE LOGISTICS REVOLUTION IS ONGOING AND THE SECTOR HAS MOVED FROM BEING AN ENABLER FOR BUSINESS TO DRIVING BUSINESS FAILURE OR SUCCESS.

In a real estate context, this shift is global, opening up opportunities in more markets in all regions.

Core urban areas with high barriers to entry are universally attractive, while large-scale facilities serving urban areas should be targeted, albeit with caution on how developments such as driverless lorries could impact future transport patterns.



Liquidity and risk do still differ for some as a function of maturity and scale, and regional patterns are also often varied, with most not vet global in nature.

The most global is hospitality, but managed and student housing are maturing, and data centres have clear potential. Demographically and socio-economically driven sectors from self-storage to health will retain a local flavour, but are nonetheless emerging in many areas.



GLOBALLY THE OFFICE MARKET IS PERHAPS BEST PLACED TO PERFORM WELL IN THE NEXT 1-2 YEARS, AS A FUNCTION OF LOW SUPPLY AND ROBUST DEMAND.

While the sector is among the most cyclical and volatile, it is also the most international and easy to understand across borders.

What is more, it is seeing structural changes to how space is used, and the role of the landlord and operator, which will increase the profit potential of the best located and managed office-led schemes.



IT MAY BE TIME TO RETHINK RETAIL, WITH WINNERS AND LOSERS NOW EMERGING.

The sector faces more pain as e-commerce develops but repricing is now being seen, and opportunities are emerging where there is an attractive risk premium for assets in locations we know will prevail in the future.

Core locations in big cities offer opportunity, particularly in a mixeduse setting and some decentralised centres, retail parks and outlet centres are starting to trade at attractive pricing.









TMENT ATLAS 2010

02/AN UPDATE ON 2018

Transaction volumes surpassed 2017's figures by 3.9% last year, making annual investment, including development land, the strongest on record.

EXCLUDING DEVELOPMENT, TRANSACTION VOLUME INCREASES OF 3.7% Y/Y LED TO THE SECOND HIGHEST YEAR POST-GFC, JUST -2.5% BEHIND THE PREVIOUS PEAK ACHIEVED IN 2015.

A REVERSAL OF FORTUNES?

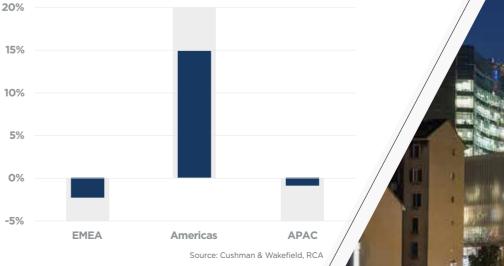
In 2017. North America was the only region to experience an overall volume decline. Last vear. however. despite higher borrowing costs, the boost to the US economy through late-cycle tax stimulus led the region to outperform, both as a target and a source of real estate investment. By comparison, weakened demand was seen across EMEA, Latin America and Asia Pacific (excluding development), with uncertain political situations in some regions and high valuations or a shortage of investable stock in others, putting pressure on transaction volumes.

STRONGER BUT MORE FOCUSSED

Cross-border investment improved on the year, led by stronger continental flows. However, the targets narrowed, with only 63 markets targeted by foreign capital, compared to 76 in 2017. EMEA retained its historical position as the most sought-after destination for international capital, with European cities predominantly dominating the top ten cross-border investment targets. Excluding land for development, APAC investors pulled back on cross-border purchases, whilst strong international interest from North American REOCs boosted outflows from the region.



FIGURE 2A: CHANGE IN INVESTMENT VOLUME BY SOURCE (%PA)



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THE INVESTORS

INTERNATIONAL APPETITE

Although all regions were active buyers last year, North America was the only capital source to increase overall CRE allocations compared to 2017, with volumes increasing 15.5% v/v. APAC capital, by comparison, decreased by -0.8% y/y, largely due to fewer global purchases. However, robust levels of domestic and continental spending led APAC investors to maintain the highest overall share of volumes in 2018. European buyers had a similar appetite to 2017, reflected in an unchanged proportion of total transaction volumes.

NORTH AMERICA LEADS THE PACK

Overall non-domestic capital deployment improved compared to 2017. Including sites for development, APAC investors dominated international flows. However the most active source of outbound investment capital when excluding land came from North America, as robust growth in Canadian outbound capital led the country to achieve the second highest share of international investment, behind the US. As a result, North American investors were responsible for 40% of all non-domestic investment flows last year.

SPENDING REMAINS DYNAMIC

German capital rounded out the top three sources of cross-border investment. with Austrian and Swedish residential units of particular interest to German REOCs. Despite UK investment managers strengthening their continental portfolios. French cross-border investment outflows outpaced the UK for the first time on record. The make-up of cross-border investment from Asia Pacific likewise altered, with both mainland Chinese and Hong Kong investors falling five places in the ranking. Singaporean outbound capital, by comparison, grew 12.3% v/v, to place fourth for cross-border flows. Overall, property companies and institutions pulled back on investment. While developers continued to be the most active, equity funds and high net worth individuals increased their buying compared to the previous year.

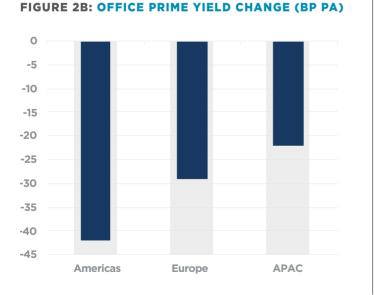
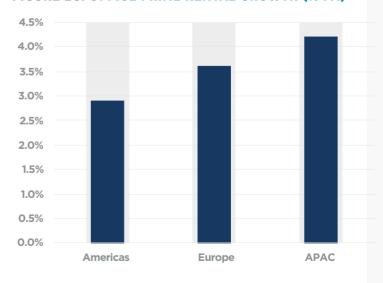
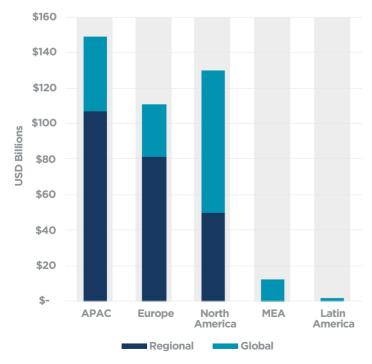


FIGURE 2C: OFFICE PRIME RENTAL GROWTH (% PA)



Source: Cushman & Wakefield





Source: Cushman & Wakefield, RCA

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TARGETS FOR INVESTMENT

APAC TAKES THE CROWN

Including development land, Asia Pacific continued to attract the greatest amount of investment, accounting for 50% of transactions in 2018. European volumes fell by -10.0% y/y, to reflect the region's lowest ever share of investment, whilst the North American real estate market outperformed, documenting growth of 16.9% y/y, and a 31% share of total investment.

Excluding development sites, the picture was more clouded. Transaction volume declines were noted for all regions except North America, where investment reached a post-GFC peak. Latin America and MEA reported the lowest transaction volumes since 2009. While all sources of capital pulled back on investment into EMEA, Latin America saw Chinese investors targeting the region.

CONTINUITY OF CAPITAL

The top three cross-border investment targets remained unchanged compared to 2017, with cross-border investment growing by 76.0% y/y. The US remained the most sought after destination for international capital. Despite investment declines from crossborder sources, the UK and Germany retained the second and third spots, representing 11% and 10% of overall international capital flows, respectively.

NARROWING FOCUS

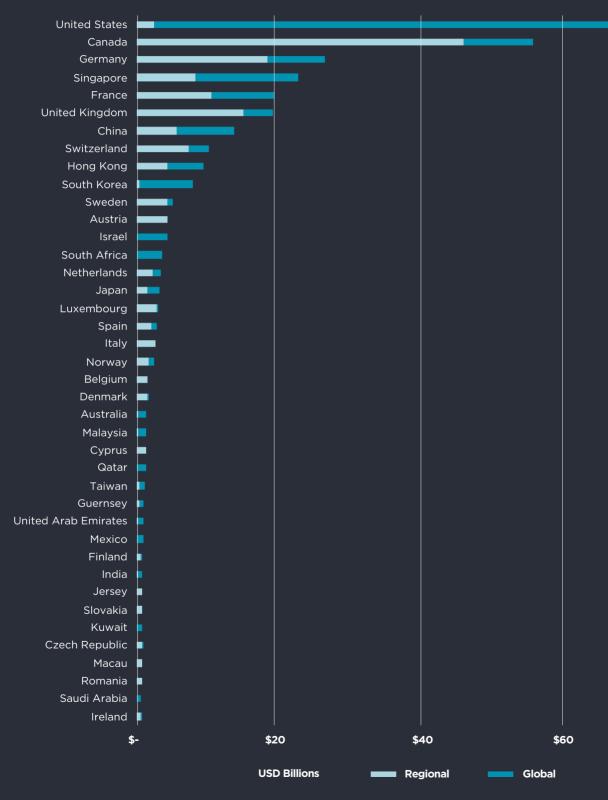
The number of markets targeted by cross-border capital declined -17.1% y/y, with EMEA and Latin American markets bearing the brunt of this narrowing of interest. A number of Central & Eastern European real estate markets were also missed off international investors' target lists last year, as capital became more selective.



Source: Cushman & Wakefield, RCA

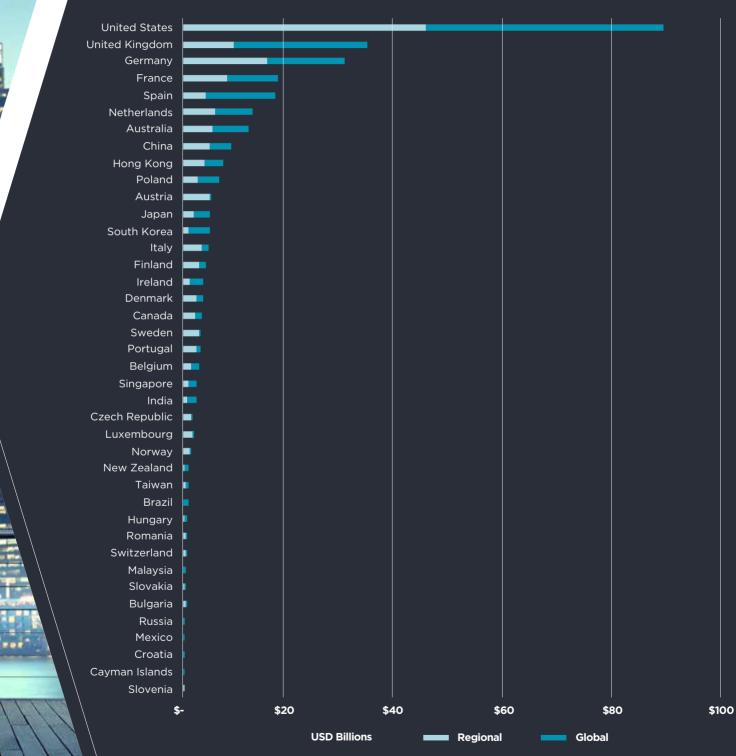


FIGURE 5A: TOP 40 SOURCES OF CROSS-BORDER INVESTMENT BY COUNTRY, EXCLUDING LAND



Source: Cushman & Wakefield, RCA

FIGURE 5B: TOP 40 CROSS-BORDER INVESTMENT TARGETS BY COUNTRY, EXCLUDING LAND









3 // SECTOR TRENDS

Investment into land for development was the highest on record in 2018. As with previous years, demand was driven almost entirely by APAC capital, although North American interest in the sector strengthened on the year. With growth of 9.7%, the industrial sector also exceeded previous investment highs. Distribution facilities. the largest portion of the industrial segment, grew at a rate of 15.3% y/y, led by strong growth in North America and APAC. Developers and operators were the most active in the industrial sector, accounting for 24% of the global market. The remainder was equally split between equity funds, institutions and prop-cos.

Retail made a comeback in 2018, growing by 2.7% y/y. Transaction improvements were down to higher shopping centre volumes, with the subsector growing 34.8% y/y. In contrast, demand for retail warehousing and high street units fell by -10.2% and -8.6% y/y respectively. As with last year, the sector maintained a 10% share of total investment, remaining below the share typically seen in the years preceding the GFC.

Offices were the only institutionalised sector to experience a decline in annual volumes, a result of most capital sources pulling back on their allocation to the sector. North American capital was the exception, as office investment grew 7.9% y/y; the region's REOCs displayed a particular interest in growing their international office market portfolios.

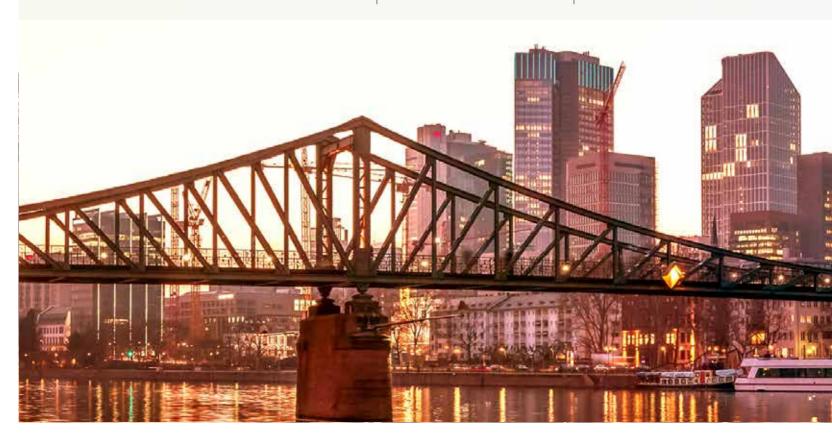


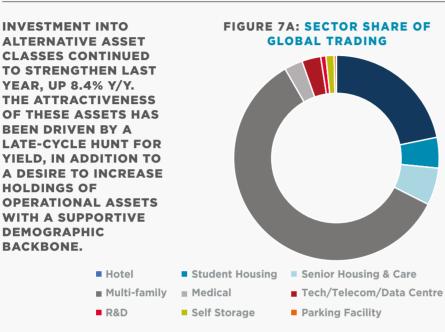


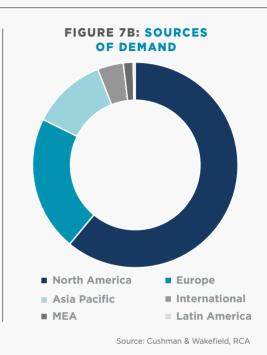
FIGURE 6: SECTOR SHARE OF GLOBAL TRADING

ource: Cushman & Wakefield, RCA



ALTERNATIVE IS IN







STUDENT HOUSING

Student housing continued to increase in importance in Europe and North America, with investors attracted by the stable. recession-resilient income on offer. The sector has yet to make significant gains in APAC, where much of the student housing sector remains development rather than investment focussed. However, a number of regional investors have signalled a desire to venture into the sector, with Japan and Australia of particular interest due to growing international student numbers.



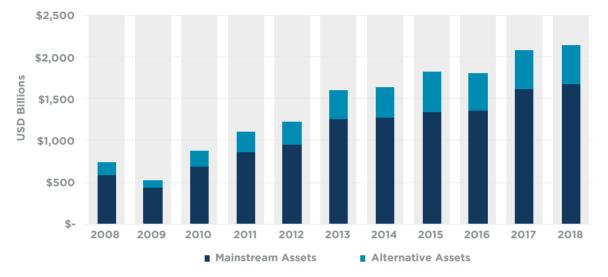


FIGURE 7C: ALTERNATIVES AND THE MAINSTREAM MARKET

Source: Cushman & Wakefield, RCA



PRS AND SUBSIDISED HOUSING

The private rental sector and subsidised housing remained the most targeted niche sector globally. North America retained sector dominance, unsurprising as due to the structure of the US residential market, North American PRS has long been viewed as an institutionalised asset class. As the fundamentals supporting PRS have become increasingly attractive, European investors have expanded their interest in the sector, with volume growth of 14.1% y/y in 2018, the strongest on record.











HOTELS

Growth in the sector was documented across North America and APAC, where volumes reached multiyear highs. Volumes in the latter were driven by single asset deals, whereas North America saw a number of large portfolio transactions. With a tourism boom anticipated for 2019 across Asia, and a number of new hotel concepts coming to the fore in North America and Europe, the outlook for the sector remains bright.



CAR PARKING

Investment into the sector fell -42.4% y/y, however this was unsurprising given the strength of investment in 2017. The number of markets seeing transactions declined by -43.8% in 2018, with transactions in only 3 European cities, compared to ten in 2017. Investment remains opportunitydriven in most regions, with a limited number of investable assets stifling transaction volumes.



DATA CENTRES

While investment volumes increased in both Asia and Europe, globally the sector contracted -48.7% y/y, but remains 46.4% above the long-run average. The issue of data sovereignty continues to loom large, with a need for governments to evolve suitable policy to face the problem head-on. Availability of assets, and a high rate of obsolescence, will mean development remains an attractive option.



MEDICAL AND CARE HOMES

Investment volumes declined globally last year, although transaction volumes remained above the 10-year average. The global provision of medical centres and care homes remains undersupplied, a trend that will only become more entrenched as ageing populations in Asia, Europe and North America increase healthcare demand and expenditure.

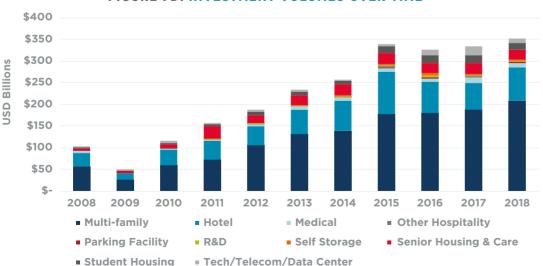


FIGURE 7D: INVESTMENT VOLUMES OVER TIME

Source: Cushman & Wakefield, RCA









O4//REGIONAL TRENDS ASIA PACIFIC

Building on the success of the previous year, 2018 set a new record for investment in Asia Pacific (including land). While domestic investors retained the majority of transactions volumes, all sources of capital targeting the area increased investment. North American buyers were the strongest source of global investment into the region, driven by high demand for the Chinese market. Indeed, despite trade tensions between the US and China, US buying in the country reached record levels last year, particularly in Shanghai.

While development sites were the target of 80% of investment in the region, previous records were also surpassed in the office and industrial sectors, while the hotel market reached its strongest point post-GFC. Retail and multifamily were the only sectors to experience a contraction in annual volumes last year, at -4.8% and -64.8%, respectively.

As in 2017, China attracted more than three quarters of volumes into the region. While the developed APAC economies of Japan and New Zealand experienced volume declines, growth was documented across the majority of emerging markets, driven by strong demand from domestic and regional buyers, and Australian volumes surpassed their previous 2015 peak.

Prime office rents continued to climb across China, Australia, Singapore, and Japan, due to demand outstripping supply in core markets. Prime yields experienced a modest contraction across the majority of markets, with further capital value growth set to continue into 2019.



FIGURE 8: APAC INVESTMENT VOLUMES

REGIONAL TRENDS: EMEA

Volume declines of -10.8% were documented for the region, owing to a pull-back from both global and domestic sources. Continental investment was robust by comparison, growing by 9.9% y/y. Despite the decline in global investment EMEA, and specifically Europe, remained the most sought after region by global capital, with 53% of all global transactions occurring within the region.

European retail documented its third consecutive year of decline, with lower volumes across much of the region. This was caused by changes in consumer habits, selective investor demand, and further compounded by the continuing differential between vendor and purchaser pricing aspirations. Industrial and office transactions contracted by -24.7% and -9.7% y/y respectively. However, following strong investment volumes in recent years, the fall in office and industrial was likely down to a shortage of investible stock. By comparison, European multi-family investment continued to strengthen, with increasing demand for the counter-cyclical sector in Western and now Central Europe.

Rental growth continued in 2018, with emerging European countries driving performance. Prime yields tightened as the limited supply of available product pushed valuations higher, but Western yields stabilised in the closing months of the year.

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FIGURE 9: EMEA INVESTMENT VOLUMES

REGIONAL TRENDS: LATIN AMERICA

Last year was the weakest on record for commercial real estate trading in Latin America, with tumultuous elections in Brazil, Mexico, Costa Rica and Colombia suppressing appetite for emerging market assets. Overall, transaction volumes fell -41.1% y/y. A pullback in investment from both domestic and continental capital was linked to exchange rate depreciation against the dollar, which led regional buyers to be more cautious in their investment approach.

In comparison, capital from global sources seeking diversification increased 34.0% y/y. In line with a strategy to improve the region's transport network, Chinese investment into Latin and South American logistics facilities strengthened. More generally, APAC investors increased their exposure to the region, as investment growth reached triple digits and hotel and development land benefited. Perhaps unsurprisingly given the difficult political situations in much of the region, opportunistic buyers were the most active last year.

Lower absorption rates were a consequence of the uncertain business environment during 2018, with prime yields largely remaining firm, but showing signs of weakness.

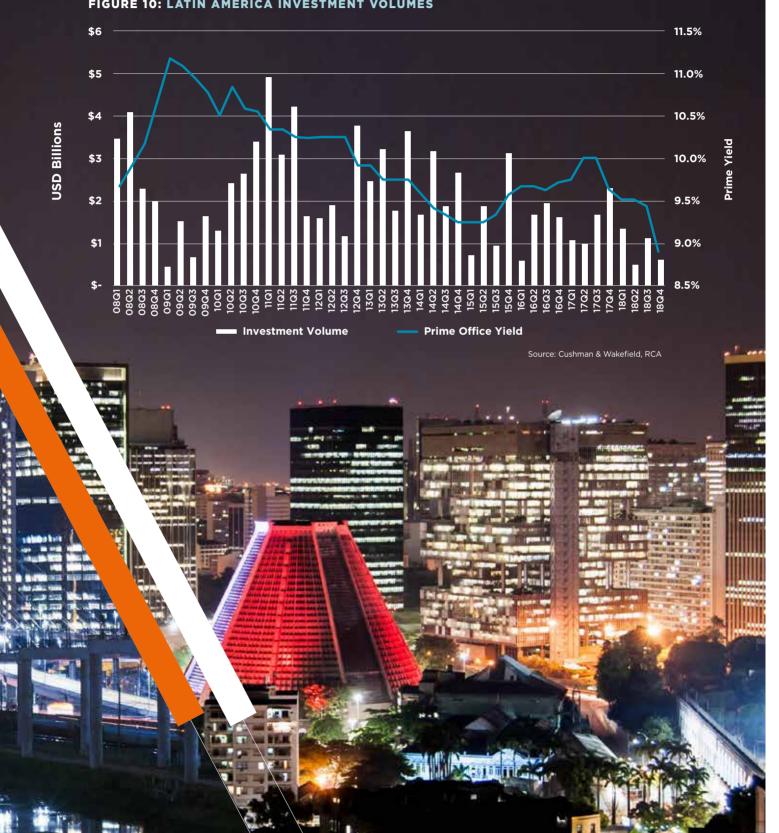


FIGURE 10: LATIN AMERICA INVESTMENT VOLUMES

REGIONAL TRENDS: NORTH AMERICA

In contrast to other global regions, North America experienced a volume windfall last year, with demand growth from all regions. Although domestic investors remained the most prolific, representing 82% of the market, the largest increase in demand came from continental capital, which more than doubled its previous high. Outside of regional flows, French investors were the primary source of global capital targeting the region, driven by the merger of shopping centre operators Unibail-Rodamco and Westfield.

All North American sectors saw increased volumes last year. Retail, which had experienced declines since 2015, found its feet once more as transactions increased by 30.1% y/y. However, apartments continued to take the largest proportion of investment, at almost a third of all transactions, while the office sector's stake of investment declined to just 25%, its lowest ever share of trading.

Opportunity zones are one factor attracting more interest as tax changes open up potential. Increased land sales to date suggest they will be a growing focus for development activity going forward.

The overall picture for the region was mixed, with the US robust but Canada reporting a transaction decline of -12.0% over the year as high pricing and supply shortages took their toll. However, strong leasing activity resulted in rent increases across prime markets in North America. Prime yields were largely stable, but higher borrowing costs have led to average cap rates drifting up in some markets.





FIGURE 11: NORTH AMERICA INVESTMENT VOLUMES









05/CLIMATE

Having long languished in the 'important but not urgent' quadrant of real estate investors' to-do lists, 2018 was the year that climate change, and its associated risks, finally made the executive agenda.

> A survey of Davos attendees published by the World Economic Forum in January, for example, found that climate-related themes made up three of the top five risks perceived most likely to materialise in 2019, and four of the five thought likely to cause the most damage.

As the incidence of global climate shocks increases, regulation and reporting standards are demanding ever more information from investors on how they are addressing these risks. Real estate investors must now consider the level to which they are exposed to both 'physical' risk as well as 'transitional' risk, meaning the risk that comes from changes to policy and market expectation. These risks may have downside implications for companies that have not yet taken appropriate action.

Of course, the line between addressing climate change risk and improving the sustainability metrics of assets can often be blurred, and with the need for all buildings globally to be carbon neutral by 2050 in order for countries to meet their Paris Climate Accord commitments, the two are inexorably linked.

To date, this has been viewed as a challenge with a time horizon substantially longer than investor holding periods. However, the creation of bodies such as the Task Force for Climate Related Disclosures and the rising popularity of GRESB, which in 2018 assessed over 79,000 real estate assets worth over \$3trn USD, has reinforced that investors can no longer continue to delay addressing these realities head on. Inaction risks developing competitive disadvantage as reporting standards become either regulatory necessity or market demand driven standard practice.

Furthermore, even if the direct impact of these risks isn't felt during existing holding periods, avoiding addressing these issues may lead to liquidity concerns in the future when assets are being sold and incoming investors consider climate risk as part of their due diligence process.

Investors wishing to preempt the climate risk to their portfolios should therefore consider:

- Asset-level resilience to climate change related threats
- City-level resilience to these same threats
- Their asset management strategy

These factors are already being considered and acted upon by some forwardlooking investors, and should become a critical part of the investment approach going forward.

KEY CLIMATE CONSIDERATIONS FOR INVESTORS

| • | \mathbf{Q} | |
|--|--|--|
| Management | Location | Asset |
| Brand and reputational upside and downside potential | Existing and future physical risk | Shifting occupier demand |
| Shareholder expectations and risk | Existing and planned government policy | Physical integrity |
| Addressing transitional risk | Location resilience and resources to address risks | Energy, water, and waste efficiency |
| Enhanced asset management | Migration and socio- economic impact | Capex requirements |
| Impact during the hold period | | Durable vs disposable construction |

ASSET-LEVEL CLIMATE RESILIENCE

A NECESSARY EXPENSE?

To date, the view of many investors on mitigating the effect of climate related risk (typically viewed as mainly natural disaster risk) has been to outsource through the acquisition of insurance policies. While clearly this has been an effective strategy in the short term, relying on insurance could become more expensive as insurers improve climate risk modelling through technological advances.

As policies are typically renewed annually, premiums may become more volatile as the effects of more frequent natural disaster incidents are priced in. In the longer term, it may be possible if no action is taken that certain assets may become uninsurable, as the risk of providing cover is considered not worth the premium This fits with the widely held view in the insurance industry that a four degree increase in global temperatures would render insuring against climate change related risk impossible.

Relying on insurance also only addresses the physical risk to the asset and loss of income. It won't cover the transitional risk of a potential loss of liquidity if a lack of climate change resilience causes buyers to steer clear upon disposal of the asset.

Anecdotal evidence already suggests this is the case, with flood risks for example leading to pricing discounts in some markets.

It will also not protect investors from potential

increases in capex requirements, as more severe weather patterns speed up deterioration of the building envelope.

As with any capital expenditure, investors will want to know the returns for building improvements linked to increased asset resilience to climate risk. At this stage, there is no clear data that links improvements in climate change resilience with insurance premiums, or tenant demand. However, we expect this to shift in the future. For occupiers in particular, as companies develop their own climate risk resilience strategies, it will be increasingly important to occupy buildings that are able to withstand climate-related events in order to minimise potential disruption to their businesses.



CITY-LEVEL RESILIENCE

TOO LIMITING OR NECESSARY PRUDENCE?

While climate change is a global phenomenon. exposure to different types of climate risk are location-specific, including everything from high winds to extreme heat and fire risk, to rising sea levels. While clearly it would not be practical for investors to eschew assets in locations exposed to climate-related risk, new mapping tools allow investors to pinpoint the most vulnerable or resilient sub-markets within cities.

However, there is a high degree of variability between cities that are working to address these risks, the methods they are using, and the perceived efficacy of these tactics. In 2011, for example, Vancouver launched the Greenest City 2020 Action Plan, which introduced a series of targets to make it the world's 'greenest city'. These include:

- lowering greenhouse gas emissions to 6% below 1990 levels;
- creating higher density neighbourhoods to help decrease transportation related emissions; and
- reducing energy use and greenhouse gas emissions in existing buildings by 20% over 2007 levels.

They have also introduced requirements for all new buildings constructed from 2020 onward to be carbon neutral in operations. In Copenhagen meanwhile, plans have been announced to build a series of islets off the city's coast to help create a flood barrier for the city, as well as housing Northern Europe's largest waste-to-energy plant, helping to lower the city's carbon footprint. While the plan still needs parliamentary approval, it provides an innovative take on how cities can address climate related concerns.

Ratings agency Moody's statement in 2017 that the way cities were managing climate change was being incorporated into their credit ratings suggests that this risk is being taken ever more seriously by the finance industry. Investors would do well to take note: while no cities have been downgraded yet because of inaction, those that do may find it difficult to raise capital in the future. This would limit their ability to continue investing, not only in climate resilience, but also more broadly into their city's future competitiveness.

Investors that have assets concentrated in geographical locations exposed to climate risk may benefit from working with local government to ensure that these cities are taking sufficient action to ensure they remain as attractive places for capital for years to come.

SUSTAINABILITY IMPROVEMENTS

WHAT OCCUPIERS WANT?

With the construction and operation of real estate estimated to contribute 40% of total greenhouse gas emissions globally, designing more environmentally friendly buildings and retrofitting existing assets to improve their energy, water, and waste systems has long been a push for the industry, with BREEAM and LEED both nearing their third decade. However, achieving buvin from landlords has long centred around the premise that energy efficiency improvements would lead to decreased running costs for the building and a saving for the tenant, justifying a higher rent. The data around this has been mixed, with some studies demonstrating a lower running cost for the asset, while others showing a higher running cost, though still more than offset by higher rental returns. It is important that investors view improvements to the resource efficiency of assets not only through the lens of achieving higher rents, but also the potential downside risk of inaction.

While there are not yet any global in-use building certifications that have widespread adoption, the example of NABERS certification in Australia. launched in 2005 and now an implicit requirement for assets to be lettable. demonstrates the potential power of such tools. In the case of NABERS, a combination of tenantled demand and required reporting for certain assets has led to widespread adoption of the certification. In other markets, for example the UK where buildings with Energy Performance Certificates (EPCs) below an E rating will be unlettable past 2023, uptake may initially be regulation-led.

In Europe, BREEAM in-use certification is becoming increasingly more popular, and investors should carefully consider the risk of waning tenant demand for assets that do not meet environmental impact benchmarks, rather than expecting a price premium.

The cost of such improvements can also be mitigated through products such as 'green loans', as banks begin to offer discounts on financing where the borrower commits to delivering environmentlinked improvements to the asset. Lloyd's Bank in England, for example, has introduced a 20bp margin discount for such cases, to promote sustainability.

'Green bonds' are also a arowing option. While a small proportion of the overall public bond market at less than 2%, annual green bond issuance is expected to reach \$1trn USD by 2020, and to date most issuances have been oversubscribed. With a large market of investors looking to improve the 'green' rating of their portfolios, these offer landlords a way of financing such capital expenditure at an attractive rate.



A BALANCING ACT

CAN YOUR ASSET 'HAVE IT ALL'?

While it is now clear that climate change must be confronted head-on in the current holding period, it is not the only new consideration that investors must contend with when managing both their existing assets and investment strategies. Health and wellbeing has become a much larger focus in recent years, with ample research demonstrating that the work environment has a direct impact on employee health, therefore affecting absenteeism, productivity, and the like. As occupiers in many markets struggle with stagnating productivity and tight labour markets, improving the quality of the working environment could potentially be an 'easy win' in terms of attracting talent and increasing productivity.

Whilst in many instances improvements to an asset's sustainability credentials will also lead a better working environment - soft landscaping can improve a building's sustainability credentials and has also - there are likely fewer between protecting against physical climate change and creating a healthier working environment. This will inevitably create tension for investors, alongside the requirement to minimise running costs

It can be challenging to strike a balance between the potentially competing objectives of improving an asset's health and wellbeing scorecard, mitigating physical climate change risk, and keeping a lid on capital expenditure and running costs. However, the value being through scorecards such as WELL, fitwel, BREEAM and LEED, as well as the costs if no action is taken, demonstrate that a balance must be achieved within these aims, as there is risk associated with not taking any action, either through transitional risk of government regulation,





OUTLOOK & STRATEGY

MACRO DRIVERS OF THE MARKET AHEAD: We entered 2019 in a somewhat chastened position with respect to the global macroeconomic backdrop with exports, manufacturing output, and corporate investment all lagging behind expectations.

NAME AND ADDRESS OF THE OWNER

This will impact confidence, volatility and interest rates, and in turn investment strategy, as many are questioning the degree of risk they should be accepting.

As we've moved through the opening quarter the news headlines have improved somewhat, helped by signs of easing US-China trade tensions. What is more, while exports and business indicators have been negative, with strong employment growth and still-low interest rates, the consumer sector is well underpinned in most markets. At the same time a number of temporary factors have been slowing growth, such as changes to emission testing standards in European car markets and deleveraging in China. As these ease, growth rates will benefit. Nonetheless, while this may suggest we are not slipping into a global recession, downside risks are obvious, and it remains a central view of an increasing number of economists that we need to plan for slower growth.

And Indexed in

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FIGURE 12 - ECONOMIC GROWTH AND FORECAST BY REGION

The question for investors of course is: how slow will that growth be? Depending on the scenario, the inflation and interest rate response will vary and this therefore is a fundamental problem for investors to address in

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their investment strategy. Increasingly, one investment policy will not suit all possible economic outcomes.

It will also not fit all regions and as inflation and growth trends increasingly diverge, Source: Oxford Economics currency pressures will be an issue for investors to consider

issue for investors to consider, perhaps differing from 2018 in terms of dollar strength and therefore hedging costs.

However, for real estate as for many other investment sectors, the cycle is not necessarily the key factor to which investors must react. A wide range of structural changes are at play, which are fundamentally altering the sector. Aside from climate change and sustainability, three key areas are demanding attention:

Geopolitical uncertainty from

Brexit to Korea continues to hog the headlines, with one crisis being supplanted by another in rapid succession. New policies are also surprising the market in some areas and influencing potential at a local level, such as changes to Sunday trading laws in Poland, the introduction of Opportunity Zones in the USA, or efforts to slow the residential market in Singapore. Considering this, investors will need to continue adapting their strategies and the single most effective response continues to be diversification by market, sector, and performance driver.

Likewise, **demographic shifts**

will continue to influence growth and will be a higher priority for investors as they look towards the appeal of different real estate formats such as rented residential healthcare and student housing. In the shorter term though, labour shortages will need to be addressed as these will limit growth and drive increased investment in technology across a range of platforms, from AI to battery life. Immigration policies may also influence where businesses locate to find their industry's future innovators. Tier 2 markets with strong universities and a buoyant start-up culture will likely be increasingly targeted, particularly since such cities often offer greater affordability and a better quality of life, improving employee retention.

The impact of the sharing economy is likely to accelerate

in the short term, with offices and hospitality leading and a push into residential underway through models such as coliving. Sharing economy services will likely influence all sectors, and while unlikely to be the dominant way property is used, they will be an increasingly important contributor to the flexibility users need. Undoubtedly, this will add to pressures blurring the lines between sectors, and between the role of landlord and service provider.

In response to this wide range of factors impacting the market, tech and data driven strategies will be increasingly important to allow landlords to understand and react to how their buildings are being used and to support ongoing innovation.

MARKET OUTLOOK



THE MARKET FACES NO SHORTAGE OF EQUITY

While new capital raising has slowed, the volumes raised remain substantial and with the dry powder already held by funds at record levels, there is no sign of any easing in the demand pressures which have controlled the market for some years now. Most fundraisings are focussed on North America, but Asia has seen an increased number of new funds as investors seek out growth stories to lift performance.

On the debt side, bank lending is tightening in some areas, lenders remain risk averse, and quantitative tightening is also set to impact. However a shortage of debt is unlikely, at least for sensible lending propositions. This will be supported by increased sources of non-bank lending, fintech growth, and a relaxation of US banking regulation, not to mention the simple fact that lending terms are attractive at present for both borrower and lender.

While demand is high, supply remains an issue and selectivity in investment targeting and reluctance to sell may hold back activity. However, there are signs that both these factors are starting to ease, which leads us to forecast a potential modest increase in activity in some global markets. Some investors are taking a more relaxed approach to acquisition targeting, with demand spilling over into smaller markets, secondary assets, and development. Supply meanwhile shows signs of increasing as funds reach the end of their planned lifecycle, and as more investors consider making tactical sales to adjust their risk profile. In addition, more stock may flow from the pressured REIT market particularly as interest rates increase, as a result of both M&A activity and strategic sales.

Sources of cross-border demand will remain dynamic. Some US institutional demand may cool domestically for example, despite a possible delay in interest rate hikes. Nonetheless, North American flows internationally will remain high and foreign interest in the USA will also increase if the dollar edges down European and Asian institutions are still increasing their allocations to real estate, and both regions are also likely to see more inbound crossborder demand, notably Europe in the short term, and Asia in the medium term as investors follow the demographic trends.

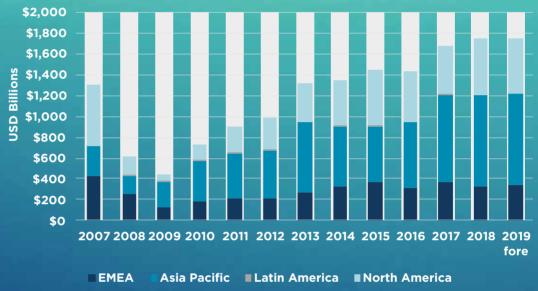
China specifically will continue to draw in global interest, with more encouragement for inbound investment from central government and more opportunities emerging as an increasing number of Chinese developers and investors look to trade assets to improve their cash flow. With deleveraging policies remaining in place, outflows will be slow to recover but should steadily improve once policy is softened and as the Go Global China policy moves on.







FIGURE 13 - GLOBAL PROPERTY INVESTMENT BY REGION



Source: Cushman & Wakefield, RCA

| Investment Volume | | Office Yield Change | |
|-------------------|--|---|--|
| 2019 Forecast | Change on | 2018 | 2019 |
| US\$ bn | 2018 | BP change | BP Change |
| 339.2 | 2.5% | -29 | -10 |
| 315.1 | 2.0% | -26 | -5 |
| 22.2 | 10.0% | -43 | -25 |
| 1.9 | 5.0% | na | na |
| 2.4 | 6.0% | -73 | -30 |
| 530.7 | -3.0% | 5 | 10 |
| 874.8 | 1.0% | -22 | -8 |
| 1,747.1 | 0.0% | -31 | -5 |
| | 2019 Forecast US\$ bn 339.2 315.1 22.2 1.9 2.4 530.7 874.8 | 2019 ForecastChange onUS\$ bn2018339.22.5%315.12.0%22.210.0%1.95.0%2.46.0%530.7-3.0%874.81.0% | 2019 ForecastChange on2018US\$ bn2018BP change339.22.5%-29315.12.0%-2622.210.0%-431.95.0%na2.46.0%-73530.7-3.0%5874.81.0%-22 |

TABLE 1 - INVESTMENT MARKET OUTLOOK BY REGION

Source: Cushman & Wakefield

MARKET OUTLOOK CONT'D

YIELD INCREASES DELAYED, BUT WHAT ABOUT RENTAL GROWTH?

Assuming, as we do, that we face slower economic growth in 2019, monetary policy will be looser than would otherwise be the case. As a result, upward yield pressures will be reduced. The US may face modest increases due to the more mature position of the property cycle, but Europe and Asia are likely to see yields remain stable or even compress slightly in some markets where competition is most intense and supply low. Trends in secondary markets will be mixed, with those perceived to offer value for occupiers and investors relative to prime likely to see compression, but weaker locations and older stock set to see rents weaken and yields move out as investors consider their potential capex demands going forward. Occupier trends will be increasingly important in defining performance, and while business investment may ease in the face of macroeconomic volatility, overall real estate demand is likely to remain robust in most sectors and markets, as quality real estate is increasingly recognised to be a key ingredient in corporate operational success.

With no rising tide of inflation, rental growth will be limited to the most effective and in-demand property solutions – and growth for the best will likely be balanced by real declines in rents for average or 'commodity' space in all sectors, even those such as logistics and student housing which are currently in vogue.

In the office sector, where supply and demand dynamics look particularly appealing in a wide range of global cities, global growth hit 3.5% last year. While it may ease in 2019, growth of 2.5-3.0% still looks achievable, given that even markets with rising levels of development are proving able to absorb the new supply, frequently in pre-lettings.

Multi-family real estate is in a similar position, with supply increases in some markets, most notably in the US. Short and mediumterm trends are supportive of growth in a wide range of cities from Madrid, Dublin. Amsterdam. and Berlin to Vancouver, and other leading Canadian cities, as well as LA and sunbelt US markets. Some Asian markets are suffering government interventions, but areas of short-term growth are still evident, in select Chinese markets for example as well as more mature markets such as Tokyo, Osaka, Sydney, and Melbourne.

In the retail market the mood is more negative, but it may nonetheless be time to rethink strategy. The fundamentals are improving from a consumer perspective, but with retailers experimenting and reacting to the growth of e-commerce, demand will remain selective and store rationalisations will continue. However winners and losers are starting to emerge, with an increased emphasis on services, experiences, and F&B, with other uses such as fitness spreading globally. As a result, it is not a universally weak outlook and the repricing occurring may be too broad in some key markets and formats.

Logistics vacancies are at record lows in many markets and rental growth is picking up as a result. This is particularly true in the US but also globally, with more pre-leasing and a generally restrained level of speculative development. With fit-out costs increasing as the sophistication of logistics mounts, obsolesce threats will grow as will demand for longer leases.

For hospitality, the tourism backdrop is positive and an increased number of routes to market are opening for investors, including debt. Greater focus on the operator is also emerging, with tech and data savvy hoteliers experimenting with the format and offering more exciting potential as a result.

STRATEGY CONSIDERATIONS

Deploying capital safely can be a concern late in the cycle, and interest rates are set to rise. However, this is natural, as in the battle between protecting against downside risk and seeking outperformance via management and risk taking, mistakes will often be made.

Move to secondary: $\ensuremath{\mathsf{At}}$

this stage in the cycle many investors will turn to secondary markets to find higher returns, but this is often a symptom of late-cycle excess and investors should therefore proceed with caution. Higher yields are after all an indication of higher risk, not just a potential arbitrage gain. This is particularly the case if we are in an environment of restrained growth, as most commentators assume.

Our analysis suggests emphasis should be placed on tier 2 cities and gateway city submarkets in top countries rather than tier 2 or 3 countries with higher political or regulatory risks. In particular, we believe challenger cities should be a focus. These are cities that may lack the scale and liquidity of gateways, but do operate as international hubs and are a magnet for growth due to factors such as universities, skill clusters, quality of life, access, and culture as well as the increasingly important factor of affordability.

Interesting tier 2 markets could include Sao Paulo, Phoenix, Auckland, Osaka, Glasgow, and Prague while leading challenger cities are Manchester, Leipzig, Barcelona, Austin, Atlanta, Calgary, Brisbane, Guangzhou, and Pune.

Credit markets can

be appealing: Seeking exposure via lending still offers potential, both in terms of diversifying risk and securing higher income returns. However, close attention to the regulatory framework is needed, for example with respect to enforceability, as well as to the riskadjusted returns offered. Debt is also still accretive for investors albeit sensible levels of leverage now need to be maintained.

Placemaking: As sector

definitions blur and uses change, mixed-use assets and locations will be increasingly favoured and forward thinking, active investors should focus on placemaking to actually drive users and uses into these settings.

Increased flexibility is

being sought by occupiers, both in terms of space usage and leases, and this will generate more demand for solutions such as co-working. Users will be seeking this extra flexibility at little extra total cost, however suggesting that the push for greater efficiency and density will continue. The need for flexibility and efficiency together make the case for ongoing experimentation, be that in property management, design, construction, or use. Examples may include in multi-storey industrial, in multi-sector hoteling, in off-site construction. in bundling additional services for occupiers, and in providing flexible leases that are not property specific.

Change and innovation

will also be seen in terms of where and when value is created along the supply chain, impacting everything from who runs cold storage or interfaces with the consumer (producer or retailer), to control of data centres and the location of click and collect facilities. Data management and analytics will be vital in more and more aspects of delivering and managing real estate.

Above all therefore, a need for innovation, creativity, and new thinking means that key global tech markets will remain very much in favour, whether in Amsterdam, Berlin, London, New York, San Francisco, Boston, Bengaluru, Singapore, Seoul, or Tel Aviv.

TARGETS FOR INVESTMENT IN 2019/20

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C&W views on areas of potential for investment based on both growth and risk characteristics.

| | Americas | APAC | EMEA |
|---------------|---|--|---|
| Core | Offices: Gateway CBDs: Manhattan (repricing creating a window), LA, Boston, Chicago, Washington DC, San Francisco and core Canadian cities (Toronto, Vancouver). Core assets in nonmajors such as Denver, Atlanta and Phoenix. Retail: Class A neighbourhood and community centres, grocery-anchored and other personal service or experiential retail in gateway cities in the US and Canada Multi-family: Class A suburban multi-family in top US cities plus build-to-core strategies particularly in the southern sunbelt markets Logistics: Key Canadian markets and US distribution hubs (Inland Empire, Dallas, Atlanta), plus port cities (LA) and along key supply chains. | Offices: Sydney, Melbourne, Singapore, Osaka. Retail and Hospitality: Singapore and Tokyo Residential and Senior Living: Tokyo and Osaka Logistics: Singapore, Sydney, Hong Kong, Tokyo, Osaka Data Centres in Tokyo | Office: London, Paris, Copenhagen, Munich, Frankfurt, Berlin, Madrid, Hamburg, Amsterdam, Barcelona Retail: Dominant centres, flagship high streets and outlet centres in core German and Nordic cities, plus Paris, London, Milan, Madrid, Barcelona, Lisbon, Dublin, Amsterdam and Brussels Logistics: London, Paris, Hamburg, Munich, Berlin, Rotterdam, Antwerp, Copenhagen, Stockholm Managed Residential: Nordics, UK, Spain and the Netherlands and senior living in Germany Hotels: Indexed leases in key cities (affordable/economy). Data Centres: Hub cities |
| Core Plus | Offices: Class A in growth markets (e.g. Dallas, Miami, Atlanta, Seattle, Denver, Phoenix, and Austin), Transit rich secondary markets and near-in suburbs of gateway markets and new Class A leased offices in Sao Paulo, Lima, Santiago. Multi-family: US Class B in cities and suburbs of tier 1/2 markets, emphasis on repositioning and the sunbelt. Retail: US Class A neighbourhood and power centres serving larger conurbations with repositioning opportunities in tier 1/2 markets. Logistics: Development in space constrained top 10 US markets, Class B product along supply chains and cold storage. Class A logistics platforms in Lima, Buenos Aires, Santiago, Bogota and Medellin plus build to suit/sale & leaseback platforms in Sao Paulo. | Offices: Brisbane, Perth, Hong Kong, Seoul, key Indian cities: NCR, Mumbai and Bangalore, plus Shanghai, Beijing, including emerging CBD markets underpinned by new transport routes and stronger tier 2 Chinese cities. Fringe office locations in core cities such as Sydney, Melbourne and Tokyo. Retail: Growth markets such as Singapore, Jakarta, Kuala Lumpur and Seoul, plus centres in core areas of Shanghai and Beijing and tier 1 Indian cities. Tier 2 logistics hubs linked to China's Belt and Road Initiative, led by Chengdu and Chongqing Alternatives: Data centres, student housing and medical serving core cities. | Offices: Select tier 2 cities, tech and culture-led, plus Budapest, Dublin, Stockholm, Helsinki, Vienna, Milan, Lisbon, as well as repositioning in core cities and medium-term gains in Polish cities. Retail: Refurbishment in core cities in Northern Europe. Core space to improve in larger cities in France, Italy, Spain and Central Europe. Dominant retail parks around larger cities, led by UK, Germany and Spain (leisure anchored). Logistics: German and French tier 2, Dublin, Madrid, Warsaw, Prague and Budapest. Developing urban logistics. Student Housing: Forward commitments and development. Hotels: Germany, UK, Spain, tourist-led Central and Eastern European cities. |
| Opportunistic | Office: repositioning/redeveloping suburban office product in major and secondary US markets. High-energy markets such as Houston, Edmonton & Calgary. Assets or platforms in Brazil with office and industrial in São Paulo a long-term target. Class A office development of partially pre-let offices in Santiago and Lima and stabilized office in Buenos Aires, Rio de Janeiro, Medellin, and Bogota. Retail: Heavy repositioning/redevelopment of Class B+ US malls into mixed-use with experiential retail or industrial component. Brazilian tier 1 shopping centres with low relative pricing and proven resilience. Class A in Santiago, Mexican and Colombian cities. Multi-family: affordable housing in the US, Mexican and Colombian cities, in infill high transit locations of Santiago, Class A in São Paulo. Industrial: US cold storage, infill distribution product, Class B and development in secondary markets. | Offices: emerging growth markets of Manila, Jakarta, Kuala Lumpur, Bangkok, Ho Chi Minh City and brownfield development in tier 1 and 2 Indian markets. Retail: Emerging markets such as Bangkok, New Delhi and other top Indian cities. Logistics: Gateway Chinese cities, Ho Chi Minh City, Guangdong and Indian hubs, plus Kuala Lumpur, Bangkok and Vietnamese hubs (including light industrial). China: Underperforming assets for upgrade or conversion (e.g. retail to coworking or office towers to residential) and over-leveraged developers, via investment in local platforms. Data Centres: Multi-let in Japan, plus other growing regional hubs. | Offices: Spec development and repositioning in core West and Nordic cities, plus leased property in the EU East and Moscow. Retail: Repositioning and active management/development in larger western cities and established centres in EU East. Logistics: Development serving large Central & Eastern European cities and peripheral Western cities: e.g. Oporto, Barcelona and Milan. Africa and UAE: Schemes serving key hubs for technology and hospitality. Hotels: Asset management in key Western cities and development (Southern Europe). Data Centres: Development in Central and Eastern Europe. |







APPENDIX 1 INVESTMENT VOLUMES USD MILLIONS

| COUN | TRY | 2017 | 2018 | ANNUAL CHANGE |
|------|----------------|-------------|-------------|------------------|
| | Argentina | \$319.8 | \$240.0 | -25% |
| ¥ | Australia | \$34,650.3 | \$37,864.5 | 9% |
| | Austria | \$7,693.5 | \$8,732.1 | 13% |
| | Bahrain | n.d. | n.d. | n.d |
| | Belguim | \$3,257.9 | \$4,896.8 | 50% |
| • | Brazil | \$2,340.3 | \$1,991.5 | -15% |
| | Bulgaria | \$1,006.8 | \$698.2 | -31% |
| * | Canada | \$30,057.6 | \$26,455.9 | -12% |
| *2 | China | \$640,606.7 | \$662,782.4 | 3% |
| | Croatia | \$521.4 | \$404.2 | -22% |
| | Czech Republic | \$4,223.8 | \$2,535.7 | -40% |
| 1 | Cyprus | \$201.1 | \$- | -100% |
| | Denmark | \$9,223.8 | \$6,004.4 | -35% |
| | Estonia | \$190.3 | \$145.4 | -24% |
| H | Finland | \$11,574.7 | \$10,974.0 | -5% |
| | France | \$44,240.9 | \$38,138.5 | -14% |
| | Germany | \$82,677.5 | \$78,745.1 | -5% |
| ±== | Greece | \$276.1 | \$- | -100% |
| * | Hong Kong | \$44,031.9 | \$50,932.9 | 16% |
| | Hungary | \$2,087.7 | \$1,782.9 | -15% |
| • | India | \$6,161.7 | \$7,473.7 | 21% |
| | Indonesia | \$1,008.3 | \$295.3 | -71% |
| | Ireland | \$4,077.9 | \$5,798.7 | 42% |
| | Italy | \$10,151.0 | \$7,137.3 | -30% |
| • | Japan | \$44,228.0 | \$32,989.4 | -25% |
| | Kuwait | n.d. | n.d. | n.d |
| | Latvia | \$80.8 | \$160.7 | 99% |
| | Luxembourg | \$1,456.7 | \$1,898.0 | 30% |

| соилт | 'RY | 2017 | 2018 | ANNUAL CHANGE |
|------------|----------------------|-------------|-------------|------------------|
| 0 | Malaysia | \$4,526.9 | \$2,667.3 | -41% |
| | Mexico | \$1,980.0 | \$837.9 | -58% |
| | Netherlands | \$23,768.2 | \$24,453.2 | 3% |
| 3 2 | New Zealand | \$3,447.7 | \$2,827.4 | -18% |
| - | Norway | \$6,486.0 | \$5,708.7 | -12% |
| F | Oman | n.d. | n.d. | n.d |
| | Philippines | \$762.0 | \$456.6 | -40% |
| | Poland | \$7,055.0 | \$8,428.3 | 19% |
| | Portugal | \$2,336.5 | \$4,383.5 | 88% |
| | Qatar | n.d. | n.d. | n.d |
| | Romania | \$1,819.3 | \$1,595.9 | -12% |
| | Russia | \$5,016.1 | \$2,122.1 | -58% |
| M | Saudi Arabia | \$53.5 | \$33.3 | -38% |
| 0 | Serbia | \$236.4 | \$421.5 | 78% |
| 6 | Singapore | \$20,724.3 | \$21,895.5 | 6% |
| 1 | Slovakia | \$504.9 | \$828.0 | 64% |
| - | Slovenia | \$93.0 | \$349.0 | 275% |
| :: | South Korea | \$20,385.1 | \$29,518.9 | 45% |
| h | Spain | \$24,792.1 | \$24,543.4 | -1% |
| + | Sweden | \$14,590.0 | \$11,491.3 | -21% |
| + | Switzerland | \$8,502.0 | \$5,232.1 | -38% |
| | Taiwan | \$6,110.2 | \$11,082.4 | 81% |
| | Thailand | \$1,769.7 | \$2,883.3 | 63% |
| Ċ. | Turkey | \$263.5 | \$15.3 | -94% |
| 2 9 | Ukraine | \$330.3 | \$442.2 | 34% |
| | United Arab Emirates | \$504.4 | \$35.0 | -93% |
| NK | United Kingdom | \$85,221.1 | \$74,071.0 | -13% |
| | United States | \$436,741.2 | \$519,382.0 | 19% |

ANNUAL CHANGE -43% -60% -1% -21% -15% n.d. -43% 15% 80% n.d. -14% -59% -41% 66% 1% 60% 283% 39% -3% -24% -41% 75% 55% -95% 29% -93% -16% 14%

APPENDIX 2 INVESTMENT VOLUMES EUR MILLIONS

| ουντι | RY | 2017 | 2018 | ANNUAL CHANGE | COUNTRY | 2017 | 20 1 |
|------------|----------------|------------|------------|------------------|---------------------|----------------|-------------|
| • | Argentina | 275.4 | 194.7 | -29% | Malaysia | 3,963.0 | 2,261 |
| R . | Australia | \$30,606.9 | \$32,062.6 | 5% | Mexico | 1,764.2 | 711. |
| = | Austria | 6,726.8 | 7,460.3 | 11% | Netherlands | 20,864.5 | 20,718 |
| | Bahrain | n.d. | n.d. | n.d. | New Zealand | 3,038.7 | 2,413 |
| | Belguim | 2,877.7 | 4,096.5 | 42% | Norway | 5,753.8 | 4,864 |
| • | Brazil | 2,029.0 | 1,678.7 | -17% | D man | n.d. | n. |
| | Bulgaria | 871.3 | 597.1 | -31% | Philippines | 658.4 | 374 |
| +1 | Canada | 26,608.3 | 22,323.7 | -16% | Poland | 6,177.7 | 7,127 |
| | China | 562,044.9 | 562,275.7 | 0% | Portugal | 2,066.9 | 3,728 |
| 8 | Croatia | 461.4 | 328.9 | -29% | Qatar | n.d. | n. |
| _ | Czech Republic | 3,806.6 | 2,174.6 | -43% | Romania | 1,585.7 | 1,356 |
| 6 | Cyprus | 195.5 | 0.0 | -100% | Russia | 4,405.2 | 1,816 |
| | Denmark | 8,079.8 | 5,082.8 | -37% | Saudi Arabia | 47.1 | 27 |
| | Estonia | 164.8 | 121.3 | -26% | Serbia | 216.5 | 359 |
| - | Finland | 10,102.7 | 9,300.0 | -8% | Singapore | 18,131.2 | 18,399 |
| | France | 38,344.5 | 32,548.5 | -15% | Slovakia | 444.6 | 711 |
| B | Germany | 73,163.7 | 67,020.1 | -8% | Slovenia | 78.2 | 299 |
| | Greece | 241.8 | 0.0 | | South Korea | 17,974.6 | 24,945 |
| \$ | Hong Kong | 39,451.4 | 42,701.8 | 8% | Spain | 21,712.9 | 20,954 |
| | Hungary | 1,847.9 | 1,526.3 | -17% | Sweden | 12,942.3 | 9,777 |
| • | India | 5,454.3 | 6,274.3 | 15% | Switzerland | 7,565.4 | 4,437 |
| - | Indonesia | 903.5 | 245.8 | -73% | Taiwan | 5,381.5 | 9,429 |
| | Ireland | 3,584.8 | 4,904.5 | 37% | Thailand | 1,579.3 | 2,440 |
| - | Italy | 11,460.9 | 8,411.8 | -27% | Turkey | 240.4 | 12 |
| • | Japan | 39,526.1 | 27,737.6 | -30% | Ukraine | 292.3 | 377 |
| | Kuwait | n.d. | n.d. | n.d. | United Arab Emirate | s 443.7 | 30 |
| | Latvia | 70.3 | 133.7 | 90% | United Kingdom | 74,811.0 | 62,732 |
| - | Luxembourg | 1,273.3 | 1,624.6 | 28% | United States | 386,506.4 | 441,870 |

Source: RCA; Australia, Italy and Finland include C&W figures

APPENDIX 3 GLOBAL OFFICE YIELDS

| COUNT | RY | OFFICE YIELD | COUNTRY | OFFICE YIELD |
|------------|----------------|--------------|----------------------|--------------|
| ٠ | Argentina | 7.50% | Malaysia | 6.00% |
| ¥. | Australia | 4.55% | Mexico | 10.20% |
| | Austria | 2.80% | Netherlands | 4.00% |
| | Bahrain | 8.00% | New Zealand | 5.50% |
| | Belguim | 4.25% | Norway | 3.60% |
| \diamond | Brazil | 8.25% | Oman | 7.80% |
| | Bulgaria | 7.75% | Philippines | 7.50% |
| * | Canada | 4.38% | Poland | 4.75% |
| 82 J | China | 4.40% | Portugal | 4.00% |
| | Czech Republic | 4.40% | Qatar | 7.50% |
| - | Croatia | n.d. | Romania | 7.25% |
| 1 | Cyprus | 5.00% | Russia | 9.00% |
| + | Denmark | 3.75% | Saudi Arabia | 7.00% |
| | Estonia | 6.60% | Serbia | 8.00% |
| +- | Finland | 3.40% | Singapore | 3.20% |
| | France | 3.00% | Slovakia | 6.25% |
| | Germany | 2.50% | Slovenia | 7.75% |
| ±≡ | Greece | 7.25% | South Korea | 4.60% |
| * | Hong Kong | 2.18% | Spain | 3.50% |
| | Hungary | 5.15% | Sweden | 3.50% |
| | India | 7.75% | Switzerland | 3.25% |
| - | Indonesia | 6.00% | Taiwan | 2.63% |
| | Ireland | 4.00% | Thailand | 7.50% |
| | Italy | 3.50% | Turkey | 7.50% |
| | Japan | 3.20% | Ukraine | 12.00% |
| | Kuwait | 8.50% | United Arab Emirates | s 7.75% |
| | Latvia | 6.50% | United Kingdom | 3.75% |
| | Luxembourg | 4.20% | United States | 4.25% |
| | | | | |

ABOUT THE REPORT

THE REPORT

This report has been written by David Hutchings and Carolina Dubanik in our Capital Markets Investment Strategy team with support from the global research group. The report has been prepared using data collected through our own research as well as information available to us from public and other external sources. The transaction information used relates to nonconfidential reported market deals, excluding indirect investment and future commitments. All investment volumes are quoted pertaining to deals of USD 5 million and above, unless otherwise stated.

Alongside Cushman & Wakefield information, data has been used from Real Capital Analytics (RCA). Where the data was sourced from RCA, it is as at 15 February 2019. In respect of all external information, the sources are believed to be reliable and have been used in good faith. However, Cushman & Wakefield cannot accept responsibility for their accuracy and completeness, nor for any undisclosed matters that would impact the conclusions drawn. Certain assumptions and definitions used in this research work are given within the body of the text. Information on any other matters can be obtained from Cushman & Wakefield.

SOURCES

Investment data: Cushman & Wakefield, Real Capital Analytics.

Other sources: Cushman & Wakefield, Oxford Economics, United States Census Bureau, Urban Land Institute, World Economic Forum, World Bank.

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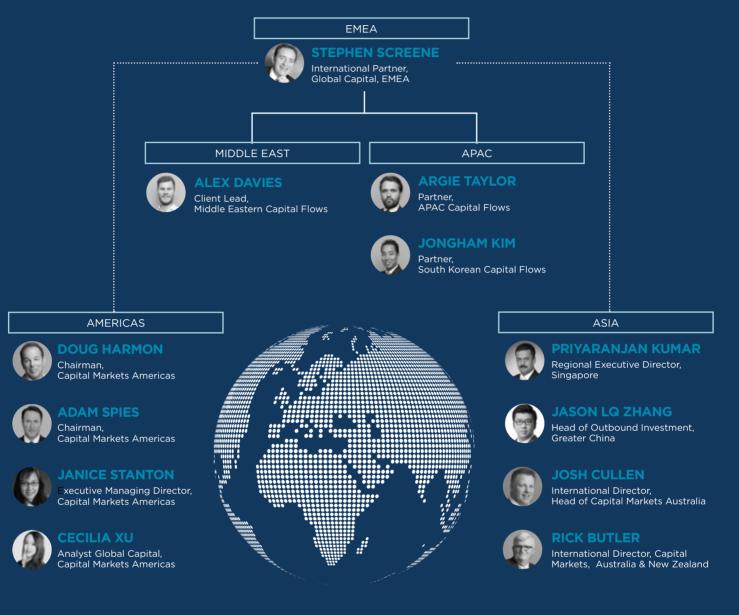
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