In This Report

As interest rates start to move upwards, compression of real estate yields is slowing and investors are looking at a world in which returns are lower than they have become accustomed to in recent years. Concerns about pricing persist, particularly in low-yielding gateway markets.

Income growth is once again playing a more significant role in determining performance and holds the key to assessing the outlook and identifying opportunities. Signs from occupier markets are positive, with many traditional and, increasingly, non-traditional sectors reporting a favorable combination of rising demand and contained supply growth.

Market indicators look strong for now, but with the United States economy in its ninth straight year of expansion, investors are aware that the current cycle will not go on forever. However, they face a dilemma about what to do next.

One approach is to accept low-looking returns on core property while rising interest rates push up the cost of capital and erode the risk premium. An alternative is to take on more risk and invest in markets and strategies that can deliver growth in the near term, benefiting from favorable market conditions to increase capital values.

Taking on measured risk to generate value growth in the near term is an attractive proposition for investors seeking to protect themselves against the prospect of future yield increases, while the use of debt strategies allows some balance between risk exposure and an additional degree of capital protection.

All things considered, investors are focusing on growth. Opportunities vary by region, but fall into four broad categories:

- **Market-level** growth opportunities, in expanding sectors and markets;
- **Active asset management** strategies, to boost values via higher income receipts, through equity or debt positions;
- Favorable **structural trends**, including logistics, and the accommodation and living sector;
- **Value sectors and locations**, including niche property types and emerging markets.
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Part I:

Focusing on Growth
Adapting to Rising Interest Rates

Patterns of real estate returns and investment performance are undoubtedly shifting. Among a host of factors, a key catalyst for change stems from the monetary policy environment. As the global economy finds a surer footing – world GDP growth is expected to rise above 3% in 2018 for the first time since 2011 – major central banks are now reducing liquidity support.

Quantitative easing (QE) programs are being scaled back and market interest rates are edging upwards (Exhibit 1). The U.S. 10-year bond yield – viewed by global real estate investors as a proxy for a universal risk-free rate – has picked up towards 3%, recording its highest level since 2013. Bond yields are also rising in other major economies, including Germany and the United Kingdom.

EXHIBIT 1: GLOBAL INTEREST RATES AND REAL ESTATE RETURNS

Financial market discount rates – the rate of return required by investors to compensate them for forgoing capital they hold today in expectation of future receipts – are rising as part of the so-called “reflation trade.”

Put simply, the reflation trade is the process by which investors adjust their portfolios to reflect a transition away from the low inflation, low interest rate environment that has dominated in recent years, to a more expansionary backdrop, driven by a reacceleration in the U.S. economy and an improving growth outlook in Europe and emerging markets. Other things being equal, a higher bond yield pushes up the risk-free rate of return, in turn raising the rate at which risk assets – including equities and real estate – are discounted.
As required returns start to edge upwards, global property markets are approaching an inflection point. In a reversal of the pattern reported in the earlier part of the current cycle, occupier market momentum is positive, but pricing momentum is slowing, as higher rates mean that investors are unable to accept ever-lower yields on their investments.

MSCI Global All Property Returns have eased to about 7% since the start of 2016, having averaged 9% over the previous five years of the current cycle. On a relative basis, real estate returns still look compelling, but excess returns are narrowing.

Since the current cycle began in 2010, global real estate markets have delivered a realized risk premium of 6.1% over the risk-free rate. However, the recent pick-up in the U.S. 10-year bond yield is already eating into the premium real estate investors receive. Expected future rate increases threaten to dampen the premium further, unless income growth accelerates significantly.

Despite concerns about slowing returns, many investors are still aiming to increase their allocations to real estate, and market liquidity remains plentiful. The challenge for new and existing investors alike is to adapt to a world that offers less yield compression, implying an environment in which sourcing deals and generating target returns is tougher than in recent years.

Low yields mean investors are finding it harder to meet target returns by simply acquiring core, stabilized assets in major cities. Instead, they are increasingly focusing on sectors and geographies that offer growth potential, or turning to higher risk, higher return, core plus and value-add strategies, essentially seeking to boost values by improving the scale or quality of cashflow being generated by higher-yielding secondary assets.
Low Yields, Slowing Returns

Yield compression, which has been a key driver of real estate performance in recent years, is slowing and a moderation of returns is underway. During 2017, prime yields declined across most major sectors globally, albeit at a slower pace than in recent years (Exhibit 2). By sector, yields are still compressing in non-Central Business District (CBD) office and logistics sectors, which are reporting improving occupier fundamentals, while pricing pressure is limited in the retail sector, which features a weak demand story owing to rising online sales.

Yields are approaching a floor in many parts of the market, especially in gateway cities where fierce competition for assets has driven pricing above historic highs. Fewer markets are reporting yield compression and its importance in global returns is fading. Yield impact contributed 2.6% to estimated global all property prime returns in 2017, down sharply from more than 5% just two years ago.

EXHIBIT 2: ESTIMATED PRIME YIELDS AND CITY-LEVEL RETURNS

Sources: CoStar, Cushman & Wakefield, JLL, Real Capital Analytics, PGIM Real Estate. As of May 2018.

Looking across major cities, the picture is varied. However, in most cases, estimated unlevered all property prime total returns – weighted by sector in each city – recorded in 2017 were significantly lower than in the previous three years.
In major gateway markets such as London, New York, Paris and Tokyo, values rose quickly in the early part of the cycle. However, returns have now slowed significantly as already elevated rents start to level off in the face of rising supply and reduced tenant affordability, at the same time as yield impact fades.

Performance is faring better outside of major gateway cities. For example, returns in Singapore have recovered from a counter-cyclical dip caused by excess supply, while markets such as Berlin, Frankfurt and Sydney are reporting relatively late-cycle rental growth across sectors. With vacancy rates also coming down in office and logistics markets in these cities, investors are starting to factor in improved income growth projections, which is fostering further yield compression.
Occupier Outlook Remains Positive

Compared to previous real estate cycles, one factor that remains different this time around is supply. Of the four major downturns recorded since 1980, only the early-1990s correction was led by over-supply, although each of the others were preceded by a cyclical uptick in building completion rates – something which has barely started to happen in this cycle.

In office markets, net additions to stock remain low across most markets, except for a handful of developed market gateway cities – including London, Tokyo, and San Francisco – where rising rents earlier in the cycle prompted a supply response. Reflecting a rapid pace of economic expansion driving growth in key occupier groups, supply growth is also elevated in emerging markets such as Shanghai.

While supply is moderating in most locations, demand conditions remain positive. Based on a simple leading indicator of global commercial space absorption, projected forward based on the outlook for employment and spending, aggregate occupier demand is set to remain above average this year and into 2019 (Exhibit 3). Actual space absorption is a little weaker, mainly because positive signals on consumer sentiment are not translating into rising demand for physical retail stores.

EXHIBIT 3: OCCUPIER MARKET ANALYSIS

Scarcity of space is a key driver of rental growth and cities tend to have a “natural rate” of vacancy, influenced by factors such as occupier mix, lease lengths, planning regime, construction costs and density. Below the natural rate, space availability is constrained enough that occupiers need to compete for available space, bidding up rents in real terms.

Across most major markets, the combination of above-average demand and below-average supply additions recorded in recent years has pushed vacancy below the natural rate, to levels that point towards rental growth. Given that the economic outlook remains positive and supply pipelines remain limited, conditions look set to remain favorable, pointing towards further rental growth in the current cycle.

While offices are performing well in most parts of the world, notably in non-CBD and suburban locations that are benefiting from a lack of space in central areas, the picture varies across other real estate sectors.

There is an ongoing contrast between struggling demand among physical retailers – which continue to be affected by a transition to greater online spending – and logistics demand, which is rising in most parts of the world. Retailers and third-party logistics providers are taking space to meet increasingly challenging supply chain requirements, notably relating to rising demand for same-day delivery.

Land availability means supply is rising to meet demand for major distribution facilities in most logistics markets, keeping a lid on rental growth – although rents are rising on assets in urban infill and “last-mile” locations that serve major population centers, where buildings compete with other higher-value land uses, such as residential properties.
Does Investing in Gateway Markets Make Sense?

For much of the period since the early-1980s, yields in the major gateway markets – a group of large, open, global cities that offer a combination of scale, liquidity and transparency not matched by other locations – traded within a tight 6% to 7% range (Exhibit 4).

Historic norms broke down prior to the global financial crisis of 2008 as property values in major markets were bid up by a combination of excessive financial market liquidity, widespread use of leverage and ambitious growth assumptions. Following a crisis-driven correction, yields have fallen once again over the past five years and are now at historic lows. While the period between 1980 and 2000 was characterized by faster growth and inflation than today, low yield levels are a concern for many investors.

Across a representative sample of 13 gateway office markets, the average prime net initial yield now stands at just 3.7%. With some gateway markets reporting slower rental growth as supply responds to previously strong rental performance, the outlook for returns is modest. As bond yields rise, the risk premium offered is being rapidly eroded, raising the question of whether investing in gateway markets is an attractive proposition today.

EXHIBIT 4: YIELDS, RETURNS AND TRANSACTION VOLUME BY LOCATION TYPE

The risk premium offered is being rapidly eroded, raising the question of whether investing in gateway markets is an attractive proposition today.

Compare to other markets, a combination of low yields, a relatively pronounced slowdown of yield impact and moderating rental performance means that gateway markets are already underperforming a wider index of global all property returns.

Sources: CoStar, Cushman & Wakefield, JLL, Real Capital Analytics, PGIM Real Estate. As of May 2018.
Unlike in previous cycles, gateway markets failed to significantly outperform during the upswing phase, but a prolonged sense of caution among investors in the aftermath of the global financial crisis kept the share of capital they received elevated. Between 2010 and 2016, 35% of all transactions globally took place in the 13 gateway markets, although this figure dropped to 31% in 2017, pointing towards a rotation of capital to other markets.

An increased share of transaction volume is taking place in a group of around 40 “other major cities.” Higher-yielding, secondary cities in the United States, such as Nashville, Portland, and Philadelphia, are all reporting increased transaction volume. Similarly, in Europe, capital continues to target German cities, such as Frankfurt and Munich, along with Amsterdam in the Netherlands, where office rental growth fundamentals are improving rapidly as vacancy drops. In Asia Pacific, Brisbane is benefiting from favorable occupier market momentum, attracting a growing share of deal volume.

To an extent, a rotation away from gateway markets makes sense in a lower returns environment. A simple analysis of returns since 2000 shows that gateway markets tend to outperform when global all property prime market returns are above 10%, but fare more poorly in periods of low growth and downturns (Exhibit 5).

**EXHIBIT 5: GATEWAY MARKET RETURNS AND LIQUIDITY**

Gateway markets offer significant liquidity through the cycle.

Sources: CoStar, Cushman & Wakefield, JLL, Real Capital Analytics, PGIM Real Estate. As of May 2018.

However, there are several reasons why gateway markets are likely to continue to attract plenty of capital. The first relates to scale and liquidity – these cities comprise large built areas, have significant institutional participation and a lot of transactions. Average annual transaction volume in a gateway market is $17 billion per year, compared to just $5 billion per market across the 40 other major cities. In other words, a large investor that chooses to ignore gateway markets will find it hard to find enough real estate to acquire elsewhere.
A second reason is that gateway markets do perform better in the longer-term. When yields are significantly below trend – as per today – gateway markets tend to underperform over a shorter one- to three-year time horizon, but any lost ground is typically regained over a 10-year period. While gateway markets tend to fare poorly in a downturn, they recover quickly – and any investors reducing exposure too much could find themselves missing out on performance in the next upswing period.
All Cycles Are Different

Despite all the positive signals from leading indicators of the economy and occupier markets that are currently being recorded – business and consumer sentiment is elevated in many parts of the world – history tells us that cycles do not go on forever. Compared to history, the current cycle, which is now into its eighth year, is a relatively long one.

For investors actively deploying capital in today’s market – whether in a typical five-to-seven year closed-end structure, an open-end vehicle, or a buy-and-hold asset – it would be sensible to assume there will be a downturn or at least a period of cyclical weakness at some point during the investment hold period.

It is important to stress that rising interest rates are not typically associated with downturns – at least not immediately. History points to the opposite being true while rates are going up. Monetary policy is usually being tightened during periods of faster growth that boost property performance on the occupier side, while elevated confidence about the outlook results in lower risk perceptions, pushing up capital values via a lower risk premium.

Instead, it is when the tightening cycle turns that real estate is more likely to run into problems. Policy easing after a period of tightening implies a renewed concern about the economic growth outlook, raising questions about rental projections. Increased risk aversion leads to a rotation of capital away from risky assets such as real estate, pushing up yields.

Since the end of 2015, the U.S Federal Reserve has raised interest rates by 125 basis points, while other central banks including the Bank of England and the European Central Bank are set to follow suit in the next 18 months. Now that a tightening cycle is fully underway, the risk that interest rates are raised too far, choking off demand and causing a downturn is growing, although policy remains accommodative for the time being.

In any case, accepting that there will be an adverse market event at some point in coming years, the key question is: what will it look like?

While risks can be identified and assigned probabilities, it is not possible to know with any precision what will cause the next downturn or when it will occur, otherwise the market would already have repriced to factor it in.
However, history can act as a guide and contains several insights. The first is simply as a reminder that the global financial crisis was in no way a typical downturn. It lasted for almost two years and global real estate values fell by 3.3% per quarter over that period, which is steep compared to other downturns (Exhibit 6).

### EXHIBIT 6: ANALYSIS OF NOMINAL REAL ESTATE VALUE MOVEMENTS DURING DOWNTURNS

<table>
<thead>
<tr>
<th>When?</th>
<th>Nature?</th>
<th>Region</th>
<th>Peak-to-Trough</th>
<th>Duration (Q)</th>
<th>Chg per Q</th>
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<tbody>
<tr>
<td>Early 1990s</td>
<td>Over-supply</td>
<td>Asia Pacific</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Europe</td>
<td>-20%</td>
<td>13</td>
<td>-1.7%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>United States</td>
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<td>17</td>
<td>-1.3%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Global</td>
<td>-7%</td>
<td>12</td>
<td>-0.6%</td>
</tr>
<tr>
<td>1997-98</td>
<td>Asian Financial Crisis</td>
<td>Asia Pacific</td>
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<td>7</td>
<td>-3.6%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Europe</td>
<td>-20%</td>
<td>13</td>
<td>-1.7%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>United States</td>
<td>-20%</td>
<td>17</td>
<td>-1.3%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Global</td>
<td>-7%</td>
<td>12</td>
<td>-0.6%</td>
</tr>
<tr>
<td>2000s</td>
<td>Dot-com / Tech Occupiers</td>
<td>Asia Pacific</td>
<td>-3%</td>
<td>5</td>
<td>-0.6%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Europe</td>
<td>-2%</td>
<td>5</td>
<td>-0.5%</td>
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<td></td>
<td></td>
<td>United States</td>
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<tr>
<td></td>
<td></td>
<td>Global</td>
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<td>-0.1%</td>
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<tr>
<td>Global Financial Crisis</td>
<td>Financial Shock</td>
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<td></td>
<td></td>
<td>Europe</td>
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<td>8</td>
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<td></td>
<td></td>
<td>United States</td>
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<td>-3.6%</td>
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<tr>
<td></td>
<td></td>
<td>Global</td>
<td>-23%</td>
<td>8</td>
<td>-3.3%</td>
</tr>
<tr>
<td>Average of Past Downturns</td>
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<td>-16%</td>
<td>6</td>
<td>-2.7%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Europe</td>
<td>-16%</td>
<td>9</td>
<td>-1.9%</td>
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<tr>
<td></td>
<td></td>
<td>United States</td>
<td>-16%</td>
<td>9</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Global</td>
<td>-10%</td>
<td>7</td>
<td>-1.3%</td>
</tr>
</tbody>
</table>

Sources: CoStar, Cushman & Wakefield, JLL, PGIM Real Estate. As of May 2018.

While understanding the exact causes of the global financial crisis is still a source of debate, many of the factors that exacerbated its effect – including excessive leverage across the financial system, complex financial engineering and relatively high interest rates – are not present today.

Linked to this, a further insight is that each cycle has different causes and effects. Importantly, the other examples are milder, either affecting one region in isolation such as during the Asian financial crisis in 1997, or being more sector specific in nature, such as in the aftermath of the dot-com crash, when offices were affected by reduced occupier demand, while retail was not, as consumer spending held up.

No one can say for sure what will trigger the next period of market weakness but, when it comes, the analysis demonstrates that the average capital value downturn is typically about 16% peak-to-trough, lasting six to nine quarters. However, there are benefits from diversification: differences in timing and magnitude of value corrections means that a typical peak-to-trough value decline for a global investor is just 10%, lasting seven quarters on average.

As a result, while it may seem prudent for investors to ensure their investments are protected against a global financial crisis-style downturn, such an approach may be excessively cautious.
Focusing on Growth

While the improved global economic outlook and continued low supply growth environment give some cause for optimism, factors such as rising interest rates, fading yield impact, a struggling retail sector, and weaker performance in gateway markets look set to act as a drag on performance.

Inflation is rising, but investors are now looking at a world in which real estate returns – at least on core assets in major markets – are likely to be lower than they have become accustomed to in recent years, implying a dilemma.

One option is to accept low-looking returns on core property in major markets while rising interest rates push up the cost of capital, eroding the risk premium. The effects of a downturn would likely be sharp, implying the risk of underperformance for a while, but history suggests returns would bounce back quickly.

An alternative approach is to take on more risk to boost returns, seeking to benefit from an increasingly favorable economic growth environment and, with the exception of retail, improving occupier market conditions. While indicators point to near-term outperformance, such an approach involves taking on location and asset quality risk that could fare poorly during and after a downturn, when occupier and investment conditions are weaker.

Cashflow is Important

For investors with long-term horizons, it is important not to get too preoccupied with pricing – which is determined by trends in the wider real estate market as well as prevailing financial conditions – and maintain a focus on the primary function of real estate assets: to generate a predictable and durable cashflow over time. In contrast to yields, which are set externally by financial markets, real estate income is something that investors can control.

In recent years, the financial component of real estate values has been heavily influenced by monetary policy and quantitative easing. Central bank liquidity and low interest rates have encouraged capital flows into real estate, driving yields down to historic lows. As interest rates rise, concern about where yields will eventually settle is growing.

Understanding pricing and where it is going is very important, and all investors will aim to avoid short-term capital losses from adverse yield movements where possible.

However, the longer the investment time horizon, the less changes in yield matter in property performance. Based on a simple projection of a hypothetical property, while the effect of a 100 basis points upward yield shift is substantial over one year and reduces the IRR by 10% over a three-year period, its impact is a more moderate 2.5% over a 10-year hold period (Exhibit 7).
Sources: PGIM Real Estate. As of May 2018.

For investors seeking to mitigate the risk of yields rising over time, generating income growth at the asset level is crucial. In the simple example, increasing growth from 2% to 4% a year would more than make up for the capital decline implied by a 100 basis points increase in the yield over 10 years.

Essentially, growth in cashflow can come from two sources, either via market-level increases in rent level, or property-level growth in income receipts, for example by leasing vacant space, improving the building quality to raise rents, adding floorspace, or by leasing under-rented space at reversionary rents.

**Optimal Strategies Change Over Time**

As an investment class, real estate faces a challenge posed by the nature of its underlying assets which are relatively illiquid, heterogeneous, and have a slow, costly transactions process. Such features make the type of trading strategies employed by managers of equity and bond portfolios virtually impossible to execute – except for publicly-traded REIT portfolios.

In turn, the application of a modern portfolio theory style approach – one that effectively assumes managers can swiftly transact between assets at zero cost – to real estate investment is limited. Nevertheless, using its toolkit to analyze the risk-return trade-offs of different asset types and geographies can provide some useful insights and help investors to assess investment opportunities going into the next phase of the cycle.

What is clear is that there is no universal optimal strategy for investing in real estate over time. Splitting global property returns into five distinct periods shows that the combinations of sectors and geographies that would have outperformed varies substantially (Exhibit 8). If nothing else, such findings demonstrate a clear benefit from holding a diversified portfolio.

The optimal holding of apartments tends to increase in a downturn. As the least volatile sector with relatively robust cashflows, it would have been optimal to hold nearly 40% of a portfolio in apartments in the early-2000s and during the global financial crisis, dropping to around 20% when market conditions are stronger.
Structural trends also matter. For much of the period between 2000 and 2015, retail was among the stronger performing sectors in each region, and it would have dominated an optimal allocation, largely at the expense of offices which, in many markets, struggled with oversupply, not least in parts of Europe where there was a legacy of overbuilding that pushed up vacancy rates significantly.

More recently, the trend has reversed, with the optimal allocation to retail dropping sharply over the past two years owing to challenging conditions for retailers, rising vacancy and weak rental growth. Meanwhile offices are reporting faster rental growth as available supply has come down significantly in the low-building environment.

Similarly, the United States dominated the early part of the recovery period after the global financial crisis, while Europe and Asia Pacific have fared better over the past two years. In contrast to flattening yields in the United States, many European markets are still reporting some yield compression, while Asia has a number of markets, such as Brisbane, Osaka and Singapore, that are reporting a late-cyclical uptick in growth.

However, the key point is that market themes and conditions will determine which sectors and regions fare best in the coming years. Office and logistics look set to remain favored over retail, but another downturn would point towards an increased attractiveness of apartments and – based on their similar characteristics and returns profiles – other accommododation and non-traditional living real estate sectors, such as senior living and student housing.

The Rise of Non-Traditional Sectors

Reflecting improvements in global GDP growth and falling unemployment, global inflation is gradually picking up, and is expected to rise to 3.2% in 2018. Within the aggregate figure, there is a contrast between price growth of 6.1% across...
emerging markets – more or less unchanged over the past few years – and 1.9% in developed markets, which is up sharply from an average of 1% recorded over the past three years. As such, global investors with some balance of holdings between developed and emerging markets are effectively contending with inflation in a range of about 2% to 3%.

As a real asset, one key characteristic of real estate is an ability to deliver cashflows that offer a degree of protection against inflation. In some instances, inflation protection is available directly via long index-linked leases, but more typically it comes through growth of market level rents over time to keep up with inflation. In sectors or markets that offer low or negative real rental growth – typically those with abundant land or few supply constraints – higher income yields compensate investors for the deterioration of the real value of a cashflow over time.

While inflation is edging up, real estate yields are historically low, implying a need to generate cashflow growth to protect property values in real terms. Across mainstream property sectors, rental growth is positive, though perhaps not as strong as might be expected during an expansionary phase of the cycle, especially given positive readings from sentiment indicators, such as hiring intentions.

The upshot is that relatively few parts of the market are delivering rental growth that is substantially above the current pace of inflation (Exhibit 9). In particular, retail assets – which were among the best performing prior to 2015 and comprised 20% of transaction volume over the past decade – are struggling to generate any rental growth in a challenging occupier environment.

With a number of office markets in emerging nations – often a source of rapid growth owing to the fast expansion of their occupier base – suffering from oversupply, mainstream real estate sectors are offering a declining opportunity set for investors that are looking for market-level rental income growth.

**EXHIBIT 9: RENTAL GROWTH BY SECTOR AND TRANSACTION VOLUME BREAKDOWN**

Sources: CoStar, Cushman & Wakefield, JLL, Real Capital Analytics, PGIM Real Estate. As of May 2018.
In part, the lack of market rental growth is pushing investors towards value-add strategies in major cities and sectors, with the low supply environment conducive to repositioning assets and increasing cashflow. However, as an alternative, many investors are looking more widely to other “non-traditional” real estate sectors aiming to capitalize on their higher income yields and growth potential – as well as finding a way of physically meeting rising real estate allocation targets.

Since 2009, the share of capital flowing to the traditional commercial sectors of office, retail and logistics has fallen from 80% to just 64%. At the same time, the share of apartments – a mainstream sector in Germany and the United States, but less so elsewhere – as well as hotels and other non-traditional sectors have risen substantially. In each of the past three years, these sectors have attracted about $350 billion of transactions combined.

A similar rapid increase in capital targeting non-traditional sectors occurred prior to the global financial crisis. As the so-called “search for yield” intensified, excess liquidity pushed investors into little-known fringe assets. Liquidity quickly dried up in the aftermath of the crisis, leaving investors in non-traditional sectors exposed, but the rotation of capital looks more durable this time around, not least because transparency has lifted and institutional participation is higher.

Non-traditional sectors appear to be here to stay. Among factors that explain the rising popularity of non-traditional sectors today is a perception that favorable structural trends can provide a source of growth and give values defensiveness in the long-term. In the current low-returns environment, the ability to raise rental income and enhance the building value via effective management of operating businesses is also attractive.

Unlike wider demographic trends, which are weak in many parts of the world, inner city populations are rising, supporting apartment demand. Furthermore, growing student numbers and, in most parts of the developed world, rising elderly populations point towards opportunities to provide niche, specialist accommodation assets serving various segments of society.

At present, the fastest increases in investment activity are being recorded in the “accommodation and living” sector, which encompasses apartments and hotels, along with other forms of accommodation such as manufactured homes – a fast-growing sector in the United States – student housing and senior living.

Rental income is growing in these sectors too. In Europe and the United States, hotel revenue per available room (RevPAR) has been growing at about 5% per year since 2014, linked to a cyclical upswing in business-related demand that has boosted occupancy, modest supply growth and, in many cities, rising tourism-related demand. In the UK, student housing rental growth is currently running at 3.5%, while senior housing rents are expected to rise by 2.5% per year over the next three years in the United States.
Part II: Regional Perspectives and Investment Opportunities
Investors Face a Dilemma

Given that higher bond yields play a role in pushing up required returns, investors face a difficult choice. One option is to capitalize on favorable short-term market momentum and take on property-level risk to underwrite target returns, increasing exposure to a value correction. An alternative is to pull back from the market and de-risk, which implies the prospect of incurring a significant opportunity cost, missing out on strong conditions for leasing momentum, deal flow and capital raising that are currently being recorded.

On balance, with growth as a route by which investors can protect themselves against future yield increases, taking on measured risk in the near term remains an attractive proposition, supported by factors such as improving global GDP growth and low supply, as well as an understanding that a future market downturn may not be as severe as the last one.

Opportunities in today’s market differ across regions but can be categorized into four groups. Market-level growth opportunities exist in Asia Pacific office markets, which offer scale and improving rental performance. In Europe, as well as in parts of Asia Pacific, elevated pricing on core offices, combined with a strong leasing environment, means that active management strategies – via equity or debt investments – look set to deliver more attractive returns, especially as supply growth remains low.

Favorable structural trends are driving the opportunity set in the United States and Europe. Logistics markets are attracting a lot of interest and look set to continue to deliver strong performance as e-commerce grows. Similarly, accommodation and living sectors – including suburban apartments in the United States, and hotels in Europe – are benefiting from rapid improvements in operating performance.

Finally, there are value sectors and locations, which are currently less favored among investors but are set to grow in scale, depth and institutional participation over time. In the United States, the outlook for niche sectors – including senior housing, manufactured housing, and data centers – is bright, while in Asia, emerging markets such as South East Asian nations and India are going through a period of rapid economic progress and improving transparency.

One option is to capitalize on favorable short-term market momentum and take on property-level risk to underwrite target returns, increasing exposure to a value correction. An alternative is to pull back from the market and de-risk.
Americas

Economic Outlook is Supportive

The U.S. economy is entering its ninth year of expansion, continuing to provide a favorable backdrop for real estate returns. Just as the overall economy has shifted from being supported by aggressive monetary policy in the early years of the current expansion to one that is underpinned by investment and consumption growth, U.S. real estate returns are now supported by income growth rather than yield compression.

U.S. GDP growth is set to accelerate in 2018, boosted by business and consumer sentiment readings that are at their highest levels since the early 2000s. Job growth remains broad-based, and labor markets are tight by historic standards, supporting further wage growth.

Financial markets have responded positively to a range of pro-business tax reforms and deregulation measures introduced over the past year. However, this has been offset somewhat by concerns about rising interest rates as well as moves towards trade barriers in recent months that have contributed to increased equity market volatility in recent months.

The Federal Reserve remains in tightening mode, shrinking its balance sheet and raising the target interest rate. Unlike in other parts of the world, policy tightening has been going on since 2015.

Investor Appetite Increasingly Selective

Ample capital continues to flow into real estate. Transaction volume remains broadly in line with its five-year average, and is roughly flat year-over-year (Exhibit AM1). However, that average obscures clear differences in activity across and within property types, reflecting pricing differentials and the outlook for occupier fundamentals.

The retail and industrial sectors most clearly illustrate investor selectivity. Sales of industrial properties increased by 24% over the past 12 months, partly due to a sustained occupier demand boost from e-commerce growth. Retail property sales declined by 24% over the same period mostly for the same reason – store closures have increased over the past year due in part to e-commerce growth.

Other property types show a gradual drift towards higher yielding investments. In the apartment sector, tertiary markets are attracting more investment, while gateway-market volumes are lower. Similarly, relatively high-yielding suburban and non-gateway office investment has held up, while CBD sales are down by 25% over the past year. Much of the CBD investment slowdown is due to a pullback in low-yielding gateway markets, particularly Manhattan.
Moderating Real Estate Returns

Returns have stabilized across all sectors in the United States. Capital appreciation has slowed as already-low yields are edging down only marginally, and are rising in the out-of-favor retail sector.

In 2017, NCREIF All Property Total Returns moderated to about 7%, which is well below the pace of the post-2010 period (Exhibit AM2). The industrial sector continues to outperform the other major sectors by a wide margin, owing to a favorable combination of net operating income (NOI) growth and strong investor demand supporting pricing.
While historically-low yields continue to challenge investors striving to meet absolute returns targets, core real estate currently is fairly-priced against most other financial assets, such as corporate bonds. However, there are concerns that real estate is starting to look slightly expensive against U.S. Treasuries (Exhibit AM2). As capital appreciation has slowed, investors are allocating less capital to mainstream property types in major gateway markets, seeking higher yields and potentially higher income growth.

**Occupier Markets on Solid Footing**

With yield compression no longer boosting returns, occupier performance is in the spotlight. Supply and demand remain balanced across most property types in the United States, providing ongoing support for occupancies and rents.

The sustained surge in forward-looking indicators – including business and consumer sentiment – suggests tenant demand should gain momentum. For example, high business confidence historically has been a good predictor of increased office demand. While that relationship has not held in recent quarters, elevated business confidence points towards increased space requirements and rising absorption during 2018 (Exhibit AM3).
Elevated business confidence points towards a pick-up in leasing activity.

Note: Optimism Index is an equal-weighted average of the NFIB and Duke optimism indices.
Sources: NFIB, Duke, CoStar, PGIM Real Estate. As of May 2018.

There are positive signals in other sectors too. Apartment demand remains buoyant, owing to job and wage growth in the key 20 to 40 age bracket, while the rise of e-commerce continues to propel industrial demand. Industrial occupancy remains near its highest level in a generation and rent growth is still running close to a 6% annual pace, well above historic averages.

Set against solid demand drivers and given low vacancy rates in most markets and sectors, the construction cycle remains modest in a historical context (Exhibit AM4). Notably, given the incremental nature of the office market recovery, lenders remain particularly cautious towards office development. While modest levels of speculative development are showing up in a handful of gateway and technology-driven office markets, notably the San Francisco Bay Area and New York City, most construction is still limited to build-to-suit and projects with significant pre-leasing.
Supplementary text:

Sources: Axiometrics, CoStar, PGIM Real Estate. As of May 2018.

One sector that has bucked the trend is apartments, for which development has been very active throughout this cycle, reining in rental growth that had accelerated rapidly in the expansion phase when demand was running above its long-term average. Despite increased deliveries, vacancy remains low and construction activity is peaking, which should support rental growth, notably in Sunbelt markets and suburban locations where renter demand is growing.

In industrial markets, supply is barely keeping up with demand, although building has ramped up in selected major national and regional distribution hubs, such as the Inland Empire, Dallas, and Phoenix. However, net additions remain low compared to demand in supply-constrained coastal markets such as Los Angeles, greater New York and Miami, where vacancy rates are all below 5% and much lower in submarkets that are adjacent to central areas.

In contrast with other property types, the main source of available retail space is vacancies created by departing tenants, rather than new construction. Traditional indicators of health for retail markets – including falling unemployment, rising wages, and increasing consumer confidence – are positive, supporting robust retail sales growth, but much of this is feeding through to e-commerce rather than in-store sales. While vacancies remain at historically low levels, they are likely to begin to move higher over the near-term, with further store closures due to bankruptcies and non-renewals.

However, not all is doom and gloom in the sector. Amazon’s purchase of Whole Foods in mid-2017 demonstrated the value of a strong physical retail presence in an omni-channel model. Increasingly, landlords are looking for ways to differentiate by offering a mix of service and experience-oriented tenants in their malls and centers, such as restaurants, salons, and fitness centers.
Latin America Outlook Improving, But Liquidity in Short Supply

Latin American economic prospects and real estate demand are improving, owing to favorable conditions in the United States, rising commodity prices, and accommodative monetary policy. However, the upcoming elections in many countries, including Mexico and Brazil, as well as the possibility of deteriorating global trade conditions, remain a source of uncertainty.

Despite the most favorable economic backdrop in Latin America for some time, there is a contrast between the performance of different markets and sectors. Mexico is benefiting from strong industrial demand, related to accelerating consumer spending growth in the United States, which is driving an ongoing expansion in the manufacturing sector. Industrial vacancy rates in Mexico are at historic lows.

International retailers are also leasing modern store space in Mexico. In contrast, office supply pipelines are still swollen with projects started years ago, keeping vacancy rates high and weighing on rental growth in markets such as Mexico City and, in Brazil, Rio de Janeiro and Sao Paulo.

Unlike in other parts of the world, uncertainty and mixed occupier performance are weighing on investor demand. After steadily declining between 2011 and 2016, transaction volume stabilized over the past year, but at a low level. Just $5.3 billion of deals were completed across the whole region last year – down significantly from the $13 billion recorded in 2011.

The nature of opportunities in Latin America remains selective. Unlike in previous cycles, slowing returns in developed markets are not yet ushering a wave of capital towards emerging markets like Mexico and Brazil. Instead, investors in the United States that are looking for higher yields and growth potential are taking on more risk domestically – for example via value-add strategies – rather than expanding their horizons geographically.

Investment Opportunities

With pricing still elevated in major markets across the United States, there are signs that investors are moving up the risk spectrum in search of assets with a combination of higher income yields and growth potential.

Supply growth remains low across most sectors and markets, due to a combination of historically tight lending standards and rents that have only recently risen to levels justifying new construction. Industrial markets continue to enjoy a prolonged rise as they benefit from a structural shift in consumer behavior. For investors looking for income-driven returns, secondary markets offer both solid income growth potential and substantially higher yields than gateway markets.

Investors are also looking outside core sectors, which is typical in the later years of an investment cycle. In addition to offering higher yields, many non-traditional and niche property types – such as senior housing and data centers – stand to benefit from structural demand tailwinds that could propel sustained income growth as well.
1. Logistics

Spending patterns and consumer demands are evolving rapidly, giving rise to investment opportunities in logistics markets across the United States.

The acceleration in e-commerce continues to propel the rapid evolution of consumer-oriented supply chains. This structural shift is giving rise to investment opportunities in industrial markets across the United States as retailers shift their emphasis away from expanding physical retail space and towards improving their supply chains. Completions of new distribution space are now picking up – but not yet matching demand growth – and vacancy continues to decline to historic lows (Exhibit AM5).

**EXHIBIT AM5: U.S. INDUSTRIAL DEMAND AND SUPPLY**

Sources: CoStar, PGIM Real Estate. As of May 2018.

Demand for next-day delivery is creating opportunities outside traditional freight hubs, in logistics markets serving large population centers, such as Denver, Boston, Orlando, and Minneapolis. Distinct from expensive urban infill locations – of which so-called ‘last-mile’ sites command a significant premium – smaller tactical distribution centers are gaining popularity as they enable fast delivery times in locations historically served from major national hubs in two or three days.

At the same time, traditional national distribution hubs remain important components of the supply chain – the five largest industrial markets accounted for 56% of net absorption in 2017. Logistics space located close to key transport interchanges continues to offer rental growth potential in both constrained coastal
markets and non-coastal markets such as Chicago, Atlanta, and Dallas-Fort Worth. Within these markets, logistics assets located close to intermodal links command a rent premium and typically outperform.

## 2. Suburban Apartments

The opportunity in the apartment sector is evolving towards better performing Class B, suburban assets with walkable-amenities and good transit access.

The population swell of millennials – a broad term used to describe young people currently in their twenties or early thirties – has helped support sustained robust demand for apartments throughout the cycle. Supply has responded to the fast pace of rental growth recorded between 2011 and 2016, although most development this cycle has been focused on luxury apartments in urban locations. As a result, rents for expensive units in urban core locations are coming under pressure, with landlords offering rent-free periods to secure tenants.

As the millennial cohort ages, the preference for larger living spaces – along with factors such as proximity to good school systems – will support increased demand in suburban locations, most notably for assets with walkable-amenities and good transit access. At this point in the cycle, better development prospects are likely to be found in well-located suburban submarkets where construction has been less prevalent.

Furthermore, while rising construction costs often mean that building Class A units provides best returns from a development perspective, the focus on highly-amenityzed Class A construction over the past decade has led to a relative dearth of value-oriented workforce housing. Well-located Class B apartments, either in urban or suburban locations offer higher yields and, at least recently, more income growth (Exhibit AM6).
EXHIBIT AM6: U.S. APARTMENT OCCUPANCY AND RENTS

The characteristics of apartment markets vary by location. Over time, markets that offer a favorable combination of demographic trends and supply constraints – notably West Coast markets such as Los Angeles and San Francisco – tend to outperform cities where factors such as planning and construction are more flexible.

3. Niche Sectors

Increased investor interest in non-traditional property types goes beyond a search for higher yields as many also offer stable and growing income.

In a slowing returns environment, there is growing interest in non-traditional property “niche” investment sectors – including senior housing, manufactured housing and data centers – that offer a combination of income growth potential from structural improvements in demand, along with higher yields due to a relative lack of scale and transparency.

Transaction volume has increased, although liquidity, especially in a potential downturn, remains unproven. At the same time, most niche sectors continue to maintain substantial yield spreads against mainstream commercial real estate (Exhibit AM7).
Given attractive relative pricing, investors are looking at structural trends to guide opportunities. For data centers – which currently offer a nearly 200 basis point yield premium – demand is growing rapidly owing to the rapid expansion of internet usage and corporate-based cloud computing. Various technological and regulatory factors pose a threat in this sector, but shell facilities in network-dense locations with access to several robust internet exchanges – such as Northern Virginia, Chicago, and the Bay Area – that feature long-term leases to investment-grade tenants offer value in today’s market.

Senior housing stands to benefit from gathering demographic tailwinds. The number of U.S. residents aged 75 or over is set to grow significantly, pointing towards increased demand – the amount of senior housing units required could rise by 379,000 over the next decade. Supply has risen to meet some of this demand, dampening rental growth a little, but opportunities remain attractive in the medium-term.

Similarly, favorable demographics support the outlook for manufactured housing. The sector has similar demand drivers to apartments, though the tenant base is primarily comprised of low- to moderate-income households, particularly retirees. The sector benefits further from high barriers-to-entry and a more stable NOI growth profile compared to other property sectors, while offering relatively higher cap rates, lower capital expenditure needs, and stronger cash-on-cash yields.
Asia Pacific

Solid Real Estate Fundamentals

Economic conditions remain mostly buoyant across the Asia Pacific region. GDP growth was better than expected in 2017 and business sentiment and consumer confidence readings point to favorable ongoing momentum. Economic expansion is being driven by domestic demand growth – underpinned by rising consumption and corporate investment spending – and intra-regional trade activity.

Across Asia Pacific’s real estate markets, leasing fundamentals remain mostly favorable, reflecting the positive economic backdrop. In the office sector, major Asian markets continued to see healthy broad-based occupier demand, driven by strong employment growth, notably among financial and technology occupiers.

The most rapid increase in take-up is being recorded in markets such as Shanghai, driven by take-up by multinationals in decentralized submarkets, along with Osaka and Singapore, where corporate occupiers are expanding. Among other major markets, Tokyo and Sydney are seeing slower activity, although demand remains firm and leasing is being held back by a limited supply of available space, as office vacancy is low and many projects under construction are fully pre-leased.

EXHIBIT AP1: ASIA PACIFIC OFFICE RENTAL GROWTH

As a result, rents are rising across major office markets and the range of rental growth is shifting gradually upwards to its best position since 2011 (Exhibit AP1). Except for a few markets – such as Brisbane and Shanghai, which have high

Sources: JLL, PGIM Real Estate. As of May 2018.
vacancy rates, or Beijing CBD or Jakarta where the pipeline is significant – demand is set to outpace supply, pointing towards broad-based rental growth prospects for office markets across the region.

Outside the office sector, consumer sentiment and household spending remain buoyant, supporting demand in retail and logistics sectors. However, as with other parts of the world, both sectors are undergoing structural changes.

Owing to the strong growth of e-commerce, total take-up of logistics space in Asia has tripled to about two million square meters per year over the last five years. As growth of online sales continue to outpace spending in physical stores in most parts of the region, demand for logistics is likely to remain strong, supporting rental growth – particularly in China, Australia and South East Asia, although Tokyo is weakened by a significant increase of new supply expected in the near term.

Under pressure from the secular rise of online spending, the retail sector performance remains polarized. Medium sized, sub-regional malls are struggling, while footfall, occupancy and rental growth are holding up relatively well in CBD and tourist-driven retail locations.

Investment Activity Holds Up Despite Slowing Chinese Capital Outflows

Investment activity is holding up across Asia Pacific, reflecting a sense of optimism about the outlook for the economy and occupier markets. Despite concerns that capital controls in China will dampen investor sentiment, transaction volume of income-producing assets – a measure that excludes land sales – rose 10% to reach $150 billion in 2017, although the composition of players and target markets is changing (Exhibit AP2).

Asian investors remain active. Domestic capital sources remain dominant, but intra-regional investment spending – capital flowing across borders, but within Asia Pacific – rose by more than 30% for the second year in a row in 2017. While large developed markets, such as Australia and Japan, continue to attract a significant share of capital, interest is growing most quickly in higher growth markets. Capital inflows recorded by South East Asian nations have doubled over the past year.

In contrast, global investors – predominantly from Europe and North America, which typically account for just under a fifth of the investment market – became less active. Sydney, Melbourne, and Tokyo remain among the top Asia Pacific cities attracting global capital inflows marking a clear diversion with intra-regional capital, as cross-border Asian investors are shifting their focus to Singapore, Hong Kong and Shanghai.

While capital continues to flow into China, capital controls imposed to restrict outflows in late 2016 are starting to affect activity among its overseas investor base. Net acquisitions by Chinese capital sources in the Asia Pacific region have declined by almost 50% since peaking in mid-2016 – although China- and Hong Kong-based investors remain highly active in the European market.
As the Chinese government builds pressure on financial organizations to improve their balance sheets and reduce financial risks, there are concerns that widespread action could trigger a sharp wave of foreign asset dispositions. However, for the time being, only a handful of corporates are showing an increased level of stress and the amount of assets being put on sale remains small.

**EXHIBIT AP2: TRANSACTION VOLUME SUMMARY – ASIA PACIFIC**

The buoyant economic outlook and positive momentum in occupier markets across the region is supporting sentiment, and investment activity is set to remain steady in 2018. However, availability of stock and elevated pricing continue to be a barrier limiting both the volume and speed of transactions.

**Yield Compression Cycle Set to End**

For real estate investors in the region, borrowing costs are starting to edge upwards, although the extent of future interest rate increases remains uncertain. While central banks across Asia Pacific are set to respond to recent tightening by the U.S. Federal Reserve, a lack of inflation pressure allows a degree of flexibility in several countries, particularly in Australia and Japan where rates are set to stay on until at least 2019.

Even so, bond yields are forecasted to follow the United States to some degree, rising from about 2% across developed markets at the end of 2017 to 3% over the next five years (Exhibit AP3). At the same time, steady yield compression in recent years means that prime property yields are at or close to historic lows in most major Asia Pacific markets.

The improved occupier market outlook is pushing up income growth expectations, helping to preserve the risk premium on offer – but there are signs that the pace and scope of yield compression is slowing. The number of markets recording yield compression fell across all major sectors during 2017.
EXHIBIT AP3: INTEREST RATE PROJECTIONS AND BREAKDOWN OF YIELD MOVEMENTS

![Graph showing 10-Year Government Bond Yields and Percentage of Markets Reporting Falling, Stable, and Rising Yields.]

Rising interest rates in the United States point towards tighter monetary conditions across Asia Pacific. Fewer markets reporting yield compression.

History suggests that some further yield compression is possible, as interest rate tightening cycles are associated with an improving economic environment and strong rental growth prospects. However, the starting point for yields is normally much higher than today and investors are increasingly cautious on pricing, particularly in low-yield markets.

**Growth to Drive Capital Values**

Real estate fundamentals are set to become a more significant factor driving capital growth across Asia Pacific. Over the last few quarters, rental growth is gradually becoming a larger driver of capital growth, its impact in the office sector rising from 2% at the end of 2016 to 3.1% by the end of 2017 (Exhibit AP4).

An anticipated shift away from yield-driven capital value movements represents a return to a more typical environment. Between 2000 and 2014, yield impact played a lesser role – with capital value growth driven mostly by rental growth. In the last three years, rental growth has been more modest, leaving value growth driven largely by declining yields across the region.

Sources: Oxford Economics, JLL, PGIM Real Estate. As of May 2018.
As yield impact diminishes, performance of fundamentals is set to be a key determinant of market performance, something that is already happening in late-cycle expansion markets, such as Brisbane and Osaka, where ongoing rental growth is the primary driver of strong return expectations given their already narrow yield spreads against major gateway markets.

In several office markets, growth prospects are aided by very low development rates. Apart from Tokyo and Beijing, most major markets are expecting new supply to be significantly below its 10-year average, as a lack of development sites and tighter bank lending conditions are limiting construction activity across the region. Leasing conditions are set to remain favorable for landlords, boosting rental growth prospects and potential for capital value uplifts.

There are other sources of growth potential too. Infrastructure investment – in the form of street pedestrianization in Sydney, new subway lines in Singapore and Seoul, or expansion of high speed rail network in China – offers a source of growth potential via a re-rating of sub-market rents owing to better connectivity and, potentially, higher-value land uses. Suburban retail in Singapore, decentralized office markets in Shanghai and Seoul, and office and industrial assets across Sydney are well-placed to benefit from infrastructure upgrades.

**Investors Taking on Style and Location Risk**

Current market conditions are characterized by a combination of improving occupier conditions and resilient investor sentiment, yet also by low yields and a declining yield impact on capital values. Investors are finding it increasingly challenging to source and underwrite core stabilized asset deals, which carry substantial downside risks if future growth turns out lower than expected, or if interest rates rise rapidly.
Instead, investors are shifting their focus to finding value in core plus and value-add strategies, seeking to create value through active asset management to improve and increase cashflow. According to ANREV, core is now the preferred style of just 26% of investors – compared to more than 40% over the past three years – while 50% expressed a preference for value-add strategies in 2018 (Exhibit AP5).

**EXHIBIT AP5: INVESTMENT PREFERENCES AND ACTIVITY BY MARKET TYPE**

<table>
<thead>
<tr>
<th>PREFERRED INVESTMENT STYLE</th>
<th>SHARE OF TRANSACTION VOLUME BY MARKET TYPE (4Q ROLLING)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core</td>
<td>Sydney &amp; Tokyo</td>
</tr>
<tr>
<td>Value-add</td>
<td>Other Gateway Cities</td>
</tr>
<tr>
<td>Opportunity</td>
<td>Other Asia Pac.</td>
</tr>
</tbody>
</table>

Interest in value-add strategies is growing at the expense of core.

Sources: ANREV, Real Capital Analytics, PGIM Real Estate. As of May 2018.

Another factor supporting a shift in preferences towards value-add investing is that evolving occupier trends are demanding more intensive asset management than previously. In the retail sector, pressure from the growth of online retailing intensifies requirements for refining the offering to attract shoppers and improve customer experience. Polarized asset performance in the retail market implies an opportunity for skillful managers to benefit from turning around performance of under-managed or “under-threat” assets.

In terms of markets, similar trends are pushing investors towards smaller markets. The share of capital going to major gateway markets – notably Tokyo and Sydney – is falling. In contrast, regional cities like Nagoya in Japan, and Brisbane in Australia, are gaining share, owing to higher yields relatively favorable cyclical momentum on the occupier side.

**Investment Opportunities**

With the yield compression cycle coming to an end, and income growth set to be the main driver of capital value appreciation in coming years, real estate investors across Asia Pacific are broadening their search for new sources of return.

In a fast-growing region like Asia Pacific, investors stand to benefit from an investment approach that combines top-down market selection with bottom-up asset picking to enhance the risk-adjusted return outlook for their investment portfolio.
An improving outlook for economic and real estate leasing market fundamentals should support a further shift in risk appetite, away from a strong focus on pursuing high quality, income-generating assets in core locations towards enhanced-return opportunities in smaller markets, and value-add strategies.

1. Seeking Growth in Office

Strong employment growth continues to support robust demand for office across major developed and emerging markets.

Over the last few years, the office sector – which accounts for about half of the Asia Pacific investment market – has recorded relatively strong rental growth in comparison to other sectors. In general, the retail sector is struggling to generate rental growth – despite some segments such as regional retail in Singapore or high street and tourist-driven retail in Japan and Australia continuing to do better than the sector average. And while there are opportunities in logistics, it is still a small sector, accounting for just 10% of the investment market. The broader base of outperformance in offices implies a deeper opportunity set for investors in this cycle.

Looking ahead, rising employment and an ongoing recovery among key occupiers points a further expansion of office demand. At the same time, supply growth is still moderate – deliveries are set to remain below their 10-year average apart from in Beijing CBD and central Tokyo – and rental growth momentum is set to continue (Exhibit AP6).

Among the more attractive markets are late-cycle expansion markets, such as Singapore, along with Brisbane and Osaka, which have almost no new net supply penciled in over the next three years. There are prospects for further rental growth in Sydney and Melbourne, owing to highly favorable fundamentals, although affordability in these markets is starting to look stretched as effective rents have grown to almost 40% above the pre-global financial crisis peaks in both markets.
EXHIBIT AP6: PRIME RENTAL GROWTH FORECASTS FOR MAJOR OFFICE MARKETS AND OTHER SECTORS

Source: JLL, Oxford Economics, PGIM Real Estate. As of May 2018.

As grade A availability declines in relatively high-rent CBD areas, there is an opportunity for higher-yielding fringe and smaller decentralized submarkets to attract occupiers that are seeking more affordable options. The growth in scale of some decentralized markets – such as Sydney’s North and Paramatta suburbs, and Melbourne’s Docklands – is attracting tenant interest, while strong returns performance appeals to investors.

Similarly, submarkets in greater Tokyo, decentralized Shanghai and Hong Kong’s East are looking attractive with improved fundamentals and a favorable rental growth outlook.

2. Active Asset Management

Active asset management is becoming a more critical driver of growth as occupier markets are evolving rapidly.

Active asset management – the process by which real estate owners receive, modify and grow the income streams associated with their buildings – has always played an important role in optimizing performance. Given the rapidly evolving nature of occupier markets – linked to factors such as accelerating technological advancements and shifting preferences among younger workers – the importance of successful asset management is growing.

The retail sector is an example. Just a few years ago, the market was focused on how traditional retailers could ward off competition from e-commerce. Today, most retailers consider omnichannel strategies as the way forward, in most cases implying lower physical space requirements than would otherwise be the case. Yet
online retail platforms are increasingly opening physical stores, blurring traditional lines and demonstrating that retail asset owners need to actively respond to ongoing changes in retailer business models and consumer shopping habits.

Performance varies across individual markets, even for asset types previously thought to be resilient to e-commerce disruption, such as convenience stores or tourist-driven high street retail. In contrast to Tokyo's Ginza and Omotesando districts, where tourist-related demand has held up, retail malls in Orchard Road in Singapore are faring less well. There is a similar contrast between suburban retail malls in Singapore, which are recovering, while sub-regional retail in Australia is struggling.

The complexity of the retail market environment across markets in Asia Pacific indicates higher risks but, at the same time, also implies a broad opportunity set for asset managers.

Similarly, office and logistics asset owners are finding that the needs of occupiers are becoming more sophisticated. Competition for office tenants, for example, is no longer just about pricing, asset quality or location – factors such as workplace “ecosystems,” along with flexibility of lease terms and space configuration are growing in importance.

Such trends imply risks and opportunities for investors. While older or poorly managed buildings are at greater risk of underperforming, there is an opportunity for skillful managers that can acquire under-managed assets, often at discounts, and actively improve, reposition, or repurpose them to enhance performance and achieve higher returns.

One sector that is being overlooked by investors globally is secondary retail. Across Asia Pacific, spreads between prime logistics and secondary retail assets have risen to their highest level in a decade (Exhibit AP7).

**EXHIBIT AP7: OPPORTUNITY TO FIND VALUES AND BOOST RETURNS VIA ACTIVE ASSET MANAGEMENT**

Sources: Cushman and Wakefield, JLL, PGIM Real Estate. As of May 2018.
While there are risks to the retail outlook, retail sales are growing rapidly in most parts of Asia thanks to rising city populations and real income growth. The lack of interest from investors in recent years has kept a lid on the supply pipeline, especially in markets like Singapore, Melbourne or Sydney. This offers an appealing opportunity for investors to acquire and reposition well-located, but underperforming its potential, assets to boost performance and valuation of the asset as a result.

3. Looking Beyond Established Markets

Finding values and secular growth in new markets and sectors that offer structural demand for real estate beyond the short term leasing cycle.

Across Asia Pacific, the era of low interest rates and quantitative easing provided an abundance of capital and liquidity – much of which focused on major asset types and locations, driving yields down to historic lows. Until recently, real estate investors had considered gaining exposure to lower risk, higher quality assets as the preferred route to deploy capital. Investors have maintained discipline in the use of leverage, and broadly limited their activity to a limited few mature markets that offer liquidity, transparency and generally lower risk premium.

With economic growth becoming more broad-based across markets in the region, investors with higher risk tolerance are increasingly ready to look beyond established markets in their search for assets with growth potential and attractive returns.

New sectors are arising as real estate markets go through significant structural changes. For example, technological progress, demographics shifts and the ongoing rise of production capabilities are prompting a sharp increase in demand for data centers and senior housing.

More broadly, the Asia Pacific economy is forecast to account for 50% of global growth and 60% of the increase in global middle-income population in the next decade. As the regional economy becomes less dependent on exports to other regions and economic development continues, commercial real estate opportunities in emerging markets are set to grow.

Over the last decade, several markets and sectors in Asia have successfully transformed and matured alongside economic and financial market development. One example is Seoul’s office market, in which investors have benefited from structural changes as the market has become more institutionalized, offering more transparency, higher liquidity and lower risk premium. China’s tier 1 cities are now demonstrating a similar path of structural progression.
New emerging markets, including South East Asian nations and India, are currently experiencing rapid economic growth, supporting deeper financial markets and boosting private wealth (Exhibit AP8).

As economic development progresses, growth in demand for residential and commercial real estate as capacity in services and consumer sector increases is set to drive an expansion of the built environment, moving beyond basic needs such as affordable housing and retail.

In the office sector, for example, annual net absorption of grade A office space in major emerging cities including China and India has doubled to 1.6 million square meters over the last five years – almost three times bigger than the aggregate of net absorption in developed Asian markets.

The risks of investing in emerging markets or sectors are tied to opportunities, including lower asset quality, a lack of liquidity and higher market volatility. However, buy-and-hold investors are well-positioned to benefit from further structural improvements over time.
Europe

Positive Economic Momentum

The economic and political backdrop for European real estate markets is the strongest it has been for some time. European GDP growth is running above trend, central bank monetary policy remains supportive and, despite some indicators falling back in the early part of 2018, forward-looking sentiment measures are at cyclical – and, in some cases historic – highs.

Some risks are lingering but, so far, a recent flare up of political uncertainty – extending beyond Brexit to issues such as a renewed push by the Catalan independence movement and populist gains in the Italian general election in March – is not having a material impact on the growth outlook.

The combination of broad-based economic growth, which is supporting sentiment among real estate occupiers, and, compared to recent years, relatively limited political disruption, implies favorable conditions for investors. For now, real estate returns are elevated and capital continues to target European markets, although slowing yield compression hints at a more challenging investment environment to come.

Deals Are Still Getting Done

Europe’s real estate investment markets continue to benefit from positive momentum, despite concerns about pricing. Deal volume rose 12% in 2017, supported by an increase in large portfolio transactions and a partial recovery in the UK – Europe’s largest investment market – as Brexit uncertainty started to ease (Exhibit EU1). In a historical context, the average annual deal volume of €279 billion recorded across Europe since 2015, is higher than the investment pace recorded at the top of the last cycle in 2007, prior to the financial crisis.

Behind the headline numbers, activity is varied by sector and geography. Office, which is by far the largest segment of the market, recorded a moderate uptick in demand, boosted by an acceleration in deal volume in the second half of the year in Amsterdam and – most strikingly – Paris, where occupier conditions and investor sentiment improved significantly following the general election.

Despite an improving outlook for wage growth and consumer spending, retail assets remain largely out of favor as the trend towards a rising share of online spending – previously confined to the UK – spreads across Europe. Instead, investors are tapping into favorable consumer trends by increasing exposure to logistics, where demand is being driven by growth in supply chains, and accommodation and living sectors, such as residential and hotels.
The composition of Europe’s real estate capital markets is changing too. While activity among domestic investors has eased off slightly over the past two years, activity among overseas investors is increasing, encouraged by the improving economic outlook. Global investors recorded the most significant increase in volume in 2017 – focused heavily on key eurozone markets, rather than the historically popular UK – while the share of activity among domestic investors dropped to 46%, some way below its 10-year average.

The last time the share of domestic activity was at today’s level was in 2007, when excessive liquidity and leverage prompted investors to expand their horizons significantly. The question today is whether the increased share of global capital reflects – as it did back then – overstretched investors searching for yield, or whether Europe simply offers an attractive opportunity set and diversification potential on which an increasingly global investor base is seeking to capitalize.

**Yield Impact Widespread…But Can’t Go on Forever**

For domestic investors – although perhaps not global players that can have different objectives, such as long-term capital preservation – pricing is a concern. Prime yields continue to compress, reaching new historic lows and driving double-digit prime returns across much of Europe over the past year – raising questions about their sustainability as the current cycle progresses.

According to a RICS sentiment survey, about three quarters of real estate investors now view pricing in the key core eurozone markets of France and Germany as “expensive” – although some parts of Europe are still viewed as “fairly valued,” including later recovery markets, such as the Netherlands, along with the UK, where values have fallen since Brexit.
Over the past three years, confidence about the outlook has improved and a legacy of caution among investors – that stemmed from the global financial crisis as well as the ensuing period of eurozone turbulence – is abating. Feeling more confident about the outlook, investors have been bidding up pricing, and yield compression has been driving value growth across almost all parts of the market.

In the earlier part of the cycle, pricing recovered most quickly in the top quartile of markets by yield level, a segment that mainly comprises the most sought-after assets in major core European cities – such as Paris, Munich and, prior to Brexit, London (Exhibit EU2). However, with yields now some way below levels recorded prior to the global financial crisis, investors – under pressure to meet target returns – are turning their attention to previously less favored sectors and locations.

As risk appetite improves, markets in the bottom quartile are reporting further compression, taking yields to historic lows. Over the past year, yields in the bottom quartile have compressed by 25 basis points, compared to just 10 basis points across top quartile markets. By sector, an increasing number of non-CBD office and logistics markets are reporting yield compression, reflecting their relative rental growth performance, while pricing momentum in more expensive CBD office and high street retail markets is fading.

**EXHIBIT EU2: EUROPEAN PRIME YIELD ANALYSIS**

![European Prime Yields by Quartile](chart1.png)

**PERCENTAGE OF MARKETS REPORTING YIELD COMPRESSION**

![Percentage of Markets Reporting Yield Compression](chart2.png)

Sources: Cushman & Wakefield, PGIM Real Estate. As of May 2018.

The question is: what comes next? Inflation remains contained, but the monetary policy environment is, very gradually, tightening. The ECB have started to taper asset purchases under their QE program, while the next move in eurozone interest rates is set to be upwards, following the pattern at the Bank of England, which recently hiked rates. Across Europe, 10-year government bond yields are gradually climbing higher in anticipation.

History suggests that yields can overshoot in an upswing, so further yield compression cannot be ruled out in this cycle. However, as risk-free rates rise, the scope for a sustainable further decrease in yields – in absence of a more significant acceleration in growth potential – appears minimal.
Returns Starting to Ease

Yield impact is starting to come out of returns, implying a period of weaker performance to come. Even though yields are still falling in many markets, the pace of compression is slowing and prime returns are slowing (Exhibit EU3). In contrast to the prime segment, average returns, which reflect a broader composition of property by quality, are yet to see a significant effect from declining yield impact: performance picked up in 2017, partly due to a rebound in UK values. However, the correlation with prime is high and it is only a matter of time before the same trends show up in the numbers.

EXHIBIT EU3: REAL ESTATE RETURNS BREAKDOWN

Yield impact typically has less influence over longer time periods.

Sources: Cushman & Wakefield, MSCI, PGIM Real Estate. As of May 2018.

Over longer periods of time, the significance of yield impact diminishes. Since 2010, yield impact has accounted for 40% of total returns recorded. Yet, going back further to 1980 – covering a long period during which property values benefited from a secular decline in interest rates – yield impact only accounts for about 15% of performance. For long-term investors, income and income growth remain key.

The extent to which returns drop further from current elevated levels – unadjusted prime returns are running at 13%, with average MSCI All Property Returns at 9.2% – depends on how much occupier performance improves. However, rent impact is still quite low compared to the last upswing, contributing 3% to prime returns in 2017, compared to an average of 6.5% per year in 2006 and 2007.

Supply Growth Remains Limited

Productivity growth – which supports rental growth potential as it allows occupiers to absorb higher costs – is still relatively low across Europe, but there are other factors supporting the rental growth outlook, including a favorable combination of rising employment and low supply growth.

Across Europe’s office markets, net additions to stock remain low, reflecting a subdued pace of building completions along with withdrawals of older buildings and conversions to other uses such as hotels and residential (Exhibit EU4). At the
same time, wary of repeating the mistakes of past cycles, lenders and developers remain cautious. Yet tenant demand is rising and – even once efficiencies from new trends such as flexible working are factored in – vacancy is coming down quickly, meaning the supply of grade A space is becoming limited.

EXHIBIT EU4: OFFICE SUPPLY ANALYSIS

Supply growth is set to pick up a little, rising back towards 1.3% of existing stock over the next two years – although that pace is still well below historical norms for an expansion phase of the cycle. Forecasts have repeatedly been too strong in recent years, suggesting supply may remain even more constrained than expected – not because of construction projects being delayed or halted, but related to ongoing stock withdrawals.

On the face of it, rents are now at or above a level estimated to support development activity in many markets, suggesting more speculative construction should be taking place. However, almost all major cities are reporting a slower pace of supply additions than during previous cycles.

In markets such as Amsterdam and Frankfurt, a legacy of oversupply from the early-2000s has discouraged new construction for many years. While vacancy is coming down now, developers remain cautious. Elsewhere, the case for a faster pace of development activity looks stronger, not least in markets like Paris and Munich where available space in central areas is very low, and rents are rising sharply.

Looking more broadly, there are differences across commercial sectors. In contrast to offices, most retail formats are struggling to attract and retain tenants. Vacancy rates are creeping upwards, even on previously fast-growing high streets, despite almost non-existent development activity. In logistics markets, tenant demand has been more closely matched by growing investor interest, resulting in better availability of finance for built-to-suit projects to meet expanding demand.

Sources: PMA, Cushman & Wakefield, PGIM Real Estate. As of May 2018.
Where is the Rental Growth?

Faced with low initial yields and the prospects of declining – albeit still positive – returns, investors are looking for ways to generate income growth, supported by a decent economic outlook, improving occupier demand and, in many parts of the market, low supply growth.

Focusing on the market level route to generating income growth – as opposed to strategies to secure asset-level revenue increases, for example via re-leasing, repositioning, or refurbishment of an existing building – recent data point to considerable momentum, particularly in office markets.

Hiring intentions among major services employers have been elevated for some time, and take-up has picked up sharply (Exhibit EU5). Demand is strong across many markets, though the main driver has been the large Paris market, where a quick dissipation of the electoral uncertainty last May fueled an uptick in corporate sentiment and a rapid acceleration in leasing activity through the second half of 2017.

EXHIBIT EU5: OCCUPIER MARKET PERFORMANCE

Over the past year, half of all office markets have recorded rental growth in excess of 5%, with non-CBD markets continuing to out-perform CBDs, reflecting a range of factors including a lack of space in central areas as well as preferences among occupiers in certain sectors, such as technology firms or flexible office providers, for cost-effective space in fringe submarket locations.

Away from offices, rental growth momentum is mainly either decelerating, as in the case of high street retail, or remains moderate.

Rental growth across all retail formats was just 1.3% over the past year, with even previously resilient high streets coming under pressure as retailers close premises and put store expansion plans on hold. Vacancy rates are edging upwards, even
on prime pitches, limiting scope for rental growth in all but a handful of locations including Milan and Rome, reflecting a low online spending penetration rate in Italy.

Logistics markets are reporting slightly faster rental growth than in recent years, not least in the major distribution corridors of the United Kingdom. However, in Continental Europe, factors such as supply chain restructuring and consolidation – along with built-to-suit supply additions, in the Netherlands for example – mean that overall vacancy remains fairly high, despite rising demand.

Like logistics, accommodation and living sectors are gaining attention owing to favorable structural trends, such as rising city center populations, growing student numbers and increased flows of tourists. In the stable apartment sector, where in-town demand is rising, rents face pressure from factors such as regulatory constraints, for example in Germany, and increased supply owing to office conversions.

In contrast, the hotel sector is benefiting from a pro-cyclical pick-up in demand, which is translating into rising occupancy rates, while supply growth remains subdued. Hotel operators are finding themselves able to translate rising demand into higher room rates, and RevPAR continues to grow at 4% per year, a rate which looks attractive compared to mainstream commercial sectors, although new formats, such as Airbnb, pose a threat to traditional operators.
Investment Opportunities

Returns are slowing as yield compression fades, but investment conditions remain favorable in the near-term. With a lot of capital still targeting the sector, the opportunity set remains substantial, despite concerns about how long the current cycle can go on. Looking ahead, opportunities are focused on how to generate rental income growth to boost near-term performance as yield impact fades, and provide some defense against any adverse cyclical value movements to come.

1. Value-Add Equity and Debt

Given a lack of grade A space in the office pipeline, strategies that seek to “create core” remain attractive, along with selected developments.

Europe’s cycle has been going on for some time now and returns are starting to slow. But despite the risk of a value correction over the next few years, value-add deals continue to benefit from positive market momentum and a sizeable opportunity set. Continental Europe remains the focus of attention in the near-term although opportunities are likely to emerge in the UK once Brexit uncertainty has diminished or been more clearly priced in.

Much of the value-add opportunity set is in offices – a sector that accounts for about half of all investment activity in Europe and is currently benefiting from positive rental growth momentum. In many of Europe’s major CBDs, factors such as rising demand, low supply growth and falling vacancy – along with an aging profile of existing stock – point to the ongoing attractiveness of strategies that seek to “create core,” given little grade A space is in the pipeline to meet tenant requirements.

Cities with low vacancy rates are the most obvious target for refurbishment or repositioning strategies. Markets such as Berlin, Munich, Paris, Stockholm and Vienna all have vacancy rates below an estimated “natural rate,” pointing towards ongoing competition for space and prospects for further rental growth in the near term, while allowing investors a degree of confidence about taking on leasing risk. Development strategies look increasingly attractive too (Exhibit EU6).
Nature of Opportunity

Supply Overhang
Focus on existing stock in strong locations, or conversions to retail/resi use

Market Getting Tighter
Reposition older stock to grade A in low vacancy submarkets

Lack of Space
Reposition to grade A across the market, selective development opportunities

Structural Change
Caution

Sources: Cushman & Wakefield, PMA, PGIM Real Estate. As of May 2018.

In other markets the opportunity varies. Cities like Brussels and Frankfurt still have relatively high vacancy rates and require a more selective approach for now, targeting low vacancy submarkets, for example, Amsterdam and several peripheral markets – notably Madrid, Milan and Rome – have a legacy of oversupply that is yet to be fully worked off, limiting opportunities.

Given that many investors are concerned about where Europe is in the cycle, investing via a debt structure – as opposed to an equity stake in a first-loss position – may represent an attractive entry point, trading off a portion of return for an additional degree of capital protection. Given that traditional lenders remain cautious and restricted by regulation, demand for loans made by non-traditional capital providers – in senior or subordinate positions – is expected to remain high, especially for higher-risk deals.

2. Logistics

Rental growth is starting to come through on the back of rising demand for logistics space, while the yield spread versus offices remains high.

Since the 1980s and 1990s – a period in which factors such as transport liberalization and rapid consumer expansion drove, at times, rapid rental growth on distribution facilities – returns on industrial and logistics assets have been driven by income receipts, rather than rental growth. Until recently, efficiency gains among logistics operators and relatively responsive supply conditions have limited rental growth, despite improving demand linked to e-commerce.
Rental growth is coming through in some markets, and upside to the outlook stems from factors such as an acceleration in the shift of consumer spending to online retail along with technological innovations in the logistics space that have the potential to increase the value of space usage (Exhibit EU7). At the same time, yields remain elevated, at least compared to office markets.

EXHIBIT EU7: SHARE OF ONLINE RETAIL AND LOGISTICS RENTAL GROWTH AND YIELD SPREADS

Sources: PMA, Cushman & Wakefield, PGIM Real Estate. As of May 2018.

Looking ahead, conditions look set to become more favorable, implying an ongoing opportunity for investors, notably for built-to-suit projects that can meet and adapt to changing tenant needs, albeit limited by the size of the sector. Even large sites have low land values, so deploying large amounts of capital remains challenging.

3. Accommodation and Living

Supportive structural trends point towards ongoing opportunities in accommodation and living, including in hotels where occupancy is rising.

As the opportunity set in commercial sectors has become more crowded, not least owing to retail’s loss of popularity, investors are looking more broadly at other sectors to deploy capital. Supportive structural trends – such as rising city center populations, an increasing elderly population, and growing tourism demand – point towards ongoing opportunities in accommodation and living real estate.

The amount of capital being deployed in accommodation and living sectors across Europe has grown sharply, rising threefold from an annual average of €25 billion between 2010 and 2011, to €75 billion a year since 2015 (Exhibit EU8).
Sources: Real Capital Analytics, Eurostat, PwC, Oxford Economics, PGIM Real Estate. As of May 2018.

The relatively defensive apartment sector accounts for about half of the accommodation and living investment market, although the hotel sector is gaining in popularity owing to attractive RevPAR growth of 4% per year over the past five years, which has been supported by favorable supply-demand dynamics.

In recent years, demand has grown among tourist and business occupants, while supply – as in many other sectors – has failed to keep pace. Occupancy rates have risen significantly, allowing operators greater pricing power to drive revenue growth.

In terms of characteristics, tourism-driven markets – as determined by analysis of overnight stays and the share of tourism in city GDP – tend to have higher occupancy rates, which enable stronger revenue growth. Unless building rates pick up, demand forecasts remain ahead of the current pace of room additions, suggesting occupancy is set to rise further in this cycle.

For the time being, hotel returns are broadly in line with those recorded on commercial real estate. However, with higher initial yields than office and retail, and conditions that point towards further RevPAR growth, relative performance is set to be attractive in a slowing returns environment in the years to come.
Global Synthesis

How Does the Cycle Play Out?

Real estate is cyclical and, of course, the present cycle cannot – and will not – go on forever. However, capital is still flowing into the sector and an analysis of regional themes and opportunities paints a broadly optimistic picture about the outlook for the next few years.

Most major economies are reporting stable or accelerating GDP growth, supporting occupier demand, albeit with an increasing emphasis on logistics at the expense of retail. Low yields are a concern as interest rates start to rise, but many typical warning signs of a downturn – such as accelerating supply growth, a reversal of financial sentiment, a drying up of credit markets or occupier distress – are absent. At least for now.

Whenever it comes, it seems unlikely that the next downturn will be as uniform as the global financial crisis, where a hit to values was near-universal and virtually inescapable. Next time around, some parts of the market will likely fare better than others. In this vein, investors are already rotating out of struggling retail assets and into faster-growing logistics or non-traditional sectors.

As interest rates rise, the challenges for investors will mount, with income growth looking like the best route to protect values given low starting yields. At the same time, competition for assets that offer growth potential is becoming fiercer, raising the risk for overpaying. Sticking to gateway markets may underperform in the near-term, but, unlike smaller markets, performance will likely bounce back quickly after a downturn.

Debt or Equity?

One way that investors can navigate the tricky choice between taking on more risk – seeking to secure higher income yields or grow values – and rotating into defensive strategies to protect capital values, is to balance their investment approach across equity and debt strategies.

Real Estate Debt

Depending on risk preferences, debt strategies offer an attractive risk-return trade-off in weaker market conditions.

For simplicity, the capital stack for a typical investment can be viewed as comprising several distinct parts. The principal component is the equity – the controlling stake or “sponsor capital” – that can account for anywhere up to 100% of the investment value. Often an equity stake is combined with a senior
debt loan, or mortgage, with the amount of debt determined by a combination of the willingness of a lender to participate and the risk preferences of the equity sponsor.

The distinction between a low-risk, low return senior debt position that is secured against a building value, and a high-returning equity stake in a first loss position is clear. Where the lines get more blurred is with so-called “junior” and “mezzanine” debt positions.

These subordinate loans – often used to fill a gap in the capital structure between debt and equity when a senior loan doesn’t stretch far enough – are effectively a blend, receiving a preferred return that is lower than the equity investor would expect to receive, but in return for a degree of capital protection behind the first loss position.

Assessing how senior and subordinate debt investments perform is tricky as there is little published data outside of, for example, public debt markets such as CMBS or mortgage REITs. However, it is possible to construct synthetic returns for private debt investments using a conceptually similar approach to prime market equity performance indices.

In this case, the approach combines data on property market performance and interest rates with estimates for typical lending margins and LTV ratios for a variety of sources. The returns data that is generated is then sense-checked against existing market data – such as the Gilberto-Levy Index in the United States – and applied out across a wider set of markets. Here the focus is on offices, which offer the broadest set of available data (Exhibit 10).

EXHIBIT 10: ESTIMATED DEBT RETURNS AND DISTRIBUTION COMPARISON

Plotting out returns demonstrates performance characteristics. Senior debt returns tend to be slow and steady, and a portfolio of well-leased, high-quality buildings would have suffered minimal losses, even during the global financial crisis. In contrast, junior loans and higher LTV mezzanine positions are more heavily correlated with equity, the mark-to-market value of a subordinate position rising and falling as real estate values and interest rates move.
The distribution plot shows the risk-return trade-off clearly. Equity investors receive higher returns to compensate for a relatively high chance of negative returns in any given period, and a long tail. In contrast, senior debt investments receive lower, but more predictable returns, with little upside. The excess returns received by junior and mezzanine loans show the trade-off investors require to move up from a senior loan and take on additional risk of incurring losses.

For investors, the ability to blend risk exposure by combining equity and debt instruments is an attractive proposition, particularly at what could turn out to be a later phase of the cycle, when it remains unclear how the pattern of returns will play out.

Confidence in the outlook or belief in the growth potential of a given sector or geography points towards equity positions, turning to core plus and value-add strategies where occupier performance is healthy, but market level returns are slowing.

In contrast, where investors have heightened risk aversion or concerns about the outlook for values, for example in offices in the United States, junior and mezzanine debt positions offer a capital buffer and preferred return, which looks relatively attractive in a lower returns environment.

Debt strategies are advantageous in a low or negative-returns environment, but can also be deployed to generate higher returns, typically in value-add deals or even developments. Participating in such projects often involves sacrificing a regular coupon payment in the early stages of a project in return for a higher-yield accruing interest payment later on and, in some cases, a profit share component too.

**Looking for Value**

Given favorable prevailing market conditions, rising interest rates and the upward pressure on discount rates, finding assets that offer attractive income streams and sources of growth that can deliver target returns in the years to come is imperative – along with keeping an eye on capital protection and locations that will fare well through a downturn.

There are risks out there and investors are rightly concerned about the prospect of policy mistakes – notably if monetary support is withdrawn too swiftly – elevated pricing in core markets, and distress in the retail sectors, which affects many existing assets and portfolios.

The environment for investors is becoming more challenging than it has been for many years, with yield compression no longer to be relied on to generate capital growth. With a downturn sure to hit eventually, the dilemma for investors...
is whether to stick to expensive-looking stabilized assets in major core markets and accept a period of low returns, or whether to take on some risk, and generate value by allocating effectively across markets and managing assets to boost income receipts and values, regardless of how the market cycle plays out.

For investors with an appetite for risk – in what amounts to largely favorable market conditions – opportunities are focused on ways to generate growth at the market-level and at the asset-level, protecting against rising interest rates and upward pressure on target returns by capitalizing on short-term momentum to boost values (see Global Map of Investment Opportunities).
Global Map of Investment Opportunities

**Niche Sectors**
Increased investor interest in non-traditional property types goes beyond a search for higher yields as many also offer stable and growing income streams.

**Suburban Apartments**
The opportunity in the apartment sector is evolving towards better performing class B, suburban assets with walkable-amenities and good transit access.

**Accommodation and Living**
Supportive structural trends point towards ongoing opportunities in accommodation and living, including in hotels where occupancy is rising.

**Value-Add Equity and Debt**
Given a lack of grade A space in the office pipeline, strategies that seek to “create core” remain attractive, along with selected developments.

**Seeking Growth in Office**
Strong employment growth continues to support robust demand for office across major developed and emerging markets.

**Logistics**
Consumer demand is evolving rapidly and logistics rents are rising, pointing to investment opportunities across the Americas and Europe.

**Looking Beyond Established Markets**
Finding values and secular growth in new markets and sectors that offer structural demand for real estate beyond the short term leasing cycle.

**Active Asset Management**
Active asset management is becoming a more critical driver of growth as occupier markets are evolving rapidly.

**Debt Strategies**
Depending on risk preferences, debt instruments offer an attractive risk-return trade-off in weaker market conditions.
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