In This Report

A golden period for global property returns appears to be coming to an end as yield compression slows alongside a positive, but modest, outlook for global economic growth. At the same time, the prospect of rising interest rates is causing concern among investors, but history suggests real estate pricing is typically resilient to tightening cycles.

Key indicators of global real estate investment activity and performance have reverted to previous norms and investor caution is showing signs of easing once again. Low supply growth is supporting the occupier market outlook and, with historically low yields in major core markets, investors are looking for assets and markets that offer higher yields or growth opportunities.

Rather than try to predict when a downturn might occur or what its impact might be, it is more important to look beyond the cycle and assess values we are seeing today in a long-term context. An analysis of the global property risk premium suggests that pricing looks sensible in a long-term context and offers decent protection against a moderate increase in interest rates.

Looking ahead, the challenge for investors is to find the attractive income streams and sources of growth that can deliver target returns. To a greater degree than in recent years, investment performance is reflecting the idiosyncrasies of local markets and global investors stand to benefit from effective portfolio diversification strategies.

Opportunities vary by region, but fall into three broad categories:

- “Growth-driven” strategies, such as value-add redevelopment or refurbishments;
- “Value-driven” opportunities targeting higher-yielding secondary assets and markets;
- Favorable “structural trends”, including alternatives and emerging markets.
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The economic outlook is mixed, but investor appetite for real estate assets remains healthy. Pricing looks sensible against other assets but yields are low and returns are slowing despite solid occupier fundamentals, notably in logistics markets that are benefiting from rising online retail spending. Supply growth is picking up but remains modest compared to history, supporting opportunities in higher-yielding secondary locations and value-add strategies.

Asia Pacific
Leading indicators are positive and real estate fundamentals are improving, although performance varies significantly across markets. Investors are still cautious, but cross-border investment volume is rising. With yields at historic lows, investors are shifting their attention to enhanced-return opportunities in smaller markets, alternative sectors and value-add strategies. In addition, there are opportunities in markets that have underperformed in recent years, which are set to benefit from limited supply.

Europe
Investor sentiment is holding up, apart from in the UK, and yields are falling, though look set to reach a lower bound soon. Returns are set to slow as yield impact fades, but rents still have room to grow from a low base in a low supply environment, particularly in second-tier office locations. Supported by a low cost of capital, there is growing interest in value-add strategies in major markets, and opportunities to capitalise on favorable structural trends in residential and other alternative sectors.

Global Synthesis
Lower correlations and a greater variability in performance of different markets and sectors points towards opportunities for global investors to benefit from effective portfolio diversification strategies.

Global Map of Investment Opportunities

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Part I:
Looking Beyond the Cycle
Investment Markets Normalizing

Capital continues to search for a home in global real estate markets, encouraged by supporting factors such as low interest rates, modest returns on other financial asset classes and ongoing improvements in occupier fundamentals, which are a product of a steady economic outlook – global GDP growth is set to edge back up towards 3% this year after decelerating to its slowest pace since the global financial crisis in 2016. In addition, an ongoing lack of supply in real estate markets is supporting the occupier market outlook.

Key indicators of global real estate investment activity and performance suggest that market conditions appear to be normalizing. On a seasonally adjusted basis, global transaction volume has pulled back, despite a strong fourth quarter rebound last year (Exhibit 1). During 2016, deal volume rose in the U.S. apartment sector, which has strong operating fundamentals, and in China, where domestic capital sources have come to the fore – but overall global investment into income-producing properties dropped 12% over the year. Activity suffered the most in Europe, where a slowdown was driven by heightened political uncertainty in the UK, which is its biggest real estate market.

EXHIBIT 1: TRANSACTION VOLUME AND RETURNS PERFORMANCE

Slightly weaker investment volume has put the brakes on yield compression, which, until recently, has been the most prominent driver of capital growth and returns in the current cycle. Global real estate returns have dipped as a fading yield impact combined with low income yields and only modest improvements in

Sources: Real Capital Analytics, MSCI, PGIM Real Estate. As of May 2017.
occupier fundamentals. At about 8%, all property average global returns are still broadly in line with their average since 2001, but are down from the double-digit pace recorded in 2015.

Importantly for real estate investors with a global or multi-regional focus, correlations across markets have edged down, boosting the potential benefits of diversification. After a period during which returns were being dominated uniformly by liquidity-driven downward shift, there is once again a greater variety of performance across markets. The gap between best and worst-performing individual markets has ticked up and is now back within a typical historical band.

The pace of investment activity and the pattern of real estate returns appears to have reverted to previous norms – but the market backdrop remains anything but normal. In Europe and the United States, market news continues to be dominated by unexpected political twists and turns. Alongside a new administration in the United States, several major European nations are holding elections this year including Germany, which is the continent’s largest economy, and the United Kingdom, which is layering a fresh general election on top of its already complex negotiations to exit the European Union (“Brexit”). Meanwhile, in Asia Pacific, investors continue to watch elevated private sector debt levels in China with concern, although real economic activity has been resilient so far.

The question is how investors react to all this. One of the most significant lessons from 2016 was that political elections ultimately represent a risk that can be quantified as opposed to a downturn-inducing “shock”. At the same time, monetary policy continues to provide significant support to market liquidity and pricing, across risk asset classes.

Low interest rates and liquidity injections, especially in the eurozone and Japan which have extensive quantitative easing (“QE”) programs, have played a key role in boosting global real estate values and dampening the effect of a steady stream of economic and political uncertainty since the global financial crisis.

Pricing in today’s market is weighing on income returns, which are a key determinant of investment performance over the long-term. The global growth outlook is improving from a modest base, but is far from heralding an uptick in the growth side of the ledger for property investors. With further yield shift unlikely as interest rates start to climb from historically low levels, a period of lower returns is likely. Performance over the coming years could look quite different from the recent, post-global financial crisis, past.
Risk Appetite Slowly Returning

In a lower returns environment, there is a question about whether investors are embracing risk and looking at ways to enhance returns, or whether they are shying away from it, focusing on defensive income streams offered – at a premium – by core assets in major gateway markets. Survey evidence and investment market trends suggest that a sense of nervousness among real estate investors continues, as concerns about factors such as heightened political risk, the perceived threat of rising interest rates and elevated real estate pricing outweigh signs of improvement in the global economic growth outlook.

Indeed, global economic growth looks modest in a historical context, while real estate lenders are being restrained by a mix of regulatory burden and caution, despite a historically low cost of capital. With uncertainty still high, investors remain focused on locations seen as offering a safe haven for capital, preferring to look at non-traditional or “alternative” real estate sectors in major cities – moving up the risk curve in core locations – rather than spreading their exposure more widely, confident of a broad-based uplift in demand.

While a focus on core assets and locations persists, there are signs that capital is starting to target markets that can offer more attractive yields and stronger growth potential. In the United States, second-tier markets are commanding a higher share of activity, while in Europe, smaller Eurozone countries are reporting the strongest growth in transaction volume, taking share from France, Germany and the UK (Exhibit 2). Meanwhile, Asian investors are gradually rediscovering an appetite to deploy capital in higher-risk, faster-growing emerging markets.

**EXHIBIT 2: SHARE OF QUARTERLY TRANSACTION VOLUME BY REGION**

While a focus on core assets and locations persists, there are signs that capital is starting to target markets that can offer more attractive yields and stronger growth potential.

Sources: Real Capital Analytics, PGIM Real Estate. As of May 2017.
Of course, a large share of capital is still being put to work in expensive-looking core markets but, even there, signs are emerging that investors are increasingly taking on asset-level risk. In Europe, the gap between indicative prime yields and actual transactions yields is higher than at any time in the last decade in the office and retail sectors, pointing towards an increased preference for lower quality, higher yielding assets. Meanwhile, the share of alternative sectors in global investment volume is rising as investors target assets such as data centers, medical office and student housing that offer an attractive risk premium in return for some combination of increased operating risk, uncertain liquidity and lower transparency.
Yield Compression is Fading

Global transaction volume fell during 2016 but was still elevated in a historical context, suggesting continued competition for deals. However, the volume of capital targeting real estate has dropped slightly, and pricing pressure in global real estate markets has cooled. In many markets with already low yields, transaction volume has only been sufficient to keep pricing stable, rather than drive further yield shift.

Until mid-2016, yields were compressing in about two-thirds of all global markets, across a range of sectors (Exhibit 3). Forecasts for global economic growth that underpin real estate fundamentals have risen only slightly, meaning that loose monetary policy and a reduction in the risk premium has been driving real estate pricing, supported by related factors such as improving credit availability, which allows capital to be spread more widely, and inflows of capital as institutional investors increase their target real estate allocations.

Yields are still moving in globally, but less consistently across markets and at a slower rate overall. By the end of 2016 a more modest 54% of global markets were reporting lower yields compared to a year earlier.

EXHIBIT 3: YIELD SHIFT ACROSS GLOBAL PROPERTY MARKETS

The most notable slowdown in pricing momentum has occurred in the United States, where just 10% of major office markets recorded any yield compression over the past year as investors display greater caution towards markets with historically low yields. Other gateway markets such as Brexit-impacted London and Asian office hubs – most notably Hong Kong, Singapore and Tokyo – have similarly reported a leveling off in pricing at historically low yield levels.
However, there is still a significant volume of capital looking for a home in real estate – private investors have about $247 billion of dry powder according to Preqin\(^1\) – and investors are searching for yield. Pricing pressure is still positive in two main groups of markets that are taking a growing share of the market. The first is in Europe’s late recovery markets – which includes most property types in the peripheral nations of Spain and Ireland, assets in smaller core countries like Austria and Netherlands, and several cheaper non-Central Business District (CBD) office markets, such as Hamburg and Dusseldorf – where yield compression has accelerated in recent months. The second is in Asia, where higher-yielding logistics markets and structurally converging emerging markets are reporting lower yields as investors display an increasing willingness to pay a premium for their favorable structural growth outlook.

\(^{1}\) Preqin Quarterly Update: Real Estate, Q1 2017.
A slower pace of yield compression is weighing on returns performance. However, to the extent that yield movements typically anticipate improvements in real estate fundamentals – investors can buy at lower yields in anticipation of future growth in income streams to meet the same returns target – inward yield shift in recent years should herald a wave of rental growth.

To date, real estate fundamentals have more accurately reflected global economic performance – which has been patchy and sluggish in a historical context – rather than accelerating at the pace implied by yield shift in recent years, which has predominantly been driven by falling interest rates rather than expectations of an acceleration of real economic growth driving a sustained occupier market upswing.

Like global economic performance, rental growth has been muted compared to history, in both the recovery following the global financial crisis and subsequent upswing, but there are signs of better performance ahead. In the office sector, which is important as it accounts for about 40% of the global investment market, supply growth is low and vacancy is falling. The vacancy rate today is 9%, compared to our estimate of a “natural” vacancy rate for global office markets of 10.7% – a rate at which rents are growing no faster than inflation (Exhibit 4).

Looking ahead, conditions for real rental growth remain favorable. The office supply pipeline remains low and, while demand growth is modest owing to a lack of expansion among key occupier groups such as finance, space absorption is expected to remain substantial enough to tighten markets further. As vacancy falls from its current level – which is consistent with annual real rental growth of about 2.5% over the next 12 months – we should see further rental gains in the current cycle as the squeeze on grade A space availability intensifies.
While low supply growth is a common feature across many markets and sectors, rental growth patterns are varied. Unusually, logistics markets have reported the strongest rental growth over the past year, with their space absorption increasing from ongoing growth in e-commerce – a trend that means retail rental growth is sluggish at the same time in many markets, despite steady growth in consumer spending. Apartment rent growth has pulled back in the United States, a rare example of a market reporting stronger supply growth (Exhibit 5).

EXHIBIT 5: GLOBAL RENTAL GROWTH BY SECTOR

Sources: Cushman & Wakefield, CoStar, JLL, PGIM Real Estate. As of May 2017.

In general, markets in Europe and the United States are performing well, reporting rental growth rates that are higher than recent averages – particularly in the case of U.S. logistics markets. Rising consumer demand is also benefiting demand for physical retail space in the United States, though profitability among major retailers remains under pressure globally and tenants remain focused on taking space in proven locations, rather than increasing their store footprint. Retail markets in Asia are struggling to a greater extent, owing to weak consumer sentiment in key markets such as Hong Kong and Singapore – where supply is being added concurrently – although growth of tourist-related demand provides a source of optimism about the outlook.
Are Development-Driven Cycles a Thing of the Past?

Causes of cyclical real estate value movements vary, but in the lead-up to each of the previous three global office downturns, the pace of supply growth in the world’s major gateway markets was elevated, at least compared to its preceding years (Exhibit 6). Arguably only the downturn in the early 1990s was actually caused by excess supply, but in each case elevated supply growth combined with occupier demand that was declining or, at least, weaker than anticipated, exacerbating the pain of the ensuing value correction.

EXHIBIT 6: GLOBAL SUPPLY CYCLE

The current cycle appears to be different – so far, at least. While historically low yields and elevated capital values are a cause for a concern and could precipitate a correction, the pace of construction simply has not picked up notably. In the decade prior to the 2008 global financial crisis, net additions to stock in major gateway markets were running at 2.3% per year, but have been just 1% per year since. An analysis of the supply pipeline over the next five years suggests little acceleration in completion rates.

A lack of development activity is not restricted to major gateway markets either. Looking across sectors and geographies, fast-expanding space markets are fewer and farther between than in previous cycles. The pace of space additions in the fastest growing set of markets is set to peak below 4% later this year – a rate which normally represents the low point of the construction cycle, not its zenith. However, some emerging markets are bucking the trends, with a large volume of space to be delivered in office and retail markets such as Shanghai, Kuala Lumpur and Jakarta in 2017, before activity is set to tail off to below-average levels.

Sources: CoStar, Cushman & Wakefield, JLL, PGIM Real Estate. As of May 2017.

Looking across sectors and geographies, fast-expanding space markets are fewer and farther between than in previous cycles.
Low supply growth means that global real estate markets look better protected against a fall in demand than they did back in 1991, 2001 or 2006 – just prior to the last three major global downturns (Exhibit 7). Similarly, in 1997, supply growth in Asian markets was substantial, and vacancy shot up rapidly when the Asian financial crisis hit in 1998.

**EXHIBIT 7: GLOBAL ALL PROPERTY PRIME MARKET CAPITAL VALUE GROWTH (% P.A.)**

<table>
<thead>
<tr>
<th>When?</th>
<th>Nature?</th>
<th>Main Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early 1990s</td>
<td>Over-supply</td>
<td>Europe, U.S. Office &amp; Industrial</td>
</tr>
<tr>
<td>Asia '98</td>
<td>Asian Financial Crisis</td>
<td>Asia, All Sectors</td>
</tr>
<tr>
<td>Early 2000s</td>
<td>Dot-com/Tech Occupiers</td>
<td>Global Office</td>
</tr>
<tr>
<td>Financial Shock</td>
<td>Global Financial Crisis</td>
<td>Global, All Sectors</td>
</tr>
</tbody>
</table>

Sources: CoStar, Cushman & Wakefield, JLL, PGIM Real Estate. As of May 2017.

Historical cycles demonstrate that complacency about the outlook should be avoided. Another downturn or market correction will undoubtedly occur at some point, although the exact timing and nature of downturns cannot be predicted. If a shock was anticipated, by definition it would cease to be a shock, and its various permutations and spillovers would be priced in by markets today.

History demonstrates that causes and effects can vary, and it is important to bear in mind that not all downturns look like the last one, which was caused by a major, systemic global financial crisis – the nature of which inevitably implied widespread pain upfront followed by a long, drawn out recovery. Indeed, a typical downturn does not affect everywhere at the same time – the downturn in 2001 was tech-led and mainly affected office markets, for example – meaning some sectors and markets will likely perform reasonably well while others struggle next time around.
Lower Returns Environment on the Way

Events over the last few years – the euro crisis, concerns about a China “hard landing”, periods of heightened financial volatility, and Brexit, to name a few – mean that it has felt like a period of great economic uncertainty at times. However, when we take a step back, it is clear that conditions have been highly favorable to property investors, particularly for those holding prime or grade A real estate assets. However, a golden period for aggregate global property returns appears to be coming to an end.

In the aftermath of the global financial crisis, in-place income streams of all risk assets, including real estate, were high relative to the cost of purchasing them – or in other words, high initial yields. Since then, rents have recovered and are growing in real terms, albeit modestly in a historical context, driven by low supply growth rather than a rapid economic expansion.

On top of an attractive valuation entry point and reasonable pick-up in rents from a low starting point, investors have benefited from a sustained period of favorable yield shift, which has been the number one driver of returns almost everywhere. Not only have market interest rates been low and falling for much of the post-global financial crisis period, but property yields have fallen even faster. Values have been boosted by a combination of a falling risk-free rate and compression of the spread of property income over bonds. The overall result has been a period of strong nominal returns, at a rate not seen since the 1980s, when economic growth and inflation were much higher (Exhibit 8).
Income | Supply Residual | Bond Yield Impact | Property Spread Impact | Total Return
---|---|---|---|---
17.1% | 10.4% | 11.2% | 13.4% | 8.4% | 5.6%

Looking ahead, a similar combination of falling interest rates and narrowing spreads is extremely unlikely to persist. The outlook for economic growth remains moderate, and productivity and inflation, which support nominal rental growth, are expected to pick up only modestly. Property yields are now at all-time lows, supported by interest rates that, in many markets are at or already rising from effective zero lower bounds. Even with the prospect of further yield compression in a few later recovery markets – for example in Europe’s periphery or in non-CBD office and logistics markets that are recording a spurt of rental growth – sustained yield compression across the board looks set to be a thing of the past in this cycle.

With low starting yields and a lack of capital value growth drivers, it is hard to envisage returns matching the pace of recent years, although low supply does provide source of optimism. An ongoing scarcity of available space could foster rental growth over and above that justified by economic fundamentals, giving returns some buoyancy. Even so, investors would be wise to prepare for more modest period of performance than has been recorded in recent years.
What Happens When Interest Rates Rise?

Falling interest rates have played an important role in propelling capital values upwards in recent years. While the overall returns environment is set to slow, there are fears that a sharp increase in interest rates would have a detrimental effect on real estate values – low yields are among the main risks highlighted by investors, based on recent survey evidence.

Some concern is understandable. In nominal terms, global capital values appear some way above a sensible long-term trend estimate, based on data prior to 2003 – the point at which the global economy started to report an excess of global liquidity (Exhibit 9). However, when we isolate and then strip out the effect of falling interest rates – based on the breakdown outlined in Exhibit 8³ – values look broadly on or near trend, in aggregate.

EXHIBIT 9: GLOBAL ALL PROPERTY CAPITAL VALUE INDEX (2003 = 100)

Notes: Global capital values are estimated from office, retail and industrial data for Asia Pacific, Europe and the United States. Sources: CoStar, Cushman & Wakefield, JLL, PGIM Real Estate. As of May 2017.

To an extent, the increase in capital values simply reflects a one-off shift to a permanently lower interest rate regime in a lower growth, lower inflation world – a move highly unlikely to be repeated as interest rates cannot go much lower, having effectively reached a zero lower bound. However sensible the shift may be, there

² See for example, Box 1.1 of the International Monetary Fund’s October 2008 World Economic Outlook, which notes the “Start of a global liquidity glut” at the end of 2003.
³ To estimate a real estate values series excluding the effect of falling interest rates, in each time-period we split yield impact into two components measuring the effect of movements in bond yields and property spreads, and subtract the bond yield component from recorded capital value growth.
is a risk that near-term returns expectations have been artificially inflated as markets report capital growth that is more than that justified by operating fundamentals.

Given concerns that excessive money supply growth in recent years may eventually usher in a period of higher inflation and with the U.S. Federal Reserve now in tightening mode, the era of ultra-low interest rates appears to be coming to an end. While tightening may still be some way off in many countries – notably in Europe, where the European Central Bank (ECB) may not raise its policy rate until 2019 – investors are increasingly concerned about what higher policy interest rates and bond yields mean for real estate values.

History tells us that interest rate tightening does not immediately cause a problem for real estate markets as it typically occurs alongside an improvement in confidence about the outlook for economic growth and inflation. As a consequence, real estate values tend to increase as a function of rising rents and a diminishing risk premium. Across each of the last five tightening cycles, global property yields have compressed by an average of 45 basis points. Similarly, yields have compressed – at a broadly comparable pace – since the Fed made its first rate hike of the current cycle in late-2015 (Exhibit 10).

**EXHIBIT 10: U.S. INTEREST RATES AND GLOBAL PROPERTY YIELDS (%)**

![Graph showing U.S. interest rates and global property yields](image_url)

History tells us that interest rate tightening does not immediately cause a problem for real estate markets as it typically occurs alongside an improvement in confidence about the outlook for economic growth and inflation.


More typically, the problem for real estate values comes as tightening cycles reverse. Rate cuts herald a shift to a more risk averse environment, which often feeds through to higher yields on risk assets such as property.
Looking Beyond the Cycle

With interest rate tightening only just getting underway, evidence from past cycles suggests that short-term pricing momentum is set to remain positive, especially as central banks remain cautious about the risk of destabilizing financial asset values and derailing growth prospects by tightening too quickly. Capital is still looking for a home in real estate and there is potential for further pricing upside in the current cycle, pointing towards further opportunities for investors.

However, with yields at historic lows and concerns about pricing levels growing, it is important to look beyond the cycle, to assess values we are seeing today in a long-term context. At some point in the future, real estate acquired in today’s market will be assessed – either for sale or valuation – in the light of a higher interest rate environment. If values have risen too far, they may require a painful period of adjustment somewhere down the line.

Based on an analysis of the global property risk premium, pricing today still looks sensible in a long-term context, even once relatively modest returns expectations are factored in (Exhibit 11). Unlike in 2006 and 2007, there has been no apparent re-rating of real estate markets and the estimated risk premium is broadly in line with its average over the last 20 years.

EXHIBIT 11: GLOBAL PRICING ANALYSIS

Note: For each time period, the property risk premium is calculated as the difference between 10-year U.S. government bond yields and an estimate of long-term expected returns that is a function of prime yields and trend estimates for real rental growth and inflation.

While valuations look sensible in today’s low rate environment, it is important to understand to what extent current pricing provides protection against anticipated future increases in interest rates. U.S. bond yields – which are typically used by
global investors as an indicative risk-free rate – are set to rise from about 2% at the end of 2016, to 3.5% over the next decade, although this level is still some way below historic norms.

Unless there is an unanticipated re-rating of real estate risk, a higher future bond yield implies a higher required return on property, which can be met by some combination of higher expectations about rental income growth – and higher yields. At present, factors supporting rental income growth – including inflation and productivity growth – look set to remain contained, suggesting property yields may have to bear the brunt of the adjustment, rising at some point in the future.

Based on an expectation that future yields will be higher, a simple 10-year internal rate of return (“IRR”) calculation suggests that a globally diversified investor would need to receive a yield of 5.5% today – compared to an actual yield of 5.2% – to meet the current required return. In other words, a modest 30 basis points yield discount to today’s pricing would be sufficient to guard against any impact on pricing from a transition to a higher rate environment.

Some Markets More Exposed Than Others

Looking across sectors and regions, the exposure of individual markets and sectors depends on a combination of factors: where yields are today relative to that required to meet required returns, and how likely it is that rental income growth will perform in line with expectations. In some markets, rents have risen above pre-global financial crisis levels in real terms, raising a threat that growth may disappoint – something that would require higher yields again.

Apartment and logistics markets in the United States potentially look exposed to rising interest rates, owing to a combination of low yields relative to those required, and rents that are at or above previous cyclical peaks (Exhibit 12). Faster supply growth adds to a sense of caution towards both sectors.

In Europe, pricing looks insulated against rising interest rates, especially in office and logistics markets, as rents have further room to grow. However, within that, cities such as London, Madrid, Paris, and Vienna, look more exposed, as yields have fallen to 3% and below in prime office and retail locations. The picture is varied across Asia, with office markets such Seoul and Sydney – where yields have fallen considerably in the past three years – looking vulnerable to the impact of higher interest rates, along with low-yielding luxury apartments in emerging markets across the region.

4 While the shift from current pricing to the exit yield is significant, the implied capital loss coming at the end of the 10-year period, is offset by rental growth in earlier years and, in any case, is discounted more heavily than prior cashflows, dampening its impact.
For investors today, ensuring that asset-level business plans offer some combination of higher yields and income growth potential is crucial to providing protection against rising interest rates. In cities where prime, grade A assets have very low yields, the implication is that investors will increasingly have to turn to better value submarkets or look at ways to generate growth – for example via asset management strategies or refurbishment plays that capitalize on low supply – to meet target returns.

Ensuring that asset-level business plans offer some combination of higher yields and income growth potential is crucial to providing protection against rising interest rates.
Part II:
A Regional Perspective and Investment Opportunities
Regional Drivers Differ

Global aggregates and averages tell us a lot about market conditions, particularly for those with large investment portfolios seeking to understand the broad nature of current and expected performance. While some trends span across regions – like supportive monetary policy, low yields in major core markets, and an anticipated transition to a lower returns environment – correlations among different markets and regions are once again lower.

To a greater degree, investment performance today reflects the idiosyncrasies of local markets, as opposed to the liquidity- and low interest rate-driven yield impact effect that pushed real estate values up and down – more or less in unison – from 2003 until recently. With growth opportunities holding the key to returns performance, it is especially important to drill down to the regional and sub-regional level to understand the nature of investment opportunities around the world today.

We broadly categorize the investment opportunities we have identified into three groups. The first are “growth-driven” opportunities where the principal objective is to enhance the value of property income streams via asset management or development, or by acquiring at a favorable point in the cycle. The second group are “value-driven” opportunities seeking to earn elevated returns via higher income yields that, in some cases, do not adequately reflect underlying growth potential. Finally, investors can seek to capitalize on “structural trends” in markets that are set to benefit from favorable underlying trends or convergence with more established markets and sectors.

With growth opportunities holding the key to returns performance, it is especially important to drill down to the regional and sub-regional level to understand the nature of investment opportunities around the world today.
Americas

Economic Outlook is Mixed

The economic outlook for the Americas is mixed, and there is a growing sense that recent past performance – of the economy and real estate markets – may not be indicative of future results. For now, in the United States, the economy is arguably demonstrating its most robust, well-balanced pattern of growth in a decade. Steady, broad-based job growth across different sectors and metropolitan areas bodes well for occupier demand, while signs that meaningful wage growth is taking hold are positive for consumer and retail spending. Prompted by the threat of rising inflation, the Federal Reserve is now in tightening mode, although recent dollar strengthening is weighing on import prices and limiting the need for aggressive rate hikes.

Following the election of President Trump in November, financial markets have responded positively to the expectation of significant fiscal stimulus in the form of tax reform, financial market deregulation and a major infrastructure spending initiative. However, at the same time, investors appear to be discounting potentially deep and wide-ranging disruptive economic impact of a concurrent increase in protectionism, reflected in a range of proposed tax, trade and immigration policies.

On balance, markets have viewed recent policy moves as broadly favorable to near-term growth prospects and many forecasters have upgraded their expectations for U.S. GDP growth in 2017 and 2018. In reality, little has happened to fundamentally change the longer-term growth potential of the economy. Uncertainty around the outlook has risen though, and the result could be a more pronounced economic cycle – with faster short-term growth and a later correction – than has been the pattern since 2009, which has been remarkably stable in a historic context.

Healthy Investor Appetite

Investor appetite for real estate in the United States remains healthy. Boosted by rising demand for apartments and strong net capital inflows from foreign investors looking for diversification and exposure to the relatively fast-growing U.S. economy, transaction volume in 2016 was the third highest annual total on record. Nevertheless, investment activity was down 10% compared to a very strong 2015 (Exhibit AM1). While a drop in large portfolio deals has been the main cause of the deceleration to date – notably in the industrial sector – there are signs that investors are exercising more caution even as would-be sellers are reluctant to adjust pricing, suggesting a meaningful bid-ask spread in the market.
Over the past year, investment activity in Central Business District (CBD) office, retail, and – despite strong occupier market performance – industrial markets has cooled in the United States, while sales of hotels and development land have fallen sharply. Along with apartments, which were the largest sector in volume terms in 2016, demand for suburban offices held up relatively well, as investors looked beyond major gateway markets in a search for higher yields.

**Investors Looking Beyond Low-Yielding Gateway Markets**

Returns are decelerating in the United States, despite solid occupier market fundamentals which are translating into steady or improving income growth across most sectors and markets. Yields appear to have bottomed out, remaining broadly flat since the start of 2016, dampening appreciation. As a result, property returns have decreased from double-digit levels – NCREIF All Property Total Returns averaged 12% between 2010 and 2015 – to about 8% today, which is more in line with historical averages.

Looking ahead, investors are concerned about historically low income yields as they try to meet return targets in an environment of slowly rising interest rates. However, real estate still looks fairly priced against other financial assets, with yield spreads over both corporate bonds and U.S. Treasuries broadly in line with historical averages (Exhibit AM2).
With positive, albeit uncertain, economic growth set to feed through into further improvements in operating fundamentals, it appears that there is room for interest rates to rise without triggering an outward movement in cap rates. Pricing for the most expensive trophy properties in gateway markets could suffer if foreign capital inflows reverse, though there is little indication of this as of yet.

Investors are still seeking yield and are turning their attention away from major gateway markets. Investment in smaller, non-gateway cities accounted for 55% of transaction volume last year, up from just over 50% in prior years. Even so, gateway markets are still being priced at a large premium, and the yield gap may overstate their defensiveness relative to other locations – notably as an outward yield shift from very low levels would have a magnified impact on values. In addition, in the last downturn, non-gateway markets were disproportionately hit by the housing slump. Since then, house prices have risen at a much faster rate in gateway markets, making a repeat of the same scenario unlikely.

**Occupier Markets in Good Shape, But Growth Has Peaked**

Occupier markets remain broadly in good shape. After a prolonged period of demand expansion, which has been accompanied by limited construction activity in most markets, vacancies in many office, industrial and retail markets are low relative to historic averages. However, apart from industrial markets – which are benefiting from a sustained increase in demand from logistics and e-commerce players, linked to growth in online retail – rental growth rates have likely seen their strongest momentum of the cycle.

Retail markets are suffering from weak in-store sales growth, despite favorable consumer tailwinds, while office rental growth rates are slowing as faster-growing markets, such as tech-driven San Francisco and San Jose, are reporting a pick-up
in supply growth. Offices in energy-driven markets, such as Houston, continue to face rental pressure owing to a combination of low oil prices and ill-timed development completions.

Rental growth has pulled back most notably in the apartment market, particularly in larger markets like New York and San Francisco where recent increases in new supply have been most substantial. Looking ahead, home ownership rates remain low and household formations are continuing at a steady pace. Pipeline figures point to apartment construction peaking this year, and vacancies and rental growth are set to stabilize.

**Supply Beginning to Stir Outside Apartments**

While tech-driven markets in the San Francisco Bay Area and Seattle have garnered most attention during the current cycle, secondary office markets in late cycle recovery sunbelt markets have tightened considerably. Vacancy rates in Raleigh and Nashville are among the lowest in the United States both in terms of level and relative to their own historical averages, while Tampa, Orange County and San Diego are all reporting falling space availability.

Office construction remains very low relative to past expansions, but developers are becoming more active again (Exhibit AM3). The strongest completions are being recorded in Texas and in tech markets, including Dallas and Austin, as well as Seattle and the Bay Area, but also in Nashville, for example, where vacancy has fallen to low single-digits.

**EXHIBIT AM3: REAL ESTATE SUPPLY BY SECTOR**

Industrial construction remains relatively restrained in most markets, particularly in the light of strong demand growth being recorded. Industrial occupancy rates are at levels not seen since the 1990s, propelling continued resilience in the rate of rental growth. The pick-up in construction in markets such as Dallas, Phoenix and Southern California’s Inland Empire – which traditionally exhibit quick supply responses – threatens to dampen rental growth, although supply-constrained coastal markets such as Los Angeles and Miami remain very tight and could see further rent gains.

Retail Playing Defense

Of course, much of the rising popularity of industrial space is coming directly at the expense of retail real estate. Retail sales are growing – in line with falling unemployment and rising wages – but in-store sales growth is lagging as online retailers take a greater market share. Even so, retail vacancy rates are at their lowest reported level in many years, although this is explained by a sharp decline in new construction since 2009, rather than any notable expansion of new demand.

While occupancy rates for retail shopping centers are elevated, meaningful growth in rents is limited as retailer profitability is eroded by online competitors. Vacancy is set to move higher as the pace of store closures increases amid an uptick in retailer bankruptcies as well as, consolidation among retailers that are increasingly under pressure to boost existing store productivity rather than expand their footprint.

Uncertainty is Rife in Latin America

Markets in Latin America are contending with a range of issues linked to the new policy regime in the United States, low-but-recovering commodity prices and, in real estate markets, new supply growth in an uncertain occupier environment. Against such a backdrop, investor demand remains muted, with deal volume falling to its lowest level since 2009. Investment activity remains limited amid struggling fundamentals and a lack of FIBRA\(^5\) transactions in Mexico.

Amplifying trends in the United States, political and economic uncertainty is rife in Latin America – although the worst appears to have passed, especially for commodity-led markets like Brazil, which has been stuck in a deep recession. Mexico continues to post reasonably healthy economic growth, but business and consumer sentiment has weakened markedly since Trump’s election. Looking ahead, economic growth throughout the region is set to be constrained by accelerating inflation, tighter monetary policy and higher interest rates in the United States, and potentially weaker business investment due to uncertainty around future U.S. trade policies.

Nevertheless, Mexico is benefiting from strong industrial demand owing to improving consumer spending growth in the United States, which has pushed vacancies lower. Supply has picked up in response, and while most construction was initially build-to-suit, more than one-third of space currently underway is speculative. However, the outlook for trade links with the United States – and hence demand among key industrial occupier groups – is uncertain. Elsewhere in Latin America, markets are recording a surge in office completions amid weak demand growth, pushing the vacancy rate higher and weighing on rent levels, especially for older properties in Rio de Janeiro and Sao Paolo.

Investment Opportunities

With yields at historically low levels, investors in the Americas are seeking to strike the right balance between moving up the risk spectrum in search of higher yielding assets and growth opportunities, or paying a premium for core markets, which offer more reliable liquidity throughout the cycle, but have also demonstrated higher historical volatility.

\(^5\) Fideicomisos de Inversión en Bienes Raíces – broadly equivalent to U.S. Real Estate Investment Trust “REIT” structures.
Reflected in investor survey responses and a shift in transaction activity towards non-gateway markets, a clear area of focus is on growth opportunities and higher yielding strategies in the United States, where supply growth is unusually low for an expansion phase of the cycle. Industrial markets continue to enjoy a prolonged rise as they are positioned to reap the gains of any ongoing improvements in the consumer outlook, while various low-building office markets are well-positioned to offer re-development opportunities, owing to a lack of available grade A space. For investors looking for income-driven returns, second-tier markets offer substantially higher yields than gateway markets.

1. Logistics

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

In recent years, rental growth in industrial markets has been underpinned by a period of slow-but-steady growth in the broader U.S. economy, combined with relatively low supply growth that has fostered a decline in vacancy below recent historic norms (Exhibit AM4). Its relative strength compared to other sectors – not least retail – relates to a secular growth component, driven by the expansion of e-commerce. Patterns of spending are evolving rapidly, giving rise to investment opportunities in logistics markets across the United States as the emphasis on space provision shifts away from physical retail.

**EXHIBIT AM4: INDUSTRIAL MARKET PERFORMANCE AND RETAIL TRENDS – UNITED STATES**

Increasingly, online customers demand next-day delivery. So, rather than being served in two or three days from a major national hub, a growing share of demand is being catered for by modestly-sized “last mile” hubs that are adjacent to or...
inside major population centers. In contrast to previous cycles, tenants are willing to pay higher rents for infill locations, creating opportunities in markets that are not traditional logistics hubs but that are located near to large population centers, such as Denver, Boston, Minneapolis, and Central Florida.

2. Secondary Assets and Markets

With historically low yields in core markets, investors are looking towards secondary buildings, locations and markets to meet target returns.

With prime assets in core gateway markets looking fully-priced, investors are increasingly moving further afield, looking towards secondary buildings, locations and markets – and at non-traditional property types too – to capture higher yield.

Secondary markets are accounting for a greater share of investment volume and are reporting stronger value growth (Exhibit AM5). Even within gateway markets, investors are becoming more active in secondary locations. Pricing trends are consistent across sectors and point towards relatively attractive opportunities in well-located suburban apartment markets, for example, as most development this cycle has been focused on luxury apartments in urban locations. Similarly, compelling opportunities for industrial investment may exist in previously overlooked markets outside major, core distribution hubs.

EXHIBIT AM5: GATEWAY VS NON-GATEWAY MARKET PERFORMANCE

There is also increased attention on non-traditional property investment sectors, including student housing, manufactured housing, and healthcare-related sectors such as medical office and senior housing. Yield is the consistent theme – these sectors offer higher yields due to a relative lack of depth and transparency, along with some additional operational risks. A well selected investment in niche property sectors can offer core-like stability at higher yields, even in major markets.

Sources: CoStar, PGIM Real Estate. As of May 2017.
3. Value-Add Strategies

Vacancy is below its historical average, and we anticipate an increase in opportunities for new construction and redevelopment.

One enduring legacy of the global financial crisis, along with experience of past cycles, has been to ensure an ongoing caution among lenders towards development, particularly given the slow and incremental nature of the recovery and subsequent upswing. While modest levels of speculative development are stirring in a handful of major industrial distribution hubs and in some tech-driven office markets, construction is still being dominated by built-to-suit and other projects with significant pre-leasing.

As a result, vacancy remains well below historical averages in many markets. With the outlook for demand growth still having some room to run, we anticipate an increase in opportunities for new construction or redevelopment in targeted markets, led by the industrial sector, where demand fundamentals are most favorable.

Even in major distribution hubs – such as Atlanta, Chicago, Dallas and Southern California, which are reporting the greatest amounts of space under construction – projected demand in coming years exceeds the amount of space currently underway, providing a cushion for investors considering speculative projects.

Similarly, many secondary office markets are starting to look tight, reporting a combination of falling availability and rents rising to at or above trend growth rates. Linked to solid job growth momentum, expected office demand in markets such as Dallas, Atlanta, and Orange County, points towards an opportunity for equity and debt investors to consider value-add plays or even take on development risk, aiming to provide grade A space which is increasingly in short supply.
Asia Pacific

Strong Growth, Divergent Real Estate Fundamentals

Asia Pacific continues to be the world’s fastest growing region. Despite a bumpy ride during 2016 – including fear of a China “hard landing” in the early part of the year, and heightened financial market volatility in the aftermath of Brexit and the U.S. Presidential Election – Asia Pacific recorded GDP growth of 4.7%, its best performance since 2013.

Leading indicators are positive and economic growth rates are expected to hold up over the next couple of years. A number of major economic restructuring initiatives, including so-called “Abenomics” in Japan, a managed transition towards a consumer-driven economic model in China, and a shift away from a reliance on commodity exports in Australia, continue to support positive momentum across the region.

Activity is also being boosted by several cyclical factors, including improved global demand – notably from previously weak Europe – and higher commodity prices. Recent U.S. interest rate hikes have been largely absorbed by markets and global monetary policy remains broadly supportive of growth and investment activity in the region.

However, despite the evidence of improving economic fundamentals, investors in Asia are not immune from swings in global capital market sentiment. Over the past year, real estate investors in the region have become more cautious, as reflected in a sharp decline in overall transaction volume and the number of successfully closed deals. Sentiment and investment activity recovered in the fourth quarter of 2016, but transaction volume for the year was down 14% compared to 2015.

Leasing markets followed economic trends more closely than investment market sentiment last year. Concerns about China and global polictics were shrugged off by major corporate occupiers, although overall rental growth has slowed as improving occupier demand has been unable to keep pace with an uptick in supply, which has caused vacancy to rise (Exhibit AP1). However, aggregates can be misleading in Asia Pacific, masking a wide divergence of market performance across its economically diverse and geographically spread group of countries.

In Commercial Business Districts (CBD) office markets, vacancy rates are low and falling in Tokyo, Sydney, Melbourne and Hong Kong, and prime rents in these markets continue to grow, albeit at a moderating pace. Overall demand for retail and logistics space is also rising, with both sectors reporting positive net absorption. In contrast to improving conditions in many markets, Singapore and Malaysia still face an ongoing challenge posed by weak demand, which is coinciding with rising supply, pointing towards further rental correction in the short term. At the same time, other markets have progressed further into the cycle, with early signs of stabilization and recovery being reported in, for example, Brisbane and Seoul office markets, both of which recently experienced a mid-cycle slowdown.
The upshot is that long-term investors can capitalize on both the dynamism and divergence of Asia Pacific real estate markets to enhance risk-adjusted returns at the portfolio level. Cyclical turning points in certain markets imply an opportunity to shift exposure to markets in a growth or recovery phase – the kind of a tactical rotation that saw investment volume in Seoul and Singapore rise to its highest level for some years in the latter part of 2016.

**Rising Intra-Regional Investment**

Asian investors, particularly from China and South Korea, have made headlines thanks to a preference for acquiring prime assets in global gateway cities, such as London, Paris and New York. In 2016, Asian investors accounted for 30% of all global cross-border investment, surpassing European investors to become the largest source of cross-border capital.

A desire to deploy capital across borders is still apparent, but preferences appear to be shifting. Rising uncertainty and comparatively moderate rates of economic growth in the United States and Europe means that Asian investors are also targeting markets closer to home. Intra-regional investment – capital flowing across borders, but within Asia Pacific – rose by a third in 2016, driven by increased deal activity by investors from China and Hong Kong (Exhibit AP2). In total, the increase in domestic cross-border flows more than offset a retreat of capital inflows from other global sources and the share of cross-border capital rose for a third successive year.

Sources: JLL, PGIM Real Estate. As of May 2017.
The preferences of other global investors point to renewed interest in Asia Pacific in 2017 and beyond. Surveys of investor intentions, such as ANREV’s, point towards rising flows of capital from Europe, as investors seek to buy into the region’s attractive growth profile. A desire among domestic and international players to increase their exposure to the region suggests that the amount of capital available to invest in Asia Pacific is set to remain plentiful in the short term.

**Yields at Historic Lows – Set to Remain Stable**

Continued capital inflows suggest competition for assets will remain high. In part, lower transaction volume last year can be explained by a lack of motivated sellers and stubborn bid-ask spreads. Prime yields, still falling in aggregate, are below long-term averages, and are at or close to historic lows across most major markets (Exhibit AP3). In such an environment, it is increasingly challenging for investors to turn their desire to acquire real estate into actual deals – by meeting current asking prices – without taking on more risk or accepting lower returns.

While pricing looks elevated on a historical basis, real estate assets continue to offer an attractive income spread over their respective government bonds. In addition, there is still a significant weight of capital seeking a home in real estate in the region, while most central banks are adopting an accommodative monetary policy stance – including Australia, Japan and South Korea – owing to low inflation and subdued domestic demand growth. As such, real estate yields are likely to remain contained despite the recent rate hikes by the U.S. Federal Reserve.

However, as the easing cycle comes to an end – the next move in interest rates looks set to be upwards at some point – investors are treading carefully and we anticipate little further yield compression in major markets.

In the absence of significant yield compression – as in other parts of the world – future capital value growth looks set to be determined to a greater extent by either rental appreciation on stabilized assets or via value-enhancement strategies.
Recent deal activity in Australia, Japan and South Korea suggests the latter, as investors are seeking higher returns on capital by targeting secondary assets with value-add potential.

**EXHIBIT AP3: YIELDS AND HISTORICAL COMPARISONS BY SECTOR**

Yields are at the bottom end of their historical ranges in all major markets across Asia Pacific.

**Non-Office Sectors Gaining More Attention**

Over time, offices have typically attracted the most interest from investors due to factors such as liquidity, stock availability, transparency and a relatively homogenous occupier base compared to retail or logistics assets. Office transactions have accounted for more than 50% of the Asia Pacific total since 2014. Looking ahead, a robust economic outlook that bodes well for employment in key occupier groups like financial and business services should continue to promote favorable investor sentiment toward the office sector.

However, competition for the best office assets has been fierce, culminating in a sharp compression of office yields across markets. The spread between income yields on offices and assets in other property types is wider than its historical average, and sectors such as retail are looking relatively more attractive again. In selected markets where rental growth momentum for offices has started to moderate – in Tokyo, for example – there are signs that investors are rotating towards other sectors in search of better value.

Similarly, a combination of value-seeking and improved confidence among investors points towards growing investor interest in non-gateway cities that offer higher income yields. Investment activity in the regional markets of Osaka and Fukuoka in Japan, and Brisbane in Australia has already started to rise. Meanwhile, with moderate growth rates in developed markets in many parts of the world, interest in asset types that offer above-average income growth potential is set to rise further. As a result, so-called alternative sectors – including student housing, healthcare and data centers – are now showing up more often on investors’ radars.
Experience from previous market cycles suggests that investors are sometimes compelled to take on more risk in lower quality assets or new sectors when prime pricing is elevated. However, spreads between prime real estate and long term bond yields across markets remains elevated and the real estate risk premium remains attractive even based on modest growth assumptions. With the economic outlook still positive and investors maintaining discipline towards the use of leverage – which is much lower so far in this cycle than it was prior to the global financial crisis – a shift towards smaller markets and alternatives looks like a rational response to pricing.

**Investment Opportunities**

With yields at historic lows in most markets across the region, opportunities for tactical allocations to specific markets have become challenging to identify, especially as some kind of tightening cycle is a looming prospect, with the notable exception of Japan.

Investors are shifting their attention from high quality, income-generating assets in core locations, which now look expensive, to enhanced-return opportunities in smaller markets, alternative sectors and value-add strategies. As a result, prices for older office and retail assets that are ripe for repositioning or redevelopment are rising quickly, as sellers are keen to price in any potential leasing market upside, leaving little room for error.

In such an environment, investors should look beyond the short-term cycle, towards the long-term underlying fundamentals of the sector and economy in which they are investing. From this perspective, despite historical comparisons, real estate values across Asia Pacific remain attractive in the long term, owing to secular demand drivers including structural progression toward economic maturity in emerging Asia, population growth in major cities, the expansion of the middle-income class, and the strong growth of e-commerce.

1. **Decentralized and Regional Office Markets**

   Improved occupier market prospects for decentralized and regional office markets do not appear to be fully priced in.

In the years following the global financial crisis, many Asian gateway markets, such as Sydney and Tokyo, reported a trend of tenants moving into the city center to take affordable space. However, CBD rents have grown significantly in recent years, and – in markets like Sydney, Melbourne, Hong Kong, and in “tier 1” cities across China – rents are now at or significantly above their previous peak levels. In turn, tenant demand is starting to shift towards decentralized areas and regional markets where space availability is higher and rents are lower in comparison (Exhibit AP4).

Over the longer term, demand for office space is supported by a secular transition from manufacturing to services, particularly in emerging economies like China and the markets of South East Asia. Improving infrastructure and connectivity between CBDs and their sub-markets are creating local business hubs that
translate into a vibrant investment opportunity. Prime examples include the growth of sub-markets in Shanghai, the decentralizing plan backed by government incentives in Seoul, and Singapore’s technology park.

On the investment side, improved prospects for decentralized and regional office markets do not appear to be fully priced in. A focus among investors on prime assets with high quality income streams has driven up capital values for CBD assets in gateway markets and the yield spread attributed to smaller markets is still elevated. With rising tenant demand and stable rental growth prospects, we are seeing better values in some secondary markets, particularly where prospective supply is limited, such as Sydney’s North Sydney and Paramatta fringe markets, the regional city of Osaka in Japan, and Hong Kong’s decentralized markets.

**EXHIBIT AP4: OFFICE MARKET PRICING AND LEASING TRENDS**

![Graph showing office market pricing and leasing trends]

Sources: JLL, PGIM Real Estate. As of May 2017.

### 2. Tourism-Driven Retail and Hotel Markets

Retail markets have been less favored by investors in recent years but are set to benefit from positive tourist-related demand, as are hotels.

Away from the office sector, retail markets have been less favored by investors in recent years, their caution attributable to threats from rapid expansion of e-commerce in Asia Pacific and weak performance in typically strong retail markets like Singapore and Hong Kong. The growth of omni-channel retailing – that sees both traditional retailers going online and online retailers opening physical stores – looks set to drive a continuing evolution of the retail sector in the coming years. However, despite rising online sales penetration, a surge in retail net absorption in regional markets suggests that weak sentiment towards retail is overdone (Exhibit AP5).
In most parts of the Asia Pacific region, the outlook for retail sales growth remains favorable in the long term, underpinned by rising city populations, a growing middle class and real wage growth in most economies. The growth of intra-regional tourism – particularly outbound Chinese tourists to Tokyo, Sydney, Seoul and Taipei – is stimulating growth in the local economies (Exhibit AP6). Tourist spending in the region has grown by nearly 50% since 2010.

Apart from in Singapore and Hong Kong, where retail rental growth remains under pressure due to increased supply and faltering demand, most other markets in the region including Tokyo and Sydney continue to record favorable rental performance in both prime and regional retail segments, supported by robust consumer spending growth and limited additions of new supply.

In addition, tourism growth is set to boost demand for hotels, with Japan, South Korea, and Australia among notable beneficiaries. Hotel occupancy rates across major cities in these markets rose to 90% over the last two years, significantly higher than their historical average of 75%, pushing up hotel room rates in cities.
like Seoul and Tokyo. Investment in hotels – particularly in the mid-tier market segment in cities with supply constraints such as Tokyo and Sydney – should allow investors to earn attractive returns as the market matures.

### 3. Counter-Cyclical Strategies

Most markets that have underperformed in recent years are set to benefit from limited supply in the next few years.

Within the context of relatively strong aggregate regional performance in recent years, selected markets have been lagging behind and are at different stages of the cycle. Leasing fundamentals in office markets in Brisbane, Singapore, Osaka and Seoul have been broadly negative, with net effective rents declining due to significant new supply additions and rising vacancy. Similarly, the cyclical downturn of the commodity sector has weighed on demand across sectors in certain markets, particularly Brisbane and Perth.

However, there are signs of improvement, even in the worst-affected markets. Apart from Singapore where there are more supply additions to absorb in the near term, most other markets that have reported a slowdown in recent years are set to benefit from limited supply in the next few years. Office vacancy rates in Osaka, for example, have already declined from above 10% in 2014 to below 5% by the end of 2016. Vacancy in other markets is also stable or declining, albeit slowly. Encouragingly, net absorption is positive once again, thanks to the uptick in economic growth across the region last year. An improving outlook in the commodity sector is also contributing to stronger corporate sentiment in Brisbane and Perth.

With fundamentals expected to improve further, and signs of improved occupier market performance in previously struggling markets, there are opportunities for investors that are willing to take on short-term risk in anticipation of a broader recovery, although strategies vary significantly by location. While investors can expect to benefit from a broad-based recovery across grades in low-vacancy Osaka, the focus remains on grade A assets in Brisbane and Singapore. Value-add, asset repositioning strategies are appealing in Seoul, due to its aging stock profile.

In logistics, both Hong Kong and Singapore are going through a period of distress with significant rental declines and rising vacancy. Given the scarcity of retail supply in Hong Kong, which is benefiting from rising Chinese tourist spending, and the long term role for Singapore as a logistics hub for the South East Asia region, today's market could prove to be an attractive entry point for investors aiming to capitalize on favorable structural trends in the medium- to longer-term.
Europe

Investor Mood Hard to Read

In a sense, Europe is enjoying its best outlook for a number of years, owing to a consistent pattern of near- or above-trend economic growth in most countries, along with positive signs such as falling unemployment and rising real wage growth. However, at the same time, uncertainty is rife, characterized by rising populism and unsettled political environments in a number of major countries, not least in the United Kingdom, which is holding a fresh general election and beginning a tricky period of negotiations ahead of exiting the European Union.

In this environment, it is hard to read the mood of investors, although sentiment appears to be holding up remarkably well. In the immediate aftermath of June 2016 and “Brexit”, equity markets wobbled and consumer and business confidence dropped sharply. At the time, it was hard to envisage a strong second half to the year. Risk attitudes have been oscillating but, after a mid-year lull as investors took stock of the situation, the fourth quarter of 2016 was the strongest quarter of real estate investment activity ever recorded in the eurozone, led by a resurgence in demand for assets in the major core markets of France and Germany, alongside stronger activity in fast-growing Spain and Ireland (Exhibit EU1).

EXHIBIT EU1: EUROPEAN TRANSACTION VOLUME

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<th>ANNUAL TRANSACTION VOLUME (€ BILLION)</th>
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Transaction volume weaker in 2016, especially in Brexit-affected UK.

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<th>SUMMARY OF TRANSACTION VOLUME (2016)</th>
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<tr>
<td>€ BILLION</td>
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<td>Other</td>
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<td>Europe</td>
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Volume bounced back in 4Q16.

Sources: Real Capital Analytics, PGIM Real Estate. As of May 2017.
Outside the currency bloc, activity was notably more circumspect in the UK where major overseas investors have retreated and lending terms have deteriorated significantly. Volume is down sharply, despite a flurry of activity towards the end of the year from new Asian players and U.S. dollar-denominated buyers whose capital now stretches further, following an 18% drop in the value of the pound.

**Prime Yields are Moving Ever Lower**

Unlike other parts of the world, yields are still compressing across most sectors and geographies in Europe, with the notable exception of the UK, where pricing softened in the second half of 2016 – although, so far, by less than had been feared. In total, prime yields compressed by 40 basis points over the past year and many European cities are now reporting prime yields across sectors that are well below historic norms. In aggregate, prime yields are now substantially below previous lows, set in prior to the 2008 global financial crisis.

Despite apparent concerns about pricing and the potential impact of rising interest rates – concerns flagged in recent investor intentions surveys, such as CBRE’s – investors are still willing to compete for high quality assets in major core markets, further bidding up pricing at the prime end. Despite historically low yields, markets like Paris, Munich and Vienna all reported significantly lower prime office and retail yields in 2016.

Yield compression is now consistent across much of the market, but the gap between pricing in the top quartile of European markets – based on analysis of 132 separate office, retail and industrial markets across 28 different cities – and less-favored bottom quartile markets remains wide, suggesting an ongoing focus among investors on the best assets in major locations (Exhibit EU2). Europe’s largest cities continue to command a high share of investment volume.

**EXHIBIT EU2: ALL PROPERTY PRIME YIELDS BY QUARTILE (%) P.A.**

Sources: Cushman & Wakefield, PGIM Real Estate. As of May 2017.
Investors Taking on Risk...But in Core Markets

At the same time, transactions yields are elevated, suggesting that investors are taking on some risk, but by acquiring secondary assets in major cities, rather than broadening too far geographically. Compared to the very top prime assets, transactions yields are still elevated and the spread over prime is unusually wide (Exhibit EU3). That deal pricing is not reflecting prime suggests a combination of factors at work, including a broadening search for yield and increasing confidence about the strength of occupier demand – or at least in the persistence of low supply growth that is keeping vacancy to a minimum.

EXHIBIT EU3: COMPARING EUROPEAN PRIME AND TRANSACTIONS YIELDS

PRIME AND TRANSACTIONS YIELDS – OFFICE

PRIME AND TRANSACTIONS YIELDS – RETAIL

Sources: Cushman & Wakefield, Real Capital Analytics, PGIM Real Estate. As of May 2017.

Prime Returns High, But Slowing

Owing to ongoing yield compression, estimated prime market total returns – an indicative series that excludes depreciation and other running costs – have been running at about 15% for the last couple of years, with average returns at about 10% (Exhibit EU4). While value growth has been predominantly driven by the impact of falling yields, rather than rapid improvements in fundamentals, real estate returns compare favorably to very low bond yields – notably in Germany where 10-year bonds hit -0.3% in the fourth quarter of 2016. In such a low interest rate environment, risk-adjusted returns on real estate look attractive and plenty of capital is looking to get into the market.

However, with interest rates now stable or starting to rise gradually from cyclical lows as growth and inflation expectations tick up, property yields look set to reach a lower bound before too long – especially in major prime markets. The question is whether fundamentals are strong enough to sustain positive momentum for pricing in absence of the boost from falling yields enjoyed over recent years.
Low Supply Growth Persists

Economic forecasts – which ultimately underpin the outlook for real estate fundamentals – paint a mixed picture. The growth outlook has been revised upwards, but inflation is rising and wage growth is only picking up gradually owing to still-high unemployment in many parts of Europe. In turn, this implies a lack of acceleration – if not a slowdown – in growth this year, even before uncertainty arising from the Brexit process and other major elections, such as Germany’s, is factored in. However, there are upside risks too: confidence among businesses and households is elevated, investment spending is picking up, and a weaker euro is helping exports.

Productivity growth – a key driver of long-term rental performance in real estate markets – remains obstinately slow. However, rents are still low in real terms in most markets and have room to grow further. Even in markets like London’s West End that recorded rapid rental growth over the last five years, headline rents are nearly 20% below pre-crisis peaks in real terms. While expansion among some key occupier groups remains limited – notably financial services firms in office markets, and major retail multiples – the outlook for rents is supported by an ongoing lack of supply in many markets.

Apart from in central London, which does have supply coming on this year, most other European office markets have little space being added, while older stock continues to be withdrawn for either refurbishment, demolition or conversion to other uses such as residential or hotels. A similar pattern plays out in other sectors too as developers continue to be held back by a range of factors including restrictions on bank lending arising from tighter regulation, a sense of caution among lenders, and uncertainty about the outlook – something that is particularly affecting the retail sector, where, in any case, changing patterns of spending point to lower future physical space requirements.
Growth Potential Varies

On the whole, a lack of expansion in the built environment, particularly for high quality, grade A space points to rental growth potential despite rates of economic expansion that look modest in a historical context. Growth potential is dictated by a range of factors, though, including not just the outlook for supply growth, but how much existing space is left over as a legacy of past cycles – something which affects office markets such as Amsterdam and Frankfurt to this day, despite restrained development activity – and, of course, the demand side, which is holding back all but the most desirable retail locations for example.

Looking ahead, in an environment where interest rates are less supportive, or, at least not in a position to boost returns to the degree seen in recent years, it will be income and rental growth that drive performance differentials across markets. While the aggregate contribution of rental growth to returns remains low, averages can be misleading. Looking across sectors and markets today reveals a wide range of current performance and prospects.

By geography, we are now seeing faster rental growth in Europe’s periphery – notably Spain and Ireland – and more modest performance in the core markets, although the gap in rental growth is still small in a historical context. By sector, the winners and losers are clearer. Non-Commercial Business Districts (CBD) office markets are a clear outperformer, most notably in cities with low CBD vacancy rates, like Munich and Hamburg, as demand is driven by tech and lower value added services occupiers that prefer cheaper, fringe CBD space. In contrast, CBD markets are being held back by lower financial employment growth than in previous cycles, and an increase in self-employment that leads workers to flexible, shared spaces, rather than being contracted to a major occupier.

Retail markets are benefiting from improving consumer demand, but are also being affected by the ongoing shift to online, which is starting to advance rapidly in markets outside the UK, Europe’s internet retail vanguard. Space demand in destination retail locations, notably high streets and prime shopping centers, continues to hold up well, and there are signs of life in parts of the retail warehouse market as bulky goods demand is responding to improving housing markets across Europe. Even so, retailer profitability remains under pressure and expansion of store networks is limited.

Investment Opportunities

The case for holding assets in major core markets is ongoing: over time, a portfolio of assets in just 13 major cities can broadly replicate Europe-wide returns. However, with income yields at very low levels in the most desirable, top tier markets, an assessment of opportunities reflects a need to balance income protection offered by major core office and retail markets – which comes at a price – and income growth potential offered by other investment styles, locations and asset types.

We are seeing growth in sub-sectors, like non-CBD office markets and Europe’s periphery. In aggregate, the economic growth outlook is moderate, but the cost of capital is very low and we are also seeing more interest in value-add strategies in major markets, aiming to generate returns based on structural factors and capitalize on space constraints, rather than rely on an expansion of occupier
demand. Instead, investors are increasingly turning to residential and other so-called alternative sectors in search of “organic” growth, boosted by structural demand factors.

1. Decentralized and Regional Office Markets

Non-CBD office markets top the rental growth charts across Europe and they continue to offer an attractive yield spread.

Contrary to historic performance, non-CBD office markets top the rental growth charts across Europe. Despite significant yield compression, they continue to offer an attractive yield spread (Exhibit EU5). Strong relative performance is set to continue owing to the nature of employment growth in this cycle, which is less focused on traditional CBD occupier groups such as finance and insurance, and more on lower value-added service providers, back office functions and IT companies – all of which typically favor location in cheaper, more trendy non-CBD and suburban locations. Similarly, industrial-driven occupiers are taking space in non-CBD submarkets of German cities like Hamburg and Dusseldorf.

EXHIBIT EU5: EUROPEAN PRIME OFFICE MARKET RENTS AND YIELDS – CBD VS NON-CBD

A lack of building means that vacancy rates are coming down and, unusually for an upswing, rents are growing more quickly than in counterpart CBD markets. To an extent, pricing reflects occupier performance as yields have compressed – but spreads with CBD counterparts are still elevated suggesting attractive value today.
2. Value-Add Strategies

Supported by debt availability, the opportunity to reposition and refurbish existing assets to grade A is set to remain significant for some time.

While there are organic growth opportunities in major cities and markets, they are not widespread in what is ultimately a modest growth environment. However an opportunity stems from not just persistently low supply growth, but a broader observation that the built environment is not being added to, or invested in, as it was previously. Additions to office and retail stock are historically low, and the amount of investment going into buildings has fallen significantly over the last eight years (Exhibit EU6). Vacancy is slowly creeping down, owing to the moderate demand improvements being recorded, but the amount of grade A space available is low.

EXHIBIT EU6: EUROPEAN OFFICE SUPPLY AND OVERALL CAPEX

ANNUAL NET ADDITIONS TO EUROPEAN OFFICE STOCK

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Supply pipeline is edging up from a very low level, but has repeatedly been revised back in recent years.

INVESTMENT GROWTH – BUILDINGS AND STRUCTURES

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Investment in the built environment remains low across Europe.

Sources: Cushman & Wakefield, PMA, PGIM Real Estate. As of May 2017.

Supported by relatively cheap and easily available debt, notably in continental Europe’s core markets of France and Germany, the opportunity to reposition and refurbish existing assets to grade A is set to remain significant for some time. The attraction of such strategies today is that investors can earn outsized returns by efficiently improving the magnitude and duration of property income streams that can be capitalized into value gains without having to rely on market-level rental growth.
3. Residential and Alternatives

Structural growth trends linked to demographic and other social factors look attractive, especially in-town residential and needs-based alternatives.

Increasingly, investors are turning to so-called alternative real estate sectors as a source of growth. Structural growth trends linked to demographic and other social factors look attractive as they imply a greater probability of demand growing over time than can be offered by the mainstream commercial property sectors. Alternatives are taking an increasing share of volume, rising to nearly 8% of all volume across Europe in 2016 (Exhibit EU7). Combined with residential – not an established institutional investment class everywhere in Europe – investment into non-traditional sectors now accounts for about one-fifth of deal volume.

EXHIBIT EU7: INVESTMENT INTO RESIDENTIAL AND ALTERNATIVES

However, we need to distinguish between assets and markets that are passing fads as capital searching for growth opportunities spills into investments that lack market depth or transparency to prosper in less favorable market conditions. As such, we favor residential assets that can attract growing in-town younger populations, and needs-based alternatives – such as housing for students and the elderly – which we expect to eventually develop into fully-fledged investment sectors, like in the United States.
Global Synthesis

Common Themes…And Differences

Regional perspectives demonstrate that a series of common themes persist across markets, perhaps most notably an ongoing low supply growth environment in all but a handful of emerging markets. Relative performance of real estate against other asset classes looks healthy in each region, encouraging further capital inflows. While the low interest rate environment remains common to most markets – for now, at least – investment volume has cooled since a strong 2015, and yield shift is slowing in most major gateway markets, which are looking expensive. Investors remain cautious and are still focused on core strategies, but they are starting to think about secondary assets and locations – and non-traditional, alternative real estate sectors – that offer higher returns potential.

At the same time, there are key differences across and within regions and sectors, which represents a change from recent years when yield shift dominated real estate value movements. By sector, logistics, apartments and non-CBD offices are the standout performers ahead of CBD offices – which recovered earlier in the cycle – and retail, where tenants are struggling to cope with rising online sales. With a favorable backdrop in terms of liquidity and steady economic growth, most markets are reporting stable or rising capital values – albeit at sharply varying growth rates – but there are exceptions.

In Asia Pacific, Singapore is struggling owing to a combination of weak demand and rising supply across sectors, while energy-driven markets – including Denver and Houston in the United States, and emerging markets such as Rio de Janeiro and Sao Paulo – are stabilizing after a mid-cycle lull driven by falling commodity prices. Value growth in major gateway markets in each region is slowing as yield compression fades and rental growth eases at an elevated level – values have dipped in U.S. CBD office markets owing to adverse yield shift. In contrast, late-recovery peripheral European nations – notably Ireland and Spain – are enjoying their best performance since prior to the global financial crisis.

In this environment, lower correlations and a greater variability in performance of different markets and sectors points towards opportunities for global investors to benefit from effective portfolio diversification strategies. Over time, market-level returns are highly variable, affected at any given time by a varying combination of global, regional and local-market factors. Sectors and regions frequently moving up and down a hypothetical rankings table through the course of a cycle, highlighting the case for holding a geographically spread portfolio to protect against market-specific risk and ensure better-performing markets are captured over time (Exhibit 13).
## EXHIBIT 13: GLOBAL PRIME RETURNS RANKING BY SECTOR AND REGION

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### Key to Chart

- **Europe Office**
- **Europe Industrial**
- **Europe Residential**
- **Asia Pacific Office**
- **Asia Pacific Retail**
- **Asia Pacific Industrial**
- **Asia Pacific Residential**
- **United States Office**
- **United States Retail**
- **United States Industrial**
- **United States Residential**

**Note:** Returns are indicative, based on the performance of prime or grade A commercial property assets. These estimates do not include depreciation or other running costs and are for illustrative purposes only.

Sources: CoStar, Cushman & Wakefield, JLL, PGIM Real Estate. As of May 2017.

## Developed vs. Emerging

Broadly speaking, in developed markets opportunities are focused on value-add growth potential arising from a lack of supply, relatively attractive pricing and growth potential offered by less fashionable second tier markets, and on structural growth potential of logistics and so-called alternative sectors that benefit from favorable structural trends. At a global level, emerging markets – which are determined by factors such as household income level, strength of legal and political institutions, and financial market depth – offer investors an alternate source of structural growth, underpinned today by an improving market environment.

### Emerging Markets

There is an increasingly attractive opportunity to invest in fast-growing emerging markets, owing to improving capital market stability.

In the aftermath of the global financial crisis, emerging markets recovered more quickly than their developed counterparts, fueled by ongoing structural convergence and rapid economic expansion, driven by rising commodity prices and growth in manufacturing production as major firms shifted production to low cost markets.

In real estate markets, growth in the size of invested stock – a byproduct of rapid economic growth – has been accompanied by strengthening capital markets and improved liquidity. Domestic capital sources have begun to assert themselves
in emerging markets that had previously relied on injections of overseas capital, reducing their exposure to global capital market constraints that existed in the early part of the recovery (Exhibit 14).

**EXHIBIT 14: EMERGING MARKET CAPITAL SOURCES AND CAPITAL VALUE GROWTH**

Fast forward to today and, while cross-border flows into major emerging markets are growing again, they are doing so alongside domestic capital sources. Real estate value growth in emerging markets has suffered in recent years as the benefits of a long-term structural yield shift have faded, at the same time as commodity-driven markets have struggled with weak demand and markets such as Shanghai and Warsaw have had to contend with a large volume of new supply that has dampened rental performance.

Even so, with growth prospects once again improving and supply growth set to peak this year before easing back, there is an increasingly attractive opportunity to invest in emerging markets that are delivering economic growth rates that compare favorably with Europe and the United States. A gradual process of convergence with major developed markets should go hand in hand with greater capital market stability due to an ongoing expansion of domestic capital sources in emerging markets, as their financial systems and real estate markets mature.

**Looking for Value**

The prospect of rising interest rates poses a new challenge to investors: to find the attractive income streams and sources of growth that can deliver target returns in the years to come, irrespective of cyclical movements in the near term.

Instead of trying to predict when a downturn might occur and what its effect may be on various sectors and geographies, it is sensible to look beyond the cycle and understand value in a long-term context. Among the various groups of investors active in real estate – from institutions, to private equity, REITs and family offices – factors such as investment time horizons, risk tolerance, and target returns can vary significantly, informing the appropriate type of strategies to pursue.
In general, pricing looks sensible in aggregate today, pointing to an ongoing opportunity to acquire core assets, albeit with lower returns expectations than previously. For investors looking to capitalize on growth opportunities to enhance performance and meet specific returns objectives, differences in performance and outlook across markets and regions inform a set of attractive global risk-adjusted investment opportunities (See Global Map of Opportunities).

As noted in the introduction to Part II, we can broadly categorize those we have identified into three groups. “Growth-driven” opportunities include value-add strategies in Europe and the United States, and counter-cyclical plays in Asian markets such as Singapore. “Value-driven” opportunities are given by secondary assets and markets that offer better value than prime gateway markets in the United States, with a similar opportunity in higher-yielding decentralized and regional office markets in Asia Pacific and Europe.

Finally, investors can seek to capitalize on “structural trends” in markets and sectors such as U.S. industrial markets, for example, which are benefiting from a shift towards online retail which is boosting demand for logistics facilities. Conversely, some Asian retail markets are demonstrating resilience to growing online retail due to rising tourist numbers. In Europe, in-town residential apartments and needs-based alternatives, such as student housing and senior living, are enjoying favorable demographic and cultural tailwinds.
Global Map of Investment Opportunities

Secondary Assets and Markets
With historically low yields in core markets, investors are looking towards secondary buildings, locations and markets to meet target returns.

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

Value-Add Strategies
Low vacancy and limited supply means we anticipate opportunities for new construction and redevelopment.

Residential and Alternatives
Structural growth trends linked to demographic and other social factors look attractive, especially in-town residential and needs-based alternatives.

Emerging Markets
There is an increasingly attractive opportunity to invest in fast-growing emerging markets, owing to improving capital market stability.

Decentralized and Regional Office Markets
Decentralized and regional office markets offer improved occupier market prospects and attractive yield spreads.

Tourism-Driven Retail and Hotel Markets
Retail markets have been overlooked by investors in recent years but are set to benefit from positive tourist-related demand, as are hotels.

Counter-Cyclical Strategies
Asian markets that have underperformed in recent years are set to benefit from limited supply in the next few years.
# Investment Research Team – Key Contacts

## Authors

<table>
<thead>
<tr>
<th>Authors</th>
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<tbody>
<tr>
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<td>Greg Kane</td>
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<td>Vice President</td>
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<td>Managing Director</td>
<td>Managing Director</td>
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<tr>
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## Americas

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## Europe

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## Asia Pacific

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