Research Report

Asia Pacific Real Estate Strategic Outlook: Mid-Year Review

September 2016

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1 Executive Summary

Macro economic conditions in Asia Pacific moderated in the first half of 2016, as headwinds remain in light of tapering growth in China and fragile trade activities in the region. Financial markets have recovered from the initial shock of the U.K. referendum in June and the associated impact on the global economy is expected to be less marked albeit with evidence of tail risks. Job growth in the region continues to hover above the historical ten year average particularly in Japan and Australia, and to some extent in China. Meanwhile, the slower growth and low inflation environment have given central banks more leeway to maintain looser monetary policies as evident in Japan, Korea and Australia. Barring any shocks or unexpected shifts in the baseline, the regional economy is set to stabilize for the remainder of 2016 supported by accommodative monetary policies and fiscal measures. Regional GDP growth in Asia Pacific is expected to remain stable at 5.3% in both 2016 and 2017.

Real estate performance across much of the Asia Pacific region continues to strengthen on the back of strong capital markets and healthy occupier fundamentals. Across the region, key cities in Japan, China, Hong Kong and Australia continued to see healthy office leasing demand in the first half of 2016 while the weight of capital targeting quality assets in the region have contributed to further cap rate compression in the key core markets. The outlook of property returns which have been heavily front loaded in our previous forecast could flatten over our forecast horizon through 2020 and returns in coming years are likely to be driven mostly by income yields as the impact of yield compression recedes. Near term returns are capped in Tokyo given the strong competition for good quality assets while in Seoul, subdued demand coupled with hidden vacancy in developers or owner occupied buildings are expected to weigh on rental growth prospects. Nevertheless, in our view, core unlevered total returns are expected to range between 6.5% - 8.2% annually over the next five years with the industrial sector performing better than office and retail.

Asia Pacific Real Estate target markets:

<table>
<thead>
<tr>
<th>Theme</th>
<th>Sector</th>
<th>Countries/Cities</th>
<th>Main Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Target Market with High Asset Liquidity</td>
<td>Office</td>
<td>Tokyo, Osaka, Seoul, Sydney, Melbourne</td>
<td>Potential for income stability and higher liquidity given the depth of the market and stable corporate occupier demand.</td>
</tr>
<tr>
<td>High street retail/neighbourhood centres</td>
<td>Tokyo, Osaka, Seoul, Sydney, Melbourne</td>
<td>Supply constrained across major high street retail. Neighbourhood centres provide cushion against fluctuations in discretionary spending.</td>
<td></td>
</tr>
<tr>
<td>Focus on Cash Flows</td>
<td>Logistics</td>
<td>Japan, Korea, Singapore, Australia</td>
<td>Structural change impacting the sector, including the ongoing proliferation of online retail.</td>
</tr>
<tr>
<td>Recovery Market</td>
<td>Office</td>
<td>Brisbane</td>
<td>Higher entry yields and potential for market-driven returns.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Theme</th>
<th>Sector</th>
<th>Countries/Cities</th>
<th>Main Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Asset Management</td>
<td>Office</td>
<td>Japan, Korea, Australia, Shanghai, Beijing</td>
<td>Utilize asset management specialty and local knowledge to enhance asset performance and improve cash flows.</td>
</tr>
<tr>
<td>High street retail/Shopping centres</td>
<td>Japan, Korea, Australia, Shanghai, Beijing</td>
<td>Improvement of foot traffic and a fresher tenant mix for underperforming high street retail and shopping centres.</td>
<td></td>
</tr>
<tr>
<td>Attractive Excess Return</td>
<td>Office/High street retail/Neighbourhood centres</td>
<td>Regional cities in Japan</td>
<td>Ten year government bond yields are now in negative territory and the borrowing costs are cheapest.</td>
</tr>
<tr>
<td>Forward Commitments</td>
<td>Logistics/Hotel</td>
<td>Japan, Korea</td>
<td>Structural undersupply of good quality hotels.</td>
</tr>
<tr>
<td>Medium-term opportunities</td>
<td>Office</td>
<td>Singapore</td>
<td>Long-term capital value growth, allowing investors to look beyond cyclical volatility.</td>
</tr>
</tbody>
</table>

1 IMF Regional Economic Outlook, Asia Pacific. As of April 2016.  
2 No assurance can be made that projected returns will be achieved.  
3 See chapter 3 for further discussion on Core Strategy and Core Plus and Value Added Strategy.
2 The Economy

Macro economic conditions in Asia Pacific moderated in the first half of 2016. China’s growth continued to moderate gradually and remain underpinned by infrastructure investment and domestic consumption. Australia saw a recovery in the non-mining sectors especially in the main Eastern states, while Western Australia continued to struggle on the back of the commodity price slump. Domestic consumption remained slow in Japan and South Korea.

The region’s growth momentum is generally subdued but partially supported by accommodative monetary policies in major economies, together with fiscal measures announced in Korea and Japan in 2016 in an effort to stimulate stronger growth. Uncertainties still remain amidst ongoing volatility in global capital markets, increased geopolitical risks as well as uncertainties in Europe given the U.K.’s referendum to leave the European Union. Barring any shocks or unexpected shifts in the baseline, the regional economy is set to stabilize for the remainder of 2016. Regional GDP growth in Asia Pacific was 5.4% in 2015 and the growth rate is expected to remain stable at 5.3% in both 2016 and 2017 based on IMF’s April 2016 report.

Exhibit 1: Real GDP growth & unemployment rates

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**External demand:** The U.S. economy remains on a recovery track supported by consumer spending and healthy labor market. The Dow Jones Industrial Average and S&P 500 index soared to an all-time high in July 2016 notwithstanding lingering uncertainties regarding the pace of interest rate hikes. Europe’s economy appeared set on a firmer footing although downside risks have intensified following the U.K.’s referendum to leave the European Union in June 2016 and increased geopolitical tensions. China remains the largest trading partner for many countries in the Asia Pacific region, particularly for Australia (34% of exports) and South Korea (26%). The impact of China’s declining import demand is most acutely felt in South Korea where exports have been declining for more than 18 months.
Monetary policy: Amid the sluggish consumption and weak economic growth in Japan, the Bank of Japan (BoJ) adopted an unprecedented negative interest rate policy in January 2016 to combat persistent deflation concerns. The Bank of Korea (BoK) and the Reserve Bank of Australia (RBA) also lowered policy rates in 2016 in an attempt to stimulate their respective domestic economies. Given the lack of strong demand drivers, the possibility of further rate cuts in the remainder of 2016 remains for these few countries.

Exhibit 3: Policy rates in major Asia Pacific economies

Note: * Based on the Singapore domestic interbank overnight rate as Singapore does not have a central bank policy rate. There is no guarantee the forecast returns shown will materialize.

Source: Deutsche Asset Management; Oxford Economics, Bloomberg, as of July 2016.

Inflation: In light of the lower energy prices, overall inflation is expected to remain muted across Asia Pacific, especially in the larger economies including China, Japan, South Korea and Australia. 10-year government bond yields are anticipated to rise gradually in 2017 or 2018 in the markets we cover in the region, albeit at varying degrees. Bond yields are expected to rise by less than 1% in Japan, and between 1 - 2 % across Singapore, Australia, Malaysia, South Korea, China and Hong Kong over the next five years. Deutsche AM anticipates a risk of cap rates increase in some markets, especially in the small and open economies of

Exhibit 2: Impact of China’s Slowdown

Exports to China (as % of total exports)

China Imports vs GDP Growth in S. Korea and Australia

Hong Kong and Singapore. (Our view is in line with the interest rate level anticipated in the forward market.)

2.1 Economic Outlook

— **Japan**: Japan’s GDP is estimated to grow less than 1% in 2016 as business conditions started to soften throughout the year. The Japanese Yen strengthened against the USD with the Nikkei stock index dropping 20% in the first half of 2016. The BoJ introduced the negative interest rate policy in January 2016 and long-term bonds have been hovering in negative territory since. Recovery in the consumer sector remains stagnant, however, and CPI is expected to remain flat around 0% towards the end of 2016.

— **South Korea**: Due to China’s slowdown and weak exports, the BoK lowered GDP growth forecasts to 2.8% compared to the historical average of 3.4% between 2006 and 2015, and lowered its inflation forecast to 1.2%. BoK cut the benchmark rate to an all-time low of 1.25% in June 2016 with a possibility of a further cut. The government announced a US$17 billion stimulus package to boost the sluggish growth and cushion risks from the United Kingdom’s decision to leave the EU. Growth is expected to rebound supported by the favorable exchange rate and recovery in private consumption.

— **China**: China’s GDP increased by 6.7% in the first quarter of 2016, compared to the expansion of 6.9% in 2015. A rebound in investment driven by property development and infrastructure construction has helped to lift industrial output by 6.0% in May 2016, largely comparable to the 6.1% pace in 2015. Domestic consumption continued to hold up with retail sales expanding by 9.7% in May, up from 9.3% in April. Export volumes were subdued in May, declining by 4.1% year on year, underscoring weakness in global demand. Meanwhile, imports continued to decline albeit at a slower pace of 0.4% in May. While China’s long-term growth potential is still moderating, a hard landing (below 5% GDP) is not expected for 2016.

— **South East Asia**: Growth in key South East Asian economies is expected to be generally modest in 2016. Sluggish external conditions continue to weigh on export demand though growth remains supported by resilient private consumption and tight labour markets. Notwithstanding, cuts in policy rates across Indonesia and Philippines along with an unexpected rate cut in Malaysia in July highlights concerns of growth risks in the region. IMF in its latest July forecast maintained growth for the ASEAN-5 economies – Malaysia, Thailand, Philippines, Indonesia and Singapore for 2016 and 2017 at 4.8% and 5.1% respectively.

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3 Oxford Economics. Data as of July 28, 2016
— **Singapore**: Singapore continues to face challenging market conditions driven by global economic headwinds, weak manufacturing and export demand, and subdued business investment. The government eased monetary policy in April 2016 through exchange rate intervention to slow the appreciation of the Singapore Dollar, while maintaining growth forecast of 1.0% to 3.0% for 2016 for the economy, underpinned by domestic services such as wealth and insurance sectors, healthcare and local infrastructure projects.

— **Australia**: The Australian economy has continued its gradual transition from resource-led investments to domestic drivers of growth. Labour market conditions have continued to improve through to the first half of 2016, providing further support to consumer confidence. Employment growth has been the strongest in New South Wales and Victoria with the largest employment gains recorded in the financial and business services, education and health sectors. Following the weak inflation outcomes in the first and second quarters, the RBA has trimmed the cash rate twice in 2016 by a total of 50 basis points to an all time low of 1.5% in August. RBA is anticipated to hold rates steady until 2018 when economic conditions may allow it to begin increasing the cash rate gradually.

### 2.2 Risks to the Forecast

— **Slowdown in China**: The risks to the Asia Pacific region remain around the concern over China’s slowing economy as well as the implications for trade volume and commodity demand. Resource-led economies such as Australia were hit in 2014-15 while exports of Korea, the largest exporter to China, have been declining since the beginning of 2015. Since China is the largest trading partner for many other APAC nations including Japan and Singapore, a sharp slowdown in the region would see trade flow decline.

— **Interest rate volatility and cap rate widening**: Prospects of successive rate hikes by the U.S. Federal Reserve could further affect key REIT markets, such as Australia, Hong Kong, Singapore and Japan, which are structurally sensitive to long term interest rate volatility. These REIT markets have impact on the broader direct real estate markets in terms of transaction volume, yields, capital value and more importantly market sentiment. We have reflected this in our cap rate assumptions in the base case scenarios for each market although risks remain that cap rates might widen more significantly than anticipated.

— **Impact of the U.K. referendum on EU membership (“Brexit”)**: In light of the U.K.’s referendum result to leave the European Union, we expect further capital market volatility and a possible reweighting of capital away from Europe to top gateway cities in Asia Pacific. Prolonged uncertainty could derail global economic growth and weigh on occupier demand. The office sector in the region’s financial hubs, such as Hong Kong and Singapore, could be affected most in the event of any financial turmoil due to high linkages to the financial industry. From a currency perspective, the South Korean and Australian markets could be affected by increased hedging costs while the Japan market can be expensive in dollar terms if the yen sustains its appreciation.

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3 Strategic Real Estate Outlook

Real estate performance across much of the Asia Pacific region has continued to strengthen on the back of strong capital markets and healthy recovering leasing markets. Japan, China, Hong Kong and Australia’s top cities have experienced healthy office leasing demand in 2015 and in the first half of 2016. The recovery is expected to continue in coming quarters for these key markets though real estate conditions are likely to remain subdued in Singapore, Perth and to a lesser degree in Seoul due to either a surge of new supply or subdued demand.

The weight of capital targeting quality assets in the region has contributed to further cap rate compression, especially in key Japanese and Australian cities as well as Seoul. The trend was compounded by active investments by sovereign capital, pension funds and insurance firms which have increased their real estate allocation. As such, much of the capital growth was front loaded and realized in our previous forecast and mostly in 2015, leading to diminished capital growth prospects over our forecast horizon. Therefore, returns in coming years are likely to be driven mostly by income yields. Core unlevered total returns are expected to range between 6.5% - 8.2% annually over the next five years with the industrial sector performing better than offices and retail, while near term returns are capped in Tokyo and Seoul given the strong competition for good quality assets. Nevertheless, potential widening of cap rates in the medium term could create good entry opportunities for investors seeking increased exposure within the region.

3.1 Strategic Investment Themes

Since February 2016, we have witnessed further tightening of cap rates in Japan, Australia and South Korea in line with interest rate cuts, while cap rates remained tight in Singapore and Hong Kong. It has become increasingly challenging for investors seeking income producing core-type opportunities in these markets to achieve their target returns, with some opting to move up the risk curve and/or diversify their target sectors.

Note: There is no guarantee the forecasts will materialise. Total return is calculated based on the weighted average of investable stock in each market according to DTZ Money into Property 2015. Deutsche Asset Management, Aug 2016.

Total return is calculated based on the weighted average of total stocks in each market. The chart above represents the following allocations in the Asia Pacific region: Australia 9%; Japan 23%; China 50%; Hong Kong 5%; Singapore 4%; South Korea 8% and Malaysia 2%. As such, the performance and forecast shown represent hypothetical and simulated performance, which has many inherent limitations. Please see “Important Information” for additional disclosure regarding the use of simulated, hypothetical performance. No assurance is made that forecasted returns will be achieved.

5 Deutsche Asset Management. This information is subject to change at any time, based upon economic, market and other considerations and should not be construed as a recommendation. Past performance is not indicative of future returns. Forecasts are based on assumptions, estimates, opinions and hypothetical models that may prove to be incorrect.
We hold the view that while part of the cap rate compression was driven by anticipation of a recovering rental cycle, other structural factors were also at play: (1) geographical diversification needs as evident from the gradual increase in cross-border transactions and (2) rising amount of capital available to invest as revealed by Preqin's Fundraising Update published in April 2016 which showed Asia-focused real estate funds has raised an aggregate capital of US$1.9 billion in the first quarter of 2016 following the US$11 billion raised in 2015.

We favour markets with relatively good yield spreads to mitigate risks arising from widening of cap rates, and healthy leasing fundamentals to provide rental income growth to drive returns going forward. In addition, we believe there are alternatives for cross border diversification trends, and as such we prefer gateway cities with deep markets and greater appeal to foreign investors.

Core Strategy

— **Main Target Market with High Asset Liquidity:** Good income producing assets in key gateway cities, i.e. Tokyo, Osaka, Seoul, Sydney and Melbourne, have continued to attract global capital. Although returns appear more modest compared to last year, this strategy offers investors the potential for income stability and higher liquidity given the depth of the market and stable corporate occupier demand. However, near term returns are capped especially in Tokyo and Seoul given the strong competition for quality assets. High street retail in major retail destinations with access to high footfall as well as neighbourhood retail centres with large catchments in Tokyo, Osaka, Seoul, Sydney and Melbourne also remains attractive. Supply is tight across major high street locations while neighbourhood centres provides a cushion against fluctuations in discretionary spending.

— **Focus on Cash Flows:** For investors looking for higher income returns, attractive opportunities exist in the logistics sector given the steady income stream nature and higher yields of logistics properties – typically in excess of 5%, or 4.5% in greater Tokyo. We recommend focusing on prime logistics centre in key transportation hubs including Japan, Korea, Singapore and Australia.

— **Recovery Market:** For investors with slightly lower risk profiles and preferences for stabilized assets, markets in mid to late-recovery offer an attractive combination of higher entry yields and potential for market-driven returns. We see opportunities in the Brisbane office market where rental growth is in a mid to late recovery cycle and could accelerate with rising demand set against a backdrop of low development pipeline and shortage of Grade A space.

Core Plus and Value Added Strategy

— **Active Asset Management:** We see opportunities in key cities in mature North Asian and Australia markets by taking on leasing risks for vacant office properties or refurbishment/re-positioning of older but well-located properties. High street and shopping centres are also strong candidates for a value-add proposition including improvements in retail footfall and repositioning of tenant mix. In China, opportunities could arise from repositioning underperforming office assets and improving tenant mix for retail assets in prime locations such as Beijing and Shanghai. Strong local network and deep market knowledge are crucial for successful value enhancement.

— **Attractive Excess Return Markets:** The 10-year Japanese government bond yield is currently in negative territory and borrowing costs are extremely cheap. Japanese regional cities are expected to provide one of the best excess returns over the risk free rate, indicating good investment returns when local finance is secured.

— **Forward Commitments:** In some markets, entering into joint ventures with strong local operating partners for forward commitments provides a viable route to access good real estate assets. We see selective opportunities in the hotel and logistics sectors both in Japan and South Korea, given the structural undersupply in these sectors. Construction risk and lease-up risk should be mitigated.

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6 Real Capital Analytics, Aug 2016
7 Deutsche Asset Management. This information is subject to change at any time, based upon economic, market and other considerations and should not be construed as a recommendation. Past performance is not indicative of future returns. Forecasts are based on assumptions, estimates, opinions and hypothetical models that may prove to be incorrect.
— **Medium-term Opportunities**: Monitoring the progress of investable markets that are amid a cyclical downturn such as Singapore where rents are currently in decline against the backdrop of unprecedented supply surge. Despite current weak rental prospects, an expected market rebound in the medium-term on the back of a recovering economy presents opportunities for investors seeking cyclical plays.
3.2 Capital Markets

Transactions: Commercial real estate transaction volumes (excluding land transactions) in 2015 totaled record levels of US$148 billion in the Asia Pacific region, almost unchanged from the previous year. Japan continues to lead the pack with about 30% market share followed by Australia (22%) and China (21%). Office transactions accounted for 48% of total transaction volumes in 2015, a slight decline from 51% in 2014, while the retail sector accounted for 28% in 2015, up from 22% in 2014.

Exhibit 6: Asia Pacific transaction volume

Note: Figures exclude land acquisitions and developments, hospitality and apartments/residential
Source: Real Capital Analytics; Deutsche Asset Management, Aug 2016
Past performance is not indicative of future returns

REITs: The aggregate amount of equity fundraising by REITs in the region dropped to US$7 billion in 2015, but the tide is changing positively again under the low interest rate environment across the region in the first half of 2016. Being structurally sensitive to volatilities in long term interest rates, REIT stock indices in major regional markets started to bounce back in the first half of 2016, especially in Japan where negative interest rates were introduced as well as in Australia where the policy rate was cut twice in May and August.

Exhibit 7: Market Capitalization of listed REITs in Asia Pacific

Note: Figures exclude land acquisitions and developments, hospitality and apartments/residential
Source: Real Capital Analytics; Bloomberg; Deutsche Asset Management, Aug 2016
— **Investor Profile:** Based on data from Real Capital Analytics, the share of transactions in Asia Pacific by listed REITs increased from 21% in 2014 to 26% in 2015, though it has declined in the latter half of the year. The market share by cross-border investors increased marginally from 26% to 27% in the same period, particularly so for the Australian market where overseas investors account for over half of the transactions. On the other hand, Asian institutions including Chinese, Taiwanese and Korean investors remained active in exploring outbound cross-regional investments in Europe and North America in 2015.

As of July 2016. Note: f = forecast. There is no guarantee the forecast returns shown will materialize.

The trend of global and domestic capital chasing income producing office assets has contributed to cap rate compressions in 2015 which continued in the first half of 2016, in line with declines in interest rates. This trend was compounded by active investments by sovereign capital, pension funds and insurance firms which continued to chase large deals and/or increase real estate allocations. Further marginal compression might be possible in some markets such as Japan and Australia where the policy rates were cut in 2016. Cap rates are expected to remain at current tight levels in most markets for the remainder of 2016 before beginning to unwind in 2017 or 2018, with the anticipated impact of widening cap rates on capital values likely to be more strongly felt in the small and open economies of Hong Kong and Singapore over the next few years.

As of July 2016. Note: f = forecast. There is no guarantee the forecast returns shown will materialize.

*Source: Deutsche Asset Management, Real Capital Analytics, Oxford Economics, Global Insight*

Past performance and forecasts are not indicative of future returns.
Sizable institutional grade assets in the retail sector remain tightly held by local developers and REITs in markets like Hong Kong, Singapore and Australia, capping deal volumes. High street retailers have benefited from increasing Asian tourist arrivals especially in Japan and Australia, while private wealth capital is more dominant in transactions in prime high street areas in Hong Kong, Shanghai, Tokyo and Seoul Gangnam where cap rates are extremely tight. Institutional investors have been observed to be exploring suburban assets in Japan and Australia, where some REITs and funds have tried to reshuffle existing portfolios.

The rise in e-commerce has redefined the retail landscape in Asia Pacific. Multi channel or ‘omni-channel’ retailing as well as the emergence of mobile-based transactions have seen retailers changing their retail operating models and increasing the selection of goods and services available online often at lower prices than in-store. As a result, this could undermine profit margins for physical retail stores and consequently turnover rent leases at retail centres. Notwithstanding, anecdotal evidence have also showed that some pure play e-commerce companies are merging their online and high street presence and have setup physical store space for brand building as well as showrooms.

Investor interest in the industrial and logistics sector remains strong due to the relatively higher yields and the recent evolution and gradual maturity of the sector, though acquisition opportunities of institutional grade assets remains limited. The supply of modern facilities is catching up to increasing demand with several large assets currently in the development pipeline in major metros in Japan, South Korea and China for completion in 2016 and 2017. Further yield compression (albeit marginal) could occur in Japan, while yields have stabilized in other markets.

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### Exhibit 10: Retail sector: Initial yields and 10Y government bond yield

![Graph showing initial yields and 10Y government bond yield for different regions.](image)

**Note:** f = forecast. There is no guarantee the forecast returns shown will materialise.

**Source:** Deutsche Asset Management; Oxford Economics, Global Insight, Aug 2016

Past performance and forecasts are not indicative of future returns

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### Exhibit 11: Industrial sector: Initial yields and 10Y government bond yield

![Graph showing initial yields and 10Y government bond yield for different regions.](image)

**Note:** f = forecast. There is no guarantee the forecast returns shown will materialise.

**Source:** Deutsche Asset Management; Oxford Economics, Global Insight, Aug 2016

Past performance and forecasts are not indicative of future returns

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— Credit markets: The financing environment remains generally accommodative in key markets due to the positive stimulus of rate cuts and supportive measures. Spreads remained at similar levels to a year ago while base rates have declined further in Japan, South Korea and Australia. There are early signs, however, that lenders are allocating more time on due diligence and applying tighter covenants than before especially in decentralized locations on mounting concerns of overheated valuations.

<table>
<thead>
<tr>
<th>Exhibit 12: Typical commercial lending terms</th>
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<tbody>
<tr>
<td>Market</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td>Australia</td>
</tr>
<tr>
<td>China</td>
</tr>
<tr>
<td>Hong Kong</td>
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<tr>
<td>Japan</td>
</tr>
<tr>
<td>Singapore</td>
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<tr>
<td>South Korea</td>
</tr>
</tbody>
</table>

Source: Bloomberg, Deutsche Asset Management, Aug 2016
For illustrative purposes only

3.3 Investment Market Outlook

— Japan: The volume of commercial real estate transactions in Japan in the rolling 12 months to June 2016 reached JPY 4.3 trillion on a preliminary basis, an 18% drop from six months ago, though up marginally compared to the previous quarter. Several transactions outside the central locations have not been successfully executed due to widening bid-ask spreads between buyers and sellers, while prices remained very tight in central locations. The rapid growth of private REITs (open-ended funds) contributed to higher market liquidity, while the recovery in leasing markets and relatively healthy yield spreads make markets attractive for cross border investors, with cap rates expected to remain tight.

<table>
<thead>
<tr>
<th>Exhibit 13: Transaction Volume and Lending Attitude by Banks in Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td>(JPY trn) transaction volume (12 months, LHS)</td>
</tr>
</tbody>
</table>

Sources: Urban Research Institute, Bank of Japan, Real Capital Analytics, Deutsche Asset Management, Aug 2016
There is no guarantee forecast returns shown will materialize

— South Korea: The volume of commercial real estate transactions in 2015 declined by 27% in Seoul compared to a year before. Tight cap rates in the office sector together with the soft occupier market in Seoul resulted in subdued investment activities especially in the office sector, while transaction volumes in the retail sector increased (even after excluding the KRW 6 trillion corporate transaction of Homeplus). Some investors have notably moved up the risk spectrum into non-core transactions such as asset repositioning, lease ups, forward commitments, asset conversions or investment in decentralized locations. Under accommodative monetary policy conditions, cap rates in the Seoul office sector have compressed by about 40 basis points in 2015.
China: Investment activities continued to be dominated by domestic capital with total transaction volumes reaching a record high of US$31.1 billion. Foreign investors with existing presence in China continued to look for opportunities although their focus was mainly in the office sector given the availability of institutional grade stock. Overall, office accounted for 65% of total transaction volumes in 2015 while the retail sector accounted for another 22%. Meanwhile, transaction volumes in the industrial sector held steady underpinned by strong demand from 3PLs and e-commerce companies.

Hong Kong: Commercial real estate investment remains predominantly driven by end-users as evidenced by several acquisitions of quality office assets by Chinese companies for owner occupation. Neighbourhood shopping centres continued to see solid demand from local investors while sales of industrial properties have remained muted following the end of the six-year long revitalization scheme in March 2016. Notwithstanding the weak performance of the trade sector, purpose-built, high specification warehouses remain keenly sought after by investors.
Singapore: Investment activities have continued to hold up despite the weakening rental environment. Interest in prime office has been revitalized by flagship transactions led by Qatar Investment Authority’s acquisition of Asia Square Tower 1 for SGD 3.4 billion in the first half of 2016, spurring more assets to be placed on sale in the market. Yields remained tight as investors continue to favour high quality core assets for long-term holding over older assets with redevelopment potential in view of high replacement costs and weak buyer sentiment in the strata-titled sales market.

Australia: Australia remained among the most favoured investment destinations in the region given the higher excess returns relative to the 10-year government bond and the improved leasing outlook particularly in Sydney and Melbourne. Based on data from Real Capital Analytics, the volume of transactions exceeded US$32 billion in 2015. The investment market was also bolstered by several portfolio deals during the year. Retail investments surged in 2015, achieving record sales of US$12.9...
billion, on the back of improvements in the retail environment driven by a strong housing market. Office investments continued to remain steady accounting for over US$12.6 billion of transactions. Prime grade properties with long leases remain the most favoured while offices with opportunities for residential conversion are also in strong demand. Meanwhile, industrial transaction volumes in 2015 were US$3.7 billion, down 32% compared to the previous year but remaining above the five year average of US$3.3 billion.

Exhibit 18: Transaction Volume in Australia 12m rolling

Source: Real Capital Analytics, Deutsche Asset Management, estimate as of December 2015. There is no guarantee estimate or forecast returns will materialize.
Past performance is not an indicative of future return.
3.4 Leasing Market Outlook

— **Japan**: The labor market remained very tight in Japan on the back of a healthy corporate sector which underpins office space demand in major cities. The office vacancy rate in central Tokyo fell to 4.1% in June 2016 compared to 5.1% a year ago. The healthy demand supply balance is expected to persist in the year to come, though a series of new supply pipelines from 2018 onwards may be of concern in the medium term.

![Exhibit 19: Office Supply and Vacancy Rate in Tokyo](image)

Vacancy rates have continued to recover in most major regional cities in 12 months to June 2016. It decreased from 6.2% to 4.2% in Sapporo, from 7.0% to 5.6% in Fukuoka, from 8.4% to 6.4% in Osaka respectively, while it increased marginally from 6.8% to 6.9% in Nagoya due to a couple of recent new supply. Vacancy rates in both Sapporo and Fukuoka were at their lowest levels in more than 15 years.

![Exhibit 20: Office Vacancy Rates in Major Japanese Cities](image)

— **South Korea**: Muted demand from the corporate sector held the vacancy rate at the elevated level of 10.7% in Seoul CBD in the first quarter of 2016, although it was a slight recovery from 11.2% a year before. While new tenant office supply in the coming years is expected to remain at a modest level in the major districts, the large supply of owner occupied buildings will be a concern as tenants vacating existing buildings create a significant amount of excess space. There is also some hidden vacancy in developer or owner occupied
buildings which are not fully captured by the statistics. The vacancy rate is expected to recover only moderately in the next two to three years to come.

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**China:** Overall leasing demand has softened as domestic and foreign MNCs occupiers remained generally cautious. Given the notable amount of new supply in decentralized Shanghai particularly from 2016 to 2018, the vacancy rate is anticipated to rise. Leasing demand in Beijing has also remained muted on the back of the slowing economy. Supply is expected to rise in 2016 putting further upward pressure on vacancy rate.

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**Hong Kong:** Office leasing demand remained stable supported by sustained demand from mainland Chinese firms and insurance companies. Notwithstanding, a number of new completions is anticipated to come on stream in decentralized areas of Hong Kong East and Kowloon East. Given the high specifications and competitive rentals, these projects could provide an alternative option for occupiers looking to secure cost-effective office space to accommodate expansion or consolidation requirements.
— **Singapore**: Overall leasing demand remained muted with businesses delaying expansion plans in view of the slowing economy while the financial sector continues to tackle restructuring challenges. Flight-to-quality trends have been observed as tenants attracted to lower rentals relocate to newer buildings with higher grade specifications. Rental growth and occupancy levels are expected to remain under pressure from the influx of supply with new developments Marina One and Guoco Tower coming onstream in the next 12 months.

![Exhibit 23: Office Supply and Vacancy Rate in Hong Kong](image)

— **Australia**: Tenant demand in Sydney and Melbourne has been broad based and mainly driven by organic growth from businesses particularly from the financial and business services sector. Limited new supply post 2016 coupled with increasing withdrawals of office stock is expected to lead to a tightening in vacancy. The headline vacancy rate in Sydney is expected to peak in 2016 at 10.1% before trending down to circa 6.7% in 2020. In Melbourne, the vacancy rate is anticipated to tighten to between 7.5% and 9.0% from 2016 to 2020 supported by continuing centralization of tenants from suburban markets.

![Exhibit 24: Office Supply and Vacancy Rate in Singapore](image)
Given the strong net take up in Sydney, the market has shifted in favour of landlords with evidence of tapering incentive levels. The current average leasing incentives of 35 months of rent free period on 10 year leases in Sydney (circa 29%) is anticipated to trend down to circa 28 months (23%) through to 2020. Similarly, the vacancy rate in Melbourne CBD is at its tightest since the first quarter of 2013, and incentives are anticipated to trend down to circa 29 months or 24% through to 2020.
## 4 Property Sectors and Returns

### 4.1 Office

--- **Fundamentals:** For the five year forecast period till 2020, vacancy rates are expected to either recover or remain at the current healthy levels in most key office markets in the region. Markets currently undergoing a supply surge this year such as Brisbane, Singapore, Kuala Lumpur and Sydney are expected to see a significant recovery in the medium term. The vacancy rates in Tokyo, Osaka and Hong Kong (overall) are expected to increase marginally due to a cyclical supply, but remaining at manageable levels. The exceptions are Beijing and Nagoya where large development pipelines are underway.

[Exhibit 27: Office sector: Projected vacancy rate in selected markets between 2016f – 2020f]

Healthy single digit growth is expected in net effective office rents in 2016 in Sydney, Melbourne, Shanghai, Hong Kong (Central) and Tokyo while more moderate growths are expected in other cities. Significant rental declines are expected in Singapore, Guangzhou and Perth in 2016 due to a surge in supply while demand remains muted. Rents are expected to recover in the latter years in each of those cities.

Looking ahead in the longer term, healthy growth is expected in Sydney, Melbourne and Brisbane due to the recovery in tenant incentives. Successful new developments in decentralized areas in Shanghai, Singapore, Seoul and Hong Kong should cap rental growths in the forecast horizon while moderate growth is expected in some of the North Asian markets such as Tokyo and Beijing where new supply pipeline is concentrated in the central locations. Growth is expected to be marginal in Japanese regional cities including Osaka, Yokohama and Nagoya where occupier demand is more moderate compared to Tokyo.

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9 Deutsche Asset Management. This information is subject to change at any time, based upon economic, market and other considerations and should not be construed as a recommendation. Past performance is not indicative of future returns. Forecasts are based on assumptions, estimates, opinions and hypothetical models that may prove to be incorrect.
Historically, an inverse relationship has been observed between the expected vacancy rate and rental growth forecast in most cities. A healthy demand supply balance is expected to persist in most key markets though weak leasing conditions are expected in Kuala Lumpur. Forecast average five-year rental growth is projected to be minimal or negative for Singapore, Perth and Guangzhou, although significant recovery is expected from 2018 onwards.

---

**Performance:** Mid to high single digit returns are expected in most cities in the APAC office sector over the next five years through 2020, on the back of healthy demand and moderate supply. Australian cities and Chinese Tier-1 cities are projected to be among the top performers, followed by Seoul and Japanese markets with more moderate returns. Japanese regional cities are expected to provide the best excess
returns over the local risk free rate, indicating good investment returns when local finance is secured. Forecast five-year performance in highly volatile markets such as Hong Kong, Singapore and Perth are projected to come in relatively weaker though good entry points should arise following the beginning of anticipated market recoveries occurring sometime around 2017-2018.

### Exhibit 30: Office sector: Projected compounded annual return and excess return between 2016f – 2020f

<table>
<thead>
<tr>
<th>City</th>
<th>Excess Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sydney - CBD</td>
<td>4.7%</td>
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<tr>
<td>Shanghai - Pudong</td>
<td>3.9%</td>
</tr>
<tr>
<td>Beijing - Overall</td>
<td>3.8%</td>
</tr>
<tr>
<td>Melbourne - CBD</td>
<td>4.1%</td>
</tr>
<tr>
<td>Brisbane - CBD</td>
<td>4.0%</td>
</tr>
<tr>
<td>Shanghai - Puxi</td>
<td>3.4%</td>
</tr>
<tr>
<td>Adelaide - CBD</td>
<td>3.3%</td>
</tr>
<tr>
<td>Seoul - CBD</td>
<td>3.6%</td>
</tr>
<tr>
<td>Osaka</td>
<td>5.7%</td>
</tr>
<tr>
<td>Nagoya</td>
<td>5.7%</td>
</tr>
<tr>
<td>Yokohama</td>
<td>5.6%</td>
</tr>
<tr>
<td>Kuala Lumpur</td>
<td>5.4%</td>
</tr>
<tr>
<td>Tokyo</td>
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</tr>
<tr>
<td>Hong Kong - Central</td>
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<tr>
<td>Singapore - Marina Bay</td>
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</tr>
<tr>
<td>Perth - CBD</td>
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<tr>
<td>Singapore - Raffles Place</td>
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</tr>
<tr>
<td>Singapore - Shenton Way</td>
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</tr>
<tr>
<td>Guangzhou</td>
<td>-1.4%</td>
</tr>
<tr>
<td>Hong Kong - Overall</td>
<td>-1.3%</td>
</tr>
</tbody>
</table>

Excess return is determined by projected income return plus capital appreciation over the local 10 year sovereign bond rate

f = forecast. Note: There is no guarantee the forecasts will materialise

Source: Deutsche Asset Management, Oxford Economics, Global Insight, Aug 2016

### 4.2 Retail

— **Fundamentals:** Retail sales have underperformed in some major markets in the region including Hong Kong, Singapore and Malaysia due to soft domestic consumption and subdued inbound tourist arrivals. Rents have declined in Singapore and Kuala Lumpur, while no rental growth is expected in Hong Kong until 2018. On the contrary, top cities in China, Australia, South Korea and Japan still enjoy healthy rental growth, though under pressure from ongoing proliferation of online retail. The current retail environment continues to be in favour of tenants with landlords offering better incentives. Vacancy rates could start to inch upwards in decentralized areas on the back of growing supply while occupier demand from retailers are likely to remain stable in the majority of locations in 2016 and 2017.

Over the five-year forecast horizon, China is expected to experience the strongest growth in retail rents in the region, followed by Australia, although growth should be more moderate in suburban, decentralized areas in these countries. In other markets such as Seoul and Tokyo, retail rental growth is forecast at 2% p.a. or below, in line with inflation expectations.
Performance: Given the emergence of online retailing, there is a preference among investors toward long term leases in the retail sector. The impact from online retail is expected to be felt more keenly in the discretionary retail segments such as clothing and apparel, compared to the non-discretionary segments such as staple food and daily necessities.

Looking ahead, the performance of neighbourhood centres in Australia appears more attractive due to higher yields than larger-sized formats, such as regional centres (RC). Healthy excess returns (i.e. annual total returns minus bond yields) of about 3%-6% are expected in all key retail markets in the region except for Singapore (Prime), Kuala Lumpur and Guangzhou where excess returns are expected to come in lower at 1-2%.

Exhibit 32: Retail sector: Projected compounded annual return and excess return between 2016f – 2020f

Excess return is determined by projected income return plus capital appreciation over the local 10 year sovereign bond rate

f = forecast RC= Regional Centres SRC= Sub-regional centres. Note: There is no guarantee the forecasts will materialise
Source: Deutsche Asset Management, Oxford Economics, Global Insight, Aug 2016

4.3 Industrial

Fundamentals: In the industrial sector, e-commerce and third party logistics companies are expected to drive leasing demand in the modern logistic space across the region. Occupiers with big space...
requirements are likely to find it challenging to secure space in modern logistics facilities. Growth is expected to be moderate in the region at around 1-2.5%, broadly in line with inflation as tenants, third party logistics companies and consigners remain mindful of logistics costs. A great deal of logistics supply is expected in cities like Tokyo in 2016 and 2017, and rents are therefore expected to grow only moderately while rents in Singapore are projected to decline this year due to subdued demand.

---

**Performance**: Owing to higher yields, increased transparency and strong underlying occupier demand, the industrial sector has provided consistently higher returns than the office and retail sectors, and is expected to remain attractive in the next five years (see Exhibit 5 on page 9). Five-year return forecasts for Australian key cities, Chinese cities, Singapore and Seoul all look favourable around the 8% level, although investors could be constrained by the limited deal flow of good quality assets in Chinese cities, Seoul and Singapore. Tokyo is expected to provide good excess returns in the forecast period, while excess returns are forecast to be the lowest in Hong Kong at 2.7% where industrial cap rates are anticipated to rise in the forecast period.

---

**Exhibit 33: Industrial sector: Projected rental growth between 2016f-2020f**

<table>
<thead>
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<tr>
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</tr>
<tr>
<td>Melbourne - South East</td>
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<tr>
<td>Sydney - Outer CW</td>
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<td>Melbourne - West</td>
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<tr>
<td>Hong Kong</td>
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<tr>
<td>Beijing</td>
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</tr>
</tbody>
</table>

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Excess return is determined by projected income return plus capital appreciation over the local 10 year sovereign bond rate

f = forecast. Note: There is no guarantee the forecasts will materialise

Source: Deutsche Asset Management, Aug 2016
5 Required Returns (office sector)

In light of the huge divergence in market maturity across the Asia Pacific region, it is insufficient to compare property-level total returns on a stand-alone basis without factoring the associated risks. A number of factors were considered in the computation of required returns and associated risks related to each submarket such as volatility, liquidity, transparency and the accumulated effect of obsolescence. The required returns were formulated using both quantitative and qualitative modeling which was integrated in our House View. The following table summarizes the components for the required returns.

<table>
<thead>
<tr>
<th>Exhibit 35: Component of Required Returns</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inputs</strong></td>
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<td>Risk Free Rate</td>
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<td>Bond Premium</td>
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<tr>
<td>Return Volatility</td>
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<tr>
<td>Market Liquidity</td>
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<td>Market Transparency</td>
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<tr>
<td>Small City Adjustment</td>
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<tr>
<td>Depreciation</td>
</tr>
</tbody>
</table>

Source: Bloomberg, Oxford Economics, PMA, JLL, DTZ, Deutsche Asset Management, Aug 2016

Exhibit 36 highlights the positioning of the various markets in reference to this framework. The total forecast returns on the vertical axis are plotted against required returns on the horizontal axis for each office market. The returns are based on the same office sector forecasts as outlined on Exhibit 30. We categorize the major office markets into the following three groups:

- **Core Target Market**: The core target markets include major cities in Japan and Australia as well as Seoul where total return forecasts look favorable compared to their required returns. These are among the most established and mature markets in the region and core investors focused on income yields should center their portfolio investments mainly in these markets. This is broadly in line with the “Main Target Market” in Core Strategy in the Strategic Investment Themes outlined on page 9, while some other regional markets in Australia and Japan are included as well.

- **Late Recovery**: Markets experiencing a cyclical downturn due to supply surge and subdued demand such as Singapore and Perth. A cyclical market recovery is expected in the medium-term. This is similar to the “Medium-term Opportunities” in Strategic Investment Themes outlined on page 9.

- **High Risk High Return**: Top tier markets in China are expected to provide attractive returns in the next five years, though the required returns are higher due to the high risk free rate and limited market transparency. These markets should be more suitable for core-plus or value added strategies in line with “Active Asset Management” in Strategic Investment Themes on page 9.
Despite favourable performance expectations in some markets there are other challenges and constraints that should be factored for commercial real estate investments which cannot be fully captured in the required return calculations above, especially for cross border investors.

Hedging costs are expensive in Australia and South Korea for Euro investors and this can be an impediment for cross border investors when competing with domestic investors, even though total return forecasts may look attractive. In Japan, local investors and developers hold the upper hand due to extremely cheap borrowing costs in the local debt market, while access to cheap capital is limited for foreign investors.

Regulatory and compliance risks exist for foreign investors. Onshore holding structures in China with equity investments from foreign parties require the formation of foreign-invested enterprises (FIEs) or wholly owned foreign enterprises (WOFEs). Conversion of structures is required if the existing holding structure is not in either of these forms and is subjected to regulatory approval, which introduces regulatory uncertainties.

Therefore, it is critical for investors to find capable investment managers who have a good foothold in each of these markets when making investments.
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The forecasts provided are based upon our opinion of the market as at this date and are subject to change, dependent on future changes in the market. Any prediction, projection or forecast on the economy, stock market, bond market or the economic trends of the markets is not necessarily indicative of the future or likely performance.

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# Research & Strategy – Alternatives

## Office Locations:

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<td>222 South Riverside Plaza 26th Floor</td>
<td>Chicago</td>
<td>United States</td>
<td>+1 312 537 7000</td>
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<td>Frankfurt</td>
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<td>New York</td>
<td>345 Park Avenue 24th Floor</td>
<td>New York</td>
<td>United States</td>
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<td>San Francisco</td>
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<td>Tokyo</td>
<td>Japan</td>
<td>+81 3 5156 6000</td>
</tr>
</tbody>
</table>

## Team:

### Global

- **Mark Roberts**
  - Head of Research & Strategy
  - mark-g.roberts@db.com

- **Gianluca Minella**
  - Infrastructure Research
  - gianluca.minella@db.com

- **Jessica Elengical**
  - Head of ESG Strategy
  - jessica.elengical@db.com

### Americas

- **Kevin White**
  - Head of Strategy, Americas
  - kevin.white@db.com

- **Ross Adams**
  - Industrial Research
  - ross.adams@db.com

- **Bradley Doremus**
  - Apartment Research
  - bradley.doremus@db.com

- **Ana Leon**
  - Retail Research
  - ana.leon@db.com

### Europe

- **Simon Wallace**
  - Head of Research, Europe
  - simon.wallace@db.com

- **Tom Francis**
  - Property Market Research
  - tom.francis@db.com

- **Farhaz Miah**
  - Property Market Research
  - farhaz.miah@db.com

### Asia Pacific

- **Koichiro Obu**
  - Head of Research & Strategy, Asia Pacific
  - koichiro-a.obu@db.com

- **Seng-Hong Teng**
  - Property Market Research
  - seng-hong.teng@db.com

### Contact Information

- **Mark Roberts**
  - Global Head of Research & Strategy
  - mark-g.roberts@db.com

- **Jaimala Patel**
  - Quantitative Strategy
  - jaimala.patel@db.com

- **Aaron Heffernan**
  - Liquid Real Assets Research
  - aaron.heffernan@db.com

- **Brooks Wells**
  - Head of Research, Americas
  - brooks.wells@db.com

- **Erin Patterson**
  - Office Research
  - erin.patterson@db.com

- **Silverio Vasquez**
  - Quantitative Research
  - silverio.vasquez@db.com

- **Matthias Naumann**
  - Head of Strategy, Europe
  - matthias.naumann@db.com

- **Martin Lippmann**
  - Property Market Research
  - martin.lippmann@db.com

- **Julien Scarpa**
  - Property Market Research
  - julien.scarpa@db.com

- **Natasha Lee**
  - Property Market Research
  - natasha.j.lee@db.com