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Marketing Material

Research Report

2018 Spring Global Real Estate Strategic Outlook

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1 Executive Summary

In contrast to a year ago, the outlook for economic growth has improved considerably. As a result, investors can find optimism in the real estate market in a number of ways.

First, due to stable employment growth we expect to see sustained tenant demand for property. Second, inflation-adjusted or "real" interest rates are not only low if not negative, they remain below average suggesting limited capital market risk. Third, in contrast to the last decade, fiscal policy is less austere and in the case of the U.S. very supportive of economic growth. Fourth, despite the risk of rising short term rates by central banks, when viewed through the lens of history, even marginal increases in rates would lead to below average interest rates and positively-sloped yield curves which in turn, minimizes the risk of a recession. Fifth, while there are pockets of excess supply, in general new construction activity remains below average.

Furthermore, we are not seeing the type of aggressive and accommodative leverage used in the market as we saw leading up to the credit crisis. Indeed, the CMBS market remains a shadow of its former self in both Europe and the US, while institutional and bank lending appears to have a higher degree of discipline. As a result, real estate income yields provide a reasonable risk premium compared to lending rates. Finally, in recent weeks, there has been some volatility in the equity markets, yet, corporate profits are expected to remain above average in 2018 and equity markets are poised to produce at least average rates of return in most regions across the globe. With these factors in place, we expect real estate globally will continue to provide attractive total returns in the range of 5%-8% on an unleveraged basis through 2019 and outpace the bond market while providing a competitive return to equities.

What has changed is the expected relative performance one region against another when viewed in a global context. However, these broad figures overlook the dispersion in returns that can be achieved at a city, country or sector level. For example, we expect total returns of 6%-7% for the U.S. through 2019. However, we believe higher returns can be achieved by overweighting the industrial/logistics sector while also underweighting certain large markets such as New York or San Francisco which comprise a disproportionate share of the Index.

Turning to Asia Pacific, we remain very constructive in our views for the region which is expected to see higher total returns than the U.S. in the range of 6%-8%. The real estate market in Asia-Pacific is underpinned by economic growth which should expand well in excess of the US and Europe. Once again, the core office and logistics markets in Australia are expected to outperform our regional average, while Japan is also expected to post high single digit levered returns due to the low cost of borrowing and improving economic prospects. Singapore, which traditionally sees a wide dispersion in returns through the course of a market cycle, is once again poised for a cyclical recovery due to improving global economic trade.

Finally, economic prospects in Europe have turned markedly positive over the last twelve months despite certain political risks in the region. Over the next two years, we expect prime total returns in the range of 7%-7.5%. While supply is increasing, declining unemployment in most markets combined with strong occupier demand, positive rent growth, higher releasing rates and declining vacancy rates should lead to positive momentum in total returns in 2018. Furthermore, swap-spread rates remain low in a global context. When combined with our real estate outlook, the European real estate market appears an attractive destination for a number of investors globally.

As we have highlighted in the past, a proper global diversification strategy will consider an investor's home country return and the purchasing power of their currency set against the returns available in international markets and the diversification benefits. Thus, in the sections that follow, we once again highlight these bespoke views as well as our overweight and underweight strategies and risks to our outlook in each region.

2 Global Economic and Political Highlights

Global growth momentum continues to be solid across key regions around the world. U.S. GDP growth gained substantial ground during 2017, coming in at 2.3% during the year, 80 bps higher than in 2016. We expect 2018 to be another year of good positive growth, buoyed by the recently enacted U.S. tax reform and improving global economic conditions. The Eurozone economy is also performing well compared to just a year ago. Eurozone GDP came in at 2.7% for 2017, an increase of 80 bps from 2016. European businesses are hiring, consumers are spending, exports are rising, and even governments have started to loosen their purse strings. While in the U.K., economic growth has slowed due to Brexit, but not by as much as some had feared. Asia Pacific economies have also experienced significant recovery in 2017, supported by stronger global trade conditions since late 2016. Employment trends remain positive with unemployment rates projected to either remain stable or decline marginally. We expect economic growth in the Asia Pacific region to remain broadly stable at 5.5% in 2018.

Figure 1 shows the Purchasing Manager's Indices though February 2018. Both manufacturing and non-manufacturing indices globally are showing broad-based expansion with indices running in excess of 50, indicating an expanding economy. Emerging markets have also moved into expansion territory and should lead to higher global growth and sustained trade flow in 2018.

Figure 1: Macro View: Global economy - Purchasing Managers' Indices (PMI) for the manufacturing industry*

	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18
U.S.	55.6	57.6	56.6	55.3	55.5	56.7	56.5	59.3	60.2	58.5	58.2	59.3	59.1
Germany	56.4	56.8	58.3	58.2	59.5	59.6	58.1	59.3	60.6	60.6	62.5	63.3	61.1
France	53.6	52.2	53.3	55.1	53.8	54.8	54.9	55.8	56.1	56.1	57.7	58.8	58.4
Italy	53.0	55.0	55.7	56.2	55.1	55.2	55.1	56.3	56.3	57.8	58.3	57.4	59.0
UK	55.4	54.6	54.3	57.2	56.5	54.2	55.4	56.8	56.1	56.3	58.1	56.2	55.3
Sweden	68.2	64.0	68.4	62.6	59.9	63.4	64.4	53.5	67.9	61.7	64.8	62.3	58.9
Japan	52.7	53.3	52.4	52.7	53.1	52.4	52.1	52.2	52.9	52.8	53.6	54.0	54.8
Singapore	51.0	50.9	51.2	51.1	50.8	50.9	51.0	51.8	52.0	52.6	52.9	52.8	53.1
Taiwan	55.6	54.5	56.2	54.4	53.1	53.3	53.6	54.3	54.2	53.6	56.3	56.6	56.9
South Korea	49.0	49.2	48.4	49.4	49.2	50.1	49.1	49.9	50.6	50.2	51.2	49.9	50.7
China (HSBC)	51.0	51.7	51.2	50.3	49.6	50.4	51.1	51.6	51.0	51.0	50.8	51.5	51.5
India	50.4	50.7	52.5	52.5	51.6	50.9	47.9	51.2	51.2	50.3	52.6	54.7	52.4
Brazil	45.1	46.4	47.7	50.3	49.2	47.4	48.8	49.0	50.7	48.8	46.9	47.4	50.0
Global													
Manufacturing Ind.	52.7	52.9	52.9	52.7	52.6	52.6	52.7	53.2	53.2	53.5	54.0	54.5	54.4
Non-manufacturing	53.9	53.3	53.7	53.7	53.9	53.8	53.7	54.0	53.8	54.1	53.7	53.8	54.1
Global Composite	53.8	53.6	53.8	53.7	53.8	53.6	53.5	53.9	53.8	54.0	54.0	54.3	54.6

Source: Bloomberg Finance L.P., Deutsche Asset Management Investment GmbH; As of February 2018.
* Values above 50 indicate an improving business development of the industry compared to the previous month, values below 50 indicate shrinking businesses.
Note: Past Performance and forecasts are not reliable indicators of future returns. No assurance can be given that any forecast or target will be achieved. Forecasts are based on assumptions, estimates, opinions and hypothetical models or analysis which may prove to be incorrect.

The key reasons for better global growth are (1) the U.S. tax reform providing tax cuts which is expected to stimulate the economy, (2) the rebound in regional exports across Asia since late 2016 which is gaining momentum, and (3) the recovery in oil prices which helps support economic activity in certain regions. In addition, the stimulus program in China, an improved European banking sector and reduction in political risk also provide additional support for global growth.

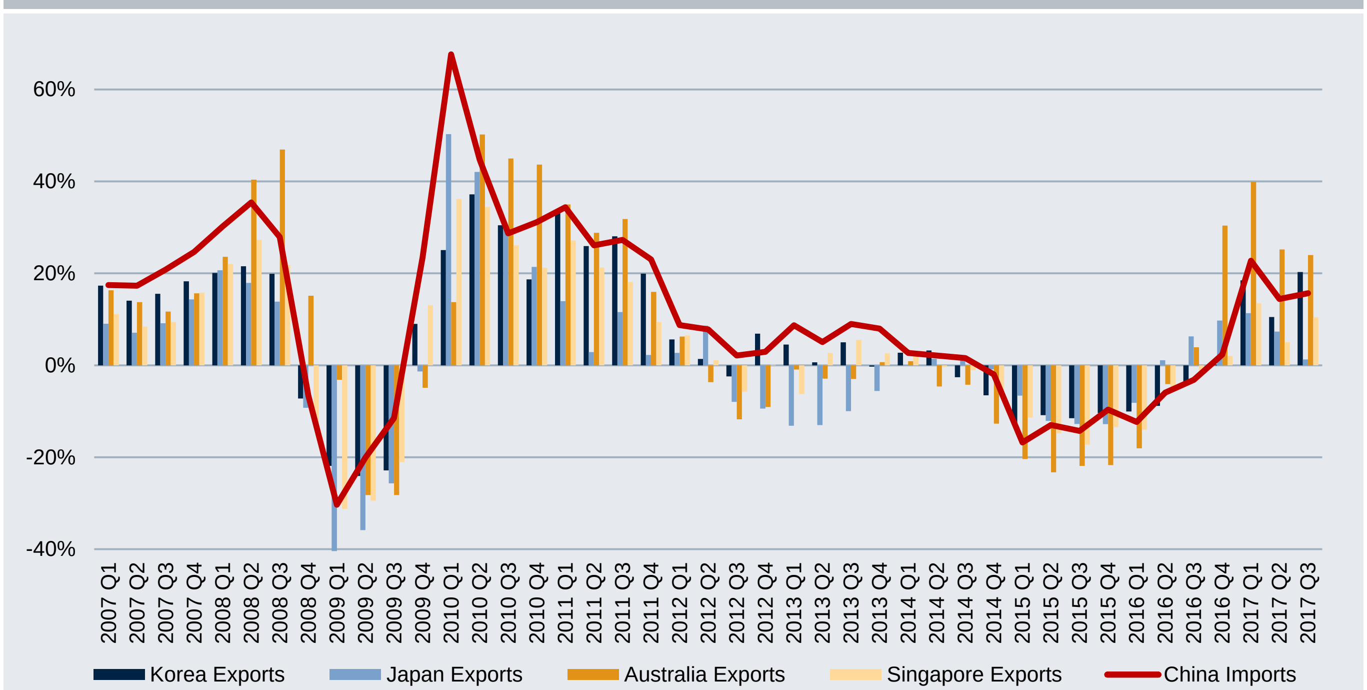
Oil prices started recovering in September 2017. Supply in the oil market is now more in check due to cutbacks from OPEC producers and Russia, which led to drawdown in inventory to the five-year average. Demand for oil has been healthy, which is consistent with an improving worldwide economy.

The U.S. tax reform is projected to increase growth by a modest 0.3-0.5% in 2018, with the boost to growth trailing off after that. Higher levels of discretionary income and after-tax corporate profits will act as a stimulus. The tax bill is expected to incentivize business investments by lowering tax rates on foreign profits held overseas and offering accelerated depreciation on capital investments made in the near term which should provide near-term benefits to growth. The stimulus may reaffirm the current rate hike outlook or modestly increase the probability of more rate hikes in the near future.

The tax reform calls for the doubling of the standard deduction and limitations on deductions for mortgage interest and state and local taxes. As it relates to the U.S. real estate market, these items could incentivise apartment renting over homeownership in high-tax/high-cost areas such as New York City, Washington, D.C. and San Francisco. On a longer term basis, the cap on state and local tax deductions will likely reinforce the current trend of population growth and domestic migration to lower cost areas such as Florida and Texas.

Lastly, regional exports across Asia have rebounded since late 2016 and have gained momentum throughout 2017. China, which is the largest single trading partner for many neighbouring countries in the region, has undergone significant structural reforms over the past few years. Since 2011, China's import demand has declined, consistent with lower trade volumes in the region. However, regional trade growth recovered starting in the second half of 2016 with broad-based recovery in exports in many major countries including Japan, South Korea, Australia, Singapore, as well as the United States and Europe. The U.S. tax cuts should also support more export demand from the Asia Pacific region. Barring any shocks such as geopolitical tension in the Korean peninsula, growth for the region is expected to remain relatively stable at 5.5% in 2018.

Figure 2: Growth in Asia's exports and China's imports (y/y %)



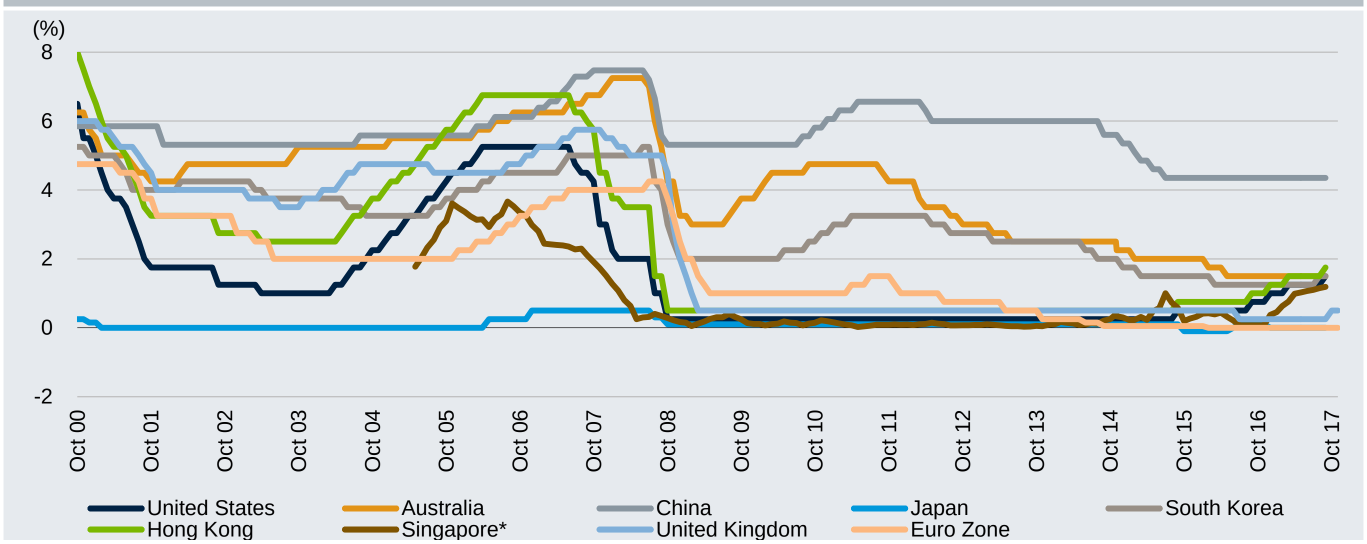
Source: Deutsche Asset Management, Oxford Economics. As of Jan 2018.

Monetary Policy:

As economic growth around the world has gotten better, central banks are edging more towards "tapering and tightening" although policies are still diverging around the globe which supports a global investment strategy. The Federal Reserve increased interest rates three times in 2017 and the "Fed dot plots" imply three additional increases during 2018 which would lift rates from 1.25%-1.50% to 2%-2.25%. Economic growth in the Eurozone has turned out better than expected, at 2.5% in 2017. Therefore, the European Central Bank has indicated it will stay the course and taper bond purchases by the end of 2018 with rates expected to start to increase in 2019. The Bank of England increased the base rate by 0.25% to 0.5% in response to higher inflation, in part reflecting the weaker pound but also a better than expected economic climate since the Brexit vote. While uncertainty persists, we expect the Bank of England to increase rates once more during 2018, although the outlook for policy will be highly dependent upon the sort of Brexit that is achieved over the coming twelve months, and the likely two-year transition period that follows.

Major central banks in Asia Pacific have kept monetary policy accommodative in support of domestic demand. The Bank of Japan (BoJ), Reserve Bank of Australia (RBA) and the People's Bank of China (PBoC) have maintained their policy rates at all-time lows to stimulate their economies. However, the Bank of Korea and Hong Kong Monetary Authority raised interest rates in 2017, consistent with U.S. monetary policy. In Singapore, borrowing costs have also increased following the U.S. rate hikes. While central banks in Asia Pacific are expected to remain accommodative, a stronger U.S. and global economy will likely support higher interest rates which will ultimately put upwards pressure on policy rates in Asia Pacific to bridge the differential with global interest rates.

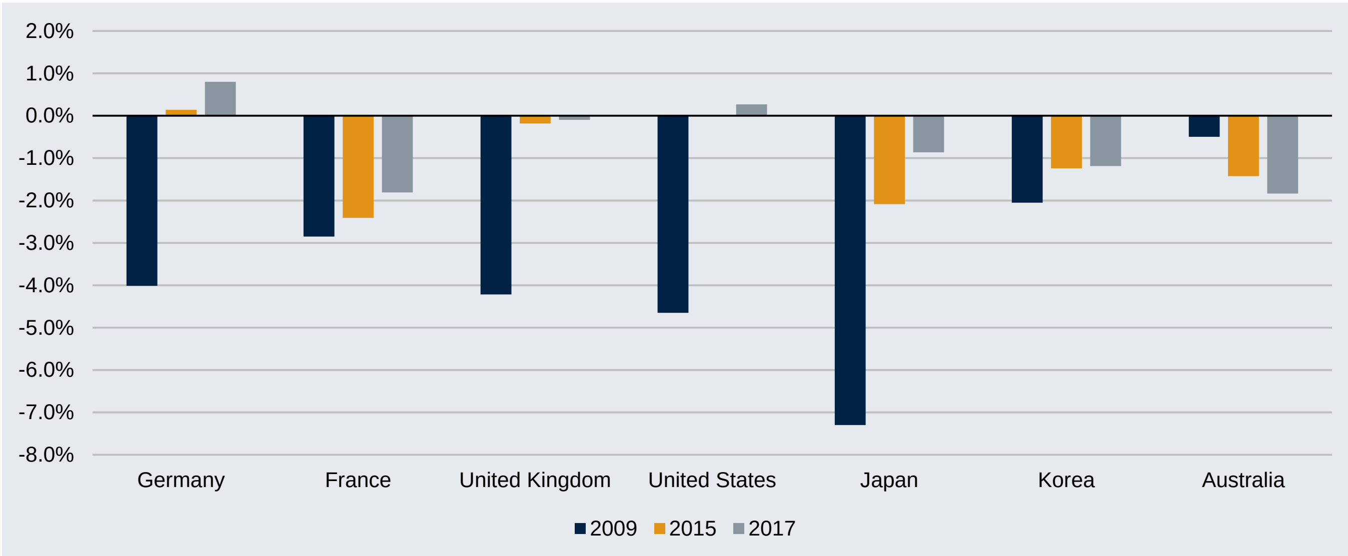
Figure 3: Policy rates in major economies



Source: Deutsche Asset Management, Oxford Economics, Bloomberg. As at Jan 2018.
*Based on the Singapore domestic interbank overnight rate.

Inflationary pressures have picked up in certain economies while excess capacity in other economies remain. From a global perspective we expect benign inflation pressures. The chart below shows the output gap slowly moving from negative territory to positive territory. A positive output gap is consistent with low unemployment, and a negative output gap reflects slack in the economy. The U.S. and German economies are already in positive territory. In the U.S. we see the sharp reduction in the output gap also being reflected in the cyclically low unemployment rate of 4.1%. As such, inflationary pressures support central bank moves to "tighten" and "taper" monetary policy. However, we do not expect inflation to increase substantially as there are many factors that keep a lid on runaway rates, such as lower trend economic growth in the U.S. and Europe, below average capacity utilization and slower projected GDP growth for emerging markets in the outer years. Also, assuming oil prices remain stable, we should see inflation pressures in the U.S. recede in 2018 as base effects on oil and shelter rents in particular, are reduced.

Figure 4: Output gap slowly moving into positive territory



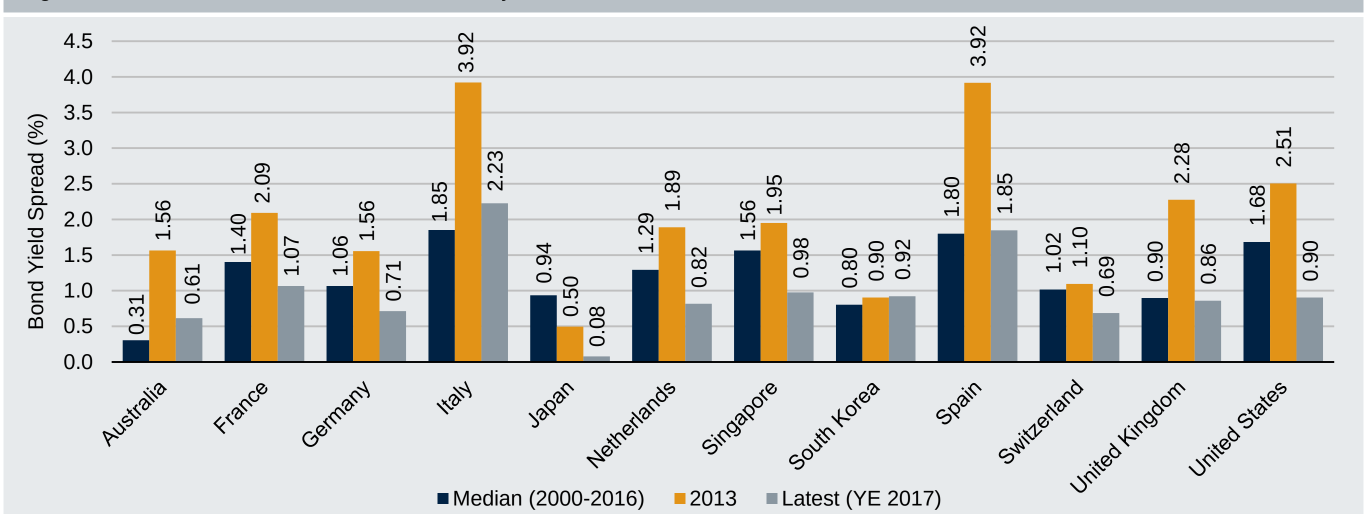
Source: IMF World Economic Outlook, Deutsche Asset Management Investment GmbH; As at January 2018.

Note: The information herein reflects our current views only, are subject to change, and are not intended to be promissory or relied upon by the reader. There can be no certainty that events will turn out as we have opined herein. Past Performance and forecasts are not reliable indicators of future returns. No assurance can be given that any forecast or target will be achieved. Forecasts are based on assumptions, estimates, opinions and hypothetical models or analysis which may prove to be incorrect.

While we do forecast higher real estate cap rates in some markets over the next five years (for example, trade-dependent markets such as Hong Kong and Singapore), we expect the increase in cap rates to be smaller than the increase in sovereign bond yields. The spread of initial yields over sovereign bond yields is still wide for many countries, leaving some room for bond yields to move higher before putting pressure on cap rates to move up. It is also worth noting that real estate performance is generally positive in periods of rising interest rates accompanied by good economic growth, as we are seeing currently.

Furthermore, the risk of a recession in any of the countries we cover remains low. As figure 5 depicts, the slope of the yield curve (difference between 10-year and 3-month sovereign bond yields) remains positive. Historically, an economic recession is typically preceded by a negatively-sloped or inverted yield curve. While yield curves today are flatter when compared to 2013 when they were widest since the financial crisis, they are generally on-par or slightly lower than their historical median. While we note that inflation expectations have increased slightly for certain major markets, they remain close to target in the U.S. (2.1%) and below target (0.9%) in Europe.

Figure 5: Recession Risks Remain Low in Major Markets



Source: Oxford Economics, January 2018.

Past performance is not indicative of future returns. Note: Spread between 10-year and 3-month government bond yields.

Key Risks

A few items stand out to us. First, global geopolitical risks including Brexit, anti-globalization sentiments and tensions with North Korea. A hard Brexit may result in trade uncertainties and thus lower growth for the United Kingdom and to a lesser extent other Eurozone countries. We have already seen inflation eating into wages and uncertainty in the region has caused a slowdown. In addition, the United Kingdom will likely undergo a two-year transitional phase after a formal withdrawal. Rising anti-globalization sentiments could lead to protectionism policies and trade barriers, which would limit economic growth in trade sensitive markets such as Hong Kong and Singapore. North Korea tensions may result in an immediate threat to South Korea and to regional economic growth.

Second, rising interest rates globally have caused more volatility in various equity markets which impacts the performance of listed REIT markets around the world. This can affect the broader direct real estate markets through transaction volume, yields and capital values. Rising interest rates can also potentially lead to cap rate widening which can impact returns especially for stabilized prime properties with low entry yields.

Third, increased government debt levels in some countries such as Japan (201% in 2016), the United States (127%), and Singapore (113%) could pressure long-term rates higher and impact cap rates. Further, high levels of foreign debt can be risky in the long term as this limits the flexibility of governments to either adopt expansionary fiscal policies to stimulate economic growth or tighten monetary policy in the event of an overheating domestic economy. However, we note that government debt interest expense as a percentage of GDP is manageable as most governments took advantage of lower interest rates over the past decade to issue debt. High levels of foreign debt were a major contributor to the Asian financial crisis in 1997-98. However, most countries in Asia Pacific are now on a better financial footing, and most government debt in Japan is domestically held, supported by high levels of foreign exchange reserves.

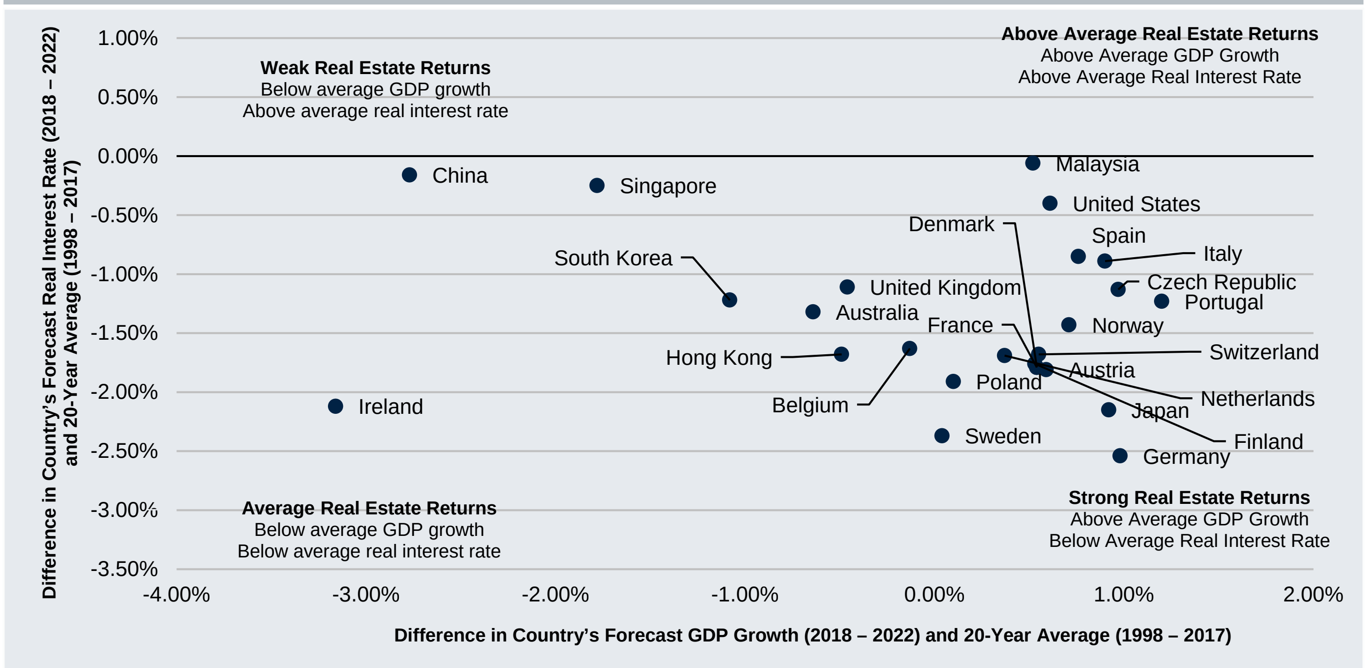
3 Macroeconomic Implications to Real Estate

We believe there are four "killers" of a real estate cycle, namely: rising "real" or inflation adjusted rates; an overabundance of new construction; excess lending activity; and economic recessions.

As noted in the section above, we believe recession risks remain low in 2018. Similarly, as inflation has gradually increased in response to better economic growth, "real" or inflation-adjusted interest rates remain well-below average despite some recent volatility in the bond market.

Globally, the outlook for inflation-adjusted interest rates relative to their 20-year average remains low for most countries. It ranges from a low of -2.54% in Germany to a high of -0.06% in Malaysia. The United States' inflation-adjusted interest rate relative to its 20-year average stands at -0.4%. Low real interest rates will likely put a lid on increases in cap rates as they reduce the cost of capital and serve to support economic growth. In addition, the spread between initial yields and 10-year sovereign bond yields remains above its historical average for many countries, which provides a cushion for any long-term rate increase (see figure 10).

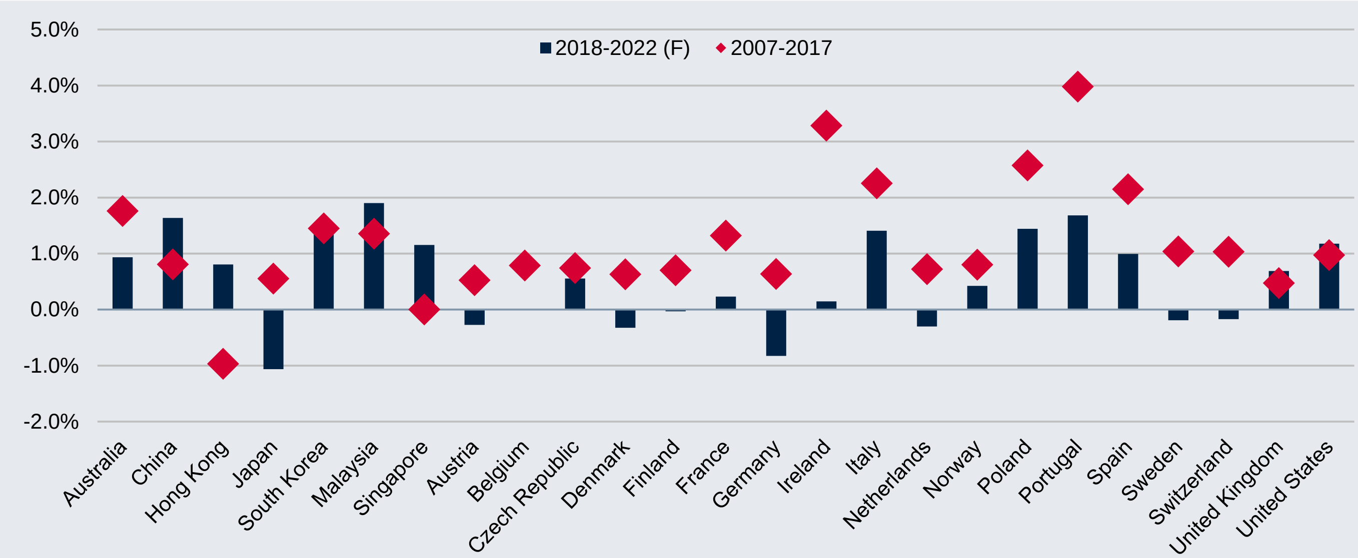
Figure 6: Economic Quadrant Based on 5-Yr Forecast GDP Growth and Real Interest Rates (10-Year Sovereign Bond Yields less Inflation)



Source: Oxford Economics, Deutsche Asset Management Investment GmbH; as of January 2018. There is no assurance that forecasts will be achieved.

From our analysis, we also see that real yields (10-year sovereign bond yields minus inflation) are inversely correlated to real estate total returns. Ten-year correlations of real yields to real estate returns range from 23% for Poland to -80% for Japan. Generally speaking lower real yields typically have led to higher real estate returns and vice versa. Since the financial crisis, low interest rates which mostly led to low or negative real yields, have supported real estate returns as real estate becomes an attractive asset class compared to fixed income investments especially. While real yields for certain countries are projected to increase, consistent with increasing interest rates, in our view real yields will likely remain below the 10-year average for most countries, thus supporting real estate returns.

Figure 7: Forecasted real yields by country remain below historical averages (10-Year Yield – Inflation)



Source: Oxford Economics, Deutsche Asset Management. As of February 2018. There is no assurance that forecasts will be achieved.

Construction activity has remained largely disciplined. In the U.S., construction is estimated to be 0.9% of GDP as of February 2018, which is in-line with the historical average, and still below the last peak in January 2008 at 1.1%. In Europe, annual office construction starts stand at 2.1% of stock, 20 bps above the historical average of 1.9%, but still below the prior peak of 3.3% in December 2007. In Asia Pacific, new office supply remains muted in major cities across Australia, Hong Kong (Central), and Seoul, but the supply pipeline is significant in emerging markets such as Guangzhou and Kuala Lumpur. While we recognize that there might be excess construction activity in certain sectors and markets, such as in some multifamily markets, New York City office and Dallas industrial, in aggregate, oversupply risk remains low. In the U.S. there are signs that multifamily and commercial construction may be peaking, limiting future supply pipelines.

4 2017 Year in Review and 2018 Total Return Outlook by Country

Commercial real estate had another solid year in 2017, although returns were lower than in 2016, continuing a deceleration in momentum. Notably, U.S. one-year returns dropped to 7.0% from 8.0% a year ago, compared to the U.S. five-year return of 10.2%. Conversely, the U.K. one-year return shifted sharply higher to 10.3% from 3.5% a year ago as the negative impact of Brexit was not as bad as expected. However, this still represents a deceleration from the five-year return of 11.1%.

Other countries in Europe are doing better. In the Netherlands, more favorable economic conditions and a stronger occupier market contributed to a one-year return of 13.3% in 2017, close to double its five-year average return of 6.8%. France, Finland, Spain, Portugal and Sweden also showed elevated one-year returns compared to their five-year averages. In Asia Pacific, Australia posted another strong year at 11.6%, and Japan also delivered an above-average one-year return of 7.2%. The returns shown in the table reflect the latest returns available due to lagged reporting results in several countries. For a nearer term view, we can also look to the Global Real Estate Fund Index (GREFI).

Figure 8: IPD Global Real Estate Performance (Local Currency)

Country	1-year return	5-year return	As of	Index	1-year return	5-year return	As of
Australia	11.6	11.1	3Q17	Japan	7.2	7.4	3Q17
Austria	5.7	5.9	4Q16	Malaysia	6.3	9.6	4Q16
Belgium	5.6	5.6	4Q16	Netherlands	13.3	6.8	3Q17
China	7.1	7.1	4Q16	Norway	10.4	8.1	4Q16
Czech Republic	8.3	6.3	4Q16	Poland	4.6	5.4	4Q16
Denmark	7.7	5.6	4Q16	Portugal	11.8	5.9	4Q16
Finland	6.2	5.6	4Q16	Singapore	4.8	7.3	4Q16
France	10.0	8.5	2Q17	South Korea	7.7	7.8	4Q16
Germany	7.5	6.2	4Q16	Spain	14.3	6.8	4Q16
Global	7.5	8.7	4Q16	Sweden	14.0	9.9	4Q16
Hong Kong	5.2	9.1	4Q16	Switzerland	6.2	6.2	4Q16
Ireland	8.1	18.6	4Q17	UK	10.3	11.1	4Q17
Italy	4.4	3.2	2Q17	USA	7.0	10.2	4Q17

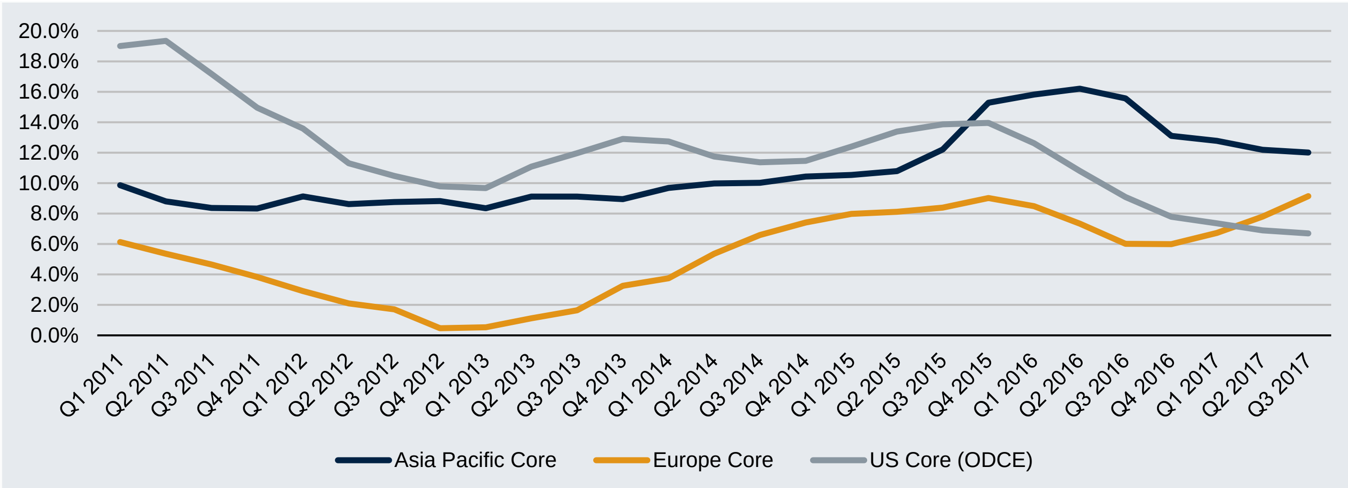
Source: MSCI, NCREIF, As of January 2018. Past performance may not be indicative of future results.

The GREFI[1] shows the levered return performance of non-listed real estate funds globally. The leverage levels across each region were relatively consistent, with Asia-Pacific and US funds both at roughly 24% and European funds at 21%. The overall index comprises US$691 billion of total gross asset value. The GREFI Core Index is a subset of $517.4 billion in assets with 43% invested in the US (NFI-ODCE), 41% in Europe and 17% in Asia-Pacific. As of the third quarter of 2017, the GREFI Index has shown that Asia Pacific core funds produced 12.0% year-over-year total return and outperformed European and U.S. core funds at 9.1% and 6.7%, respectively. Australia comprises a large portion of GAV for Asia Pacific core funds at 59% of GAV, followed by China at 10%, Japan at 8% and Singapore at 7%. European core funds have the highest exposure to the United Kingdom at 27% of GAV,

[1] Global Real Estate Fund Index (GREFI) from ANREV, INREV and NCREIF.

followed by Germany at 19% and the Netherlands at 14%. Over 2018, we expect similar relative performance in terms of levered total returns.

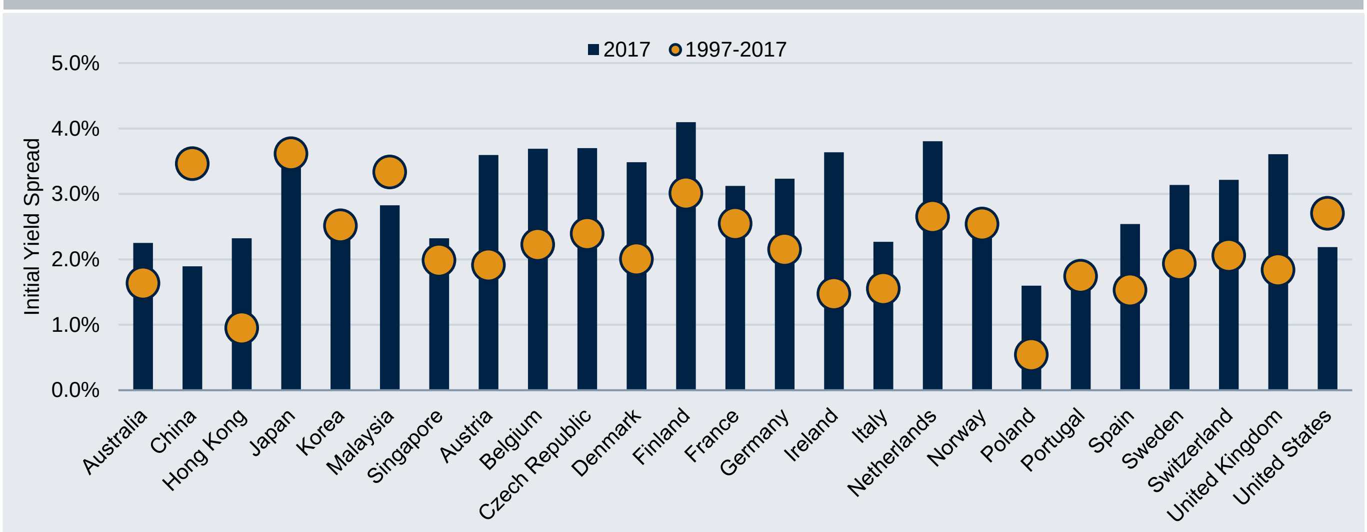
Figure 9: GREFI data shows an outperformance of Asia Pacific core funds vs. European and U.S. core funds



Source: ANREV, INREV, NCREIF, As of October 2017. Past performance may not be indicative of future results.

Looking ahead, initial yields on property in the aggregate still look attractive as the global average yield spread to sovereign bond yields was 2.89% in 2017, around 75 bps higher than the long-term average of 2.14%. This implies that if sovereign bond yields were to move up by 75 bps, real estate would still provide an income yield risk premium equivalent to its long-term average.

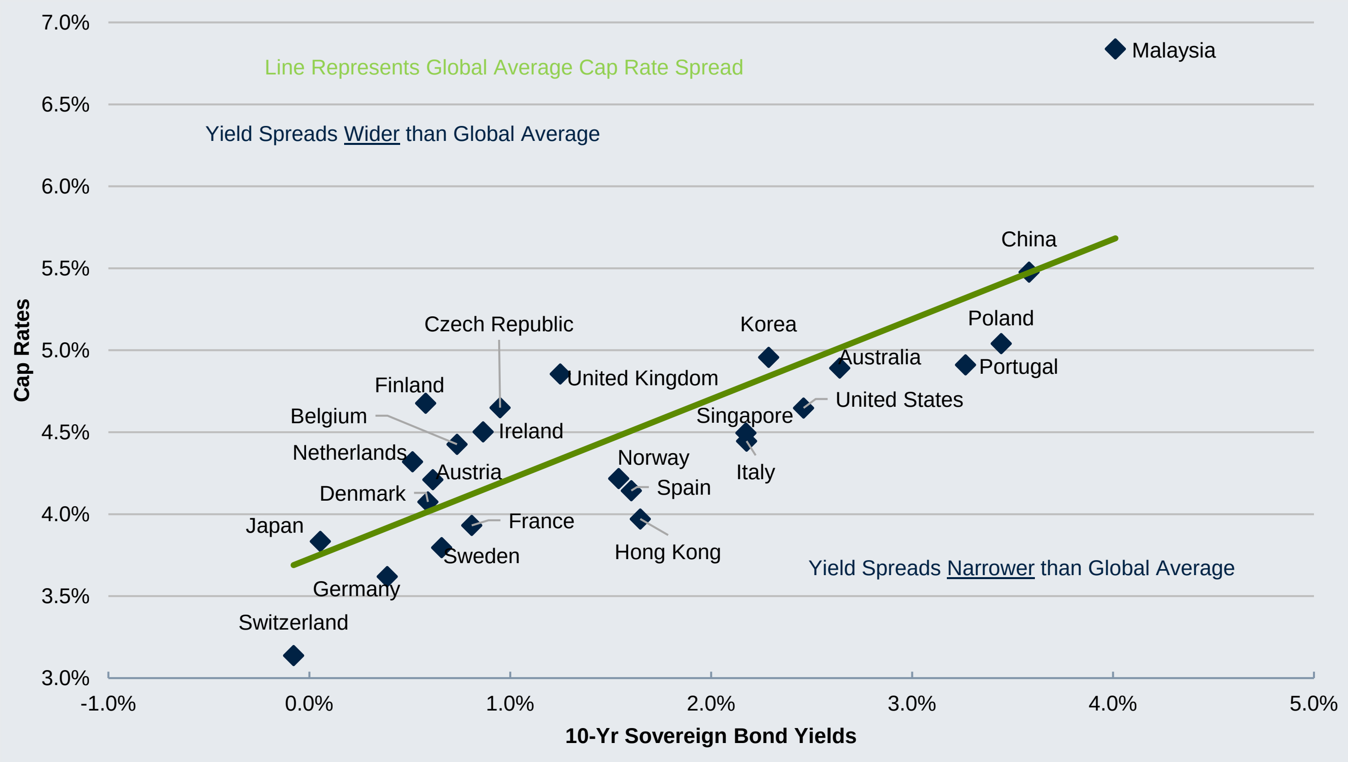
Figure 10: Initial Yield Spreads for many countries are above their 20-year average



Source: Deutsche Asset Management. As of January 2018. Initial yield spreads for each market based on equal-weight city and sector returns. Past performance may not be indicative of future results.
Note: Past Performance and forecasts are not reliable indicators of future returns. No assurance can be given that any forecast or target will be achieved. Forecasts are based on assumptions, estimates, opinions, models and analysis which may prove to be incorrect.

The following chart shows real estate cap rates vs. 10-year sovereign bond yields by country. The diagonal line represents the global average cap rates for given interest rates. Certain key markets in Asia Pacific such as Singapore and Australia have fallen below the global average line as we expect higher near-term NOI growth from these markets. Some European markets still offer yield spreads above the global average line due to sustained quantitative easing and lower relative interest rates. Some of the decline in spreads reflects cap rate compression which has served to create momentum in total returns. Countries with better growth prospects such as the U.S., have a spread that lies below their own long-term average, whereas more stable countries such as France and Australia have initial yield spreads that are above their long-term averages due to below average interest rates.

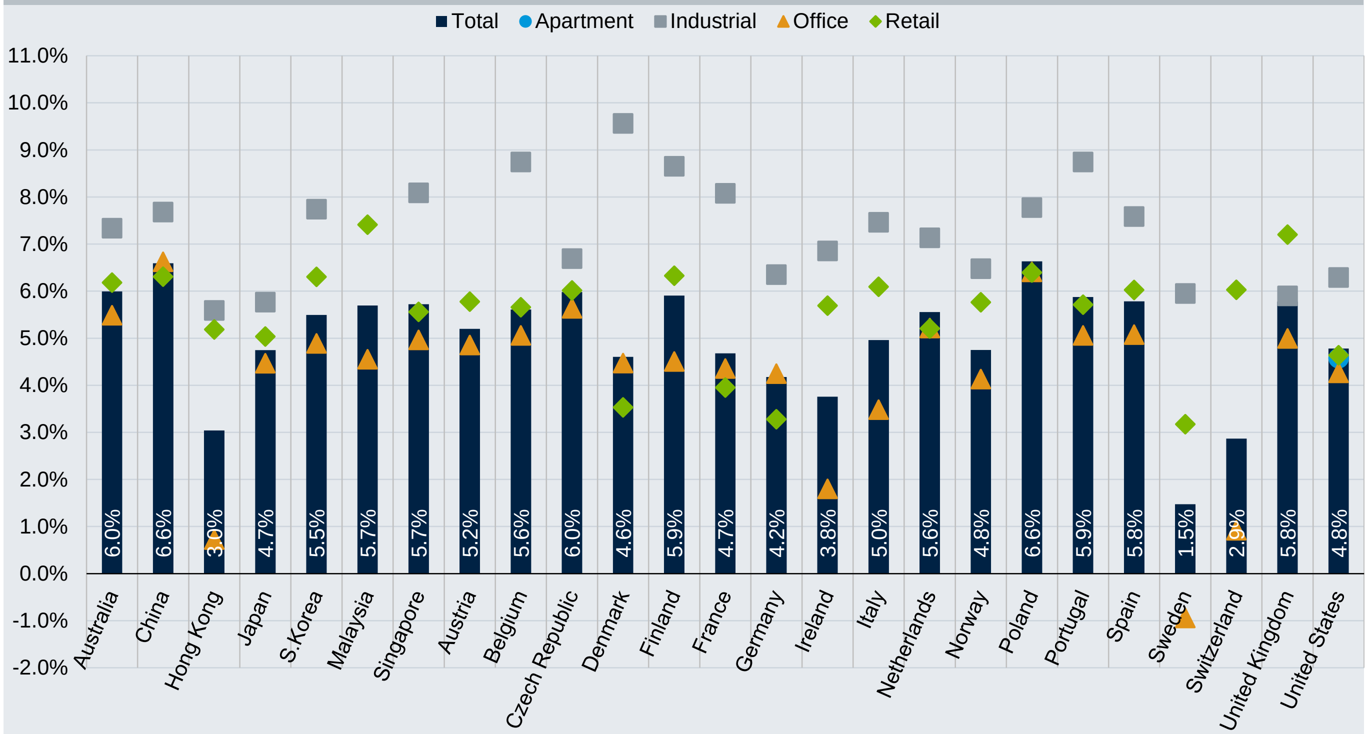
Figure 11: Real Estate Cap Rates vs. Sovereign Yields (2017)



Sources: Deutsche Asset Management (cap rates), Oxford Economics (bond yields). As of January 2018. Average initial yields for each market based on cap-weight sector initial yields. Past performance may not be indicative of future results.
Note: Past Performance and forecasts are not reliable indicators of future returns. No assurance can be given that any forecast or target will be achieved. Forecasts are based on assumptions, estimates, opinions, models and analysis which may prove to be incorrect.

We consider a number of other factors to come up with total return forecasts, including the outlook for initial yield spreads, interest rates, occupancy, rent growth and supply and demand dynamics. The following exhibit depicts our five-year total return view by country and by property sectors.

Figure 12: Average Annualized 5-Yr Forecast Returns by Country and Sector (2018-2022)



Source: Deutsche Asset Management. As of February 2018. Total returns for each market based on cap-weight sector returns. Forecasts are based on assumptions, estimates, opinions, models and analysis which may prove to be incorrect.
Note: Past Performance and forecasts are not reliable indicators of future returns. No assurance can be given that any forecast or target will be achieved. Forecasts are based on assumptions, estimates, opinions, models and analysis which may prove to be incorrect.

As can be seen in the exhibit above, total returns vary widely across countries, with a high of 6.6% in Poland to a low of 1.5% in Sweden. However, the disparity is greater when we look further at the sector/city level.

One key message from the exhibit above is the relative sector performance. We continue to expect industrial/logistics to outperform over the next five years, driven by a few key factors. Worldwide economic activity is improving and thus we expect that global trade will also improve, as can already be seen in the Asia Pacific region. Improving global trade coupled with a growing trend in e-commerce naturally leads to increased warehouse demand. Initial yields on industrial/logistics assets also tend to be higher than other sectors in most markets, while we believe that most markets lack adequate modern warehouse and logistics space suitable for the growing e-commerce trend which would produce be supportive of rental growth.

While retail has received a lot of negative press due to the threat from e-commerce, growing consumption and incomes should support certain retail property types, including neighborhood shopping centers and high quality malls. We are firm believers in the strength of high quality centers with proven good sales productivity in desirable locations.

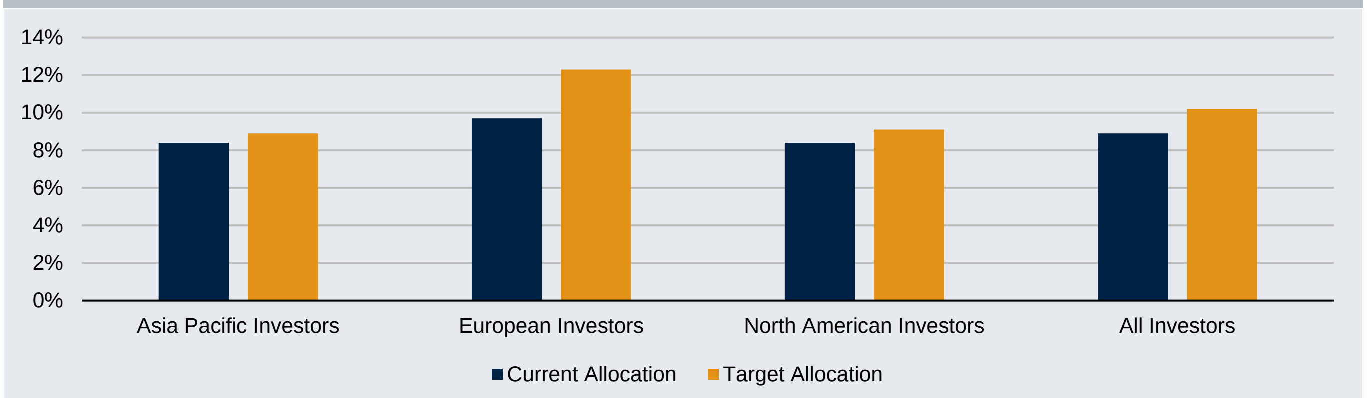
The office sector on the other hand still has elevated pricing and lower initial yields against the backdrop of full employment in several global markets which tempers our view on total return potential. Indeed, offices tend to be the most popular property type for many core investors, which explains the high pricing some investors are willing to ascribe to core office assets. However, returns vary significantly across markets and we still see good opportunities in certain markets such as in Australia, France, the Netherlands, and some smaller markets in the United States such as Orange County and Portland.

5 Real Estate Capital Flows

We expect real estate capital flows to once again increase during 2018 due to recent strong performance of the equity markets which would negate the need for investors to rebalance away from real estate. The MSCI World Index returned a total of 23.1% during 2017 and equity markets are expected to post above average rates of return in 2018 despite recent volatility. Global economic activity is improving which further supports corporate profits and the performance of the stock market. Allocation risk could arise from a weak bond market if interest rates rise rapidly, especially as monetary policy around the world is expected to tighten gradually going forward. However, expected total returns for real estate are likely to outperform bonds as we remain in a low yield environment.

Investors appear under-allocated to real estate according to the latest investor intentions survey by Inrev, Anrev and PREA. The survey received responses from 107 institutional investors with $449.4 billion real estate assets under management globally. The results show that institutional investors' current allocation to real estate is 8.9% of total assets, 130 bps lower than the target of 10.2%, which implies an underallocated amount of $65.6 billion. Looking across the regions, European investors appear to be the most under-allocated, with a current allocation of 9.7% and a target of 12.3%. North American investors are under-allocated by 70 bps with a target of 9.1%, and Asia Pacific investors are under-allocated by 50bps with a target of 8.9%

Figure 13: Current and Expected Allocation to Real Estate

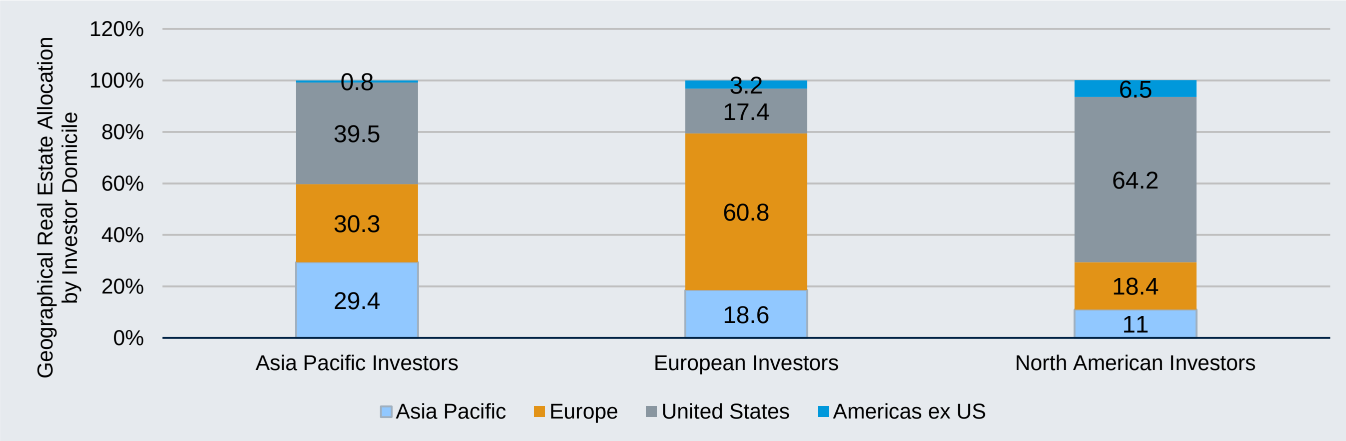


Source: PREA, Inrev, Anrev 2018 Investor Intentions Survey as published by PREA.
Note: Target allocations are weighted based on real estate assets. No assurance forecast will materialize.

The survey indicates that all investors surveyed from Asia Pacific expect to increase allocations for the next two years, which implies that capital may continue to flow to real estate from the Asia Pacific region. More than half of North American and European investors expect real estate allocations to increase over the next two years.

According to the survey, institutional investors planned to invest a total of $53.8 billion during 2018, with 58% of the capital coming from European investors. However, only 41.3% of the capital is expected to be invested in Europe which indicates a net outflow of capital from Europe to other regions. In contrast, North American investors make up 25% of the capital to be invested, and 31.6% of the capital is expected to be invested in the U.S., indicating the U.S. will experience a net inflow of capital.

Figure 14: Amount expected to be invested in real estate in 2018 by investor domicile



Source: PREA, Inrev, Anrev 2018 Investor Intentions Survey as published by PREA.
Note: No assurance forecast will materialize.

As for capital flows during 2018, Asia Pacific investors intend to invest the largest portion of their capital to the United States at 39.5%, followed by Europe at 30.3%. European and North American investors, on the other hand, intend to invest mostly in their home regions at 60.8% and 64.2%, respectively. European investors, however, do plan to increase their allocation to Asia Pacific from a current allocation of 7.3%. U.S. investors plan to increase their allocation to Europe from the current 9.4%.

6 Focus Topic: Real Estate vs. Other Asset Classes, Inflation, Rising Interest Rates and Yield Curve Slope

Institutional investors put capital to work in real estate for a variety of reasons, including total return, diversification, inflation hedging, and income relative to the bond market. However, in a period of rising interest rates, as we are in right now, one would wonder how real estate total returns will hold up. In this section, we explore the relationship between real estate total returns and other major asset classes (equities and bonds) and inflation during periods of rising interest rates.

Figure 15: 20-Year Correlation for U.S., U.K. and Japan real estate total returns against equities, bonds and inflation

	World Equities [1]	Country-Specific Equities [2]	Fixed Income[3]	Inflation
U.S. Real Estate Total Returns (NCREIF)	29%	31%	-12%	50%
U.K. Real Estate Total Returns (IPD)	52%	47%	-10%	-30%
Japan Real Estate Total Returns (IPD)	22%	29%	-17%	38%

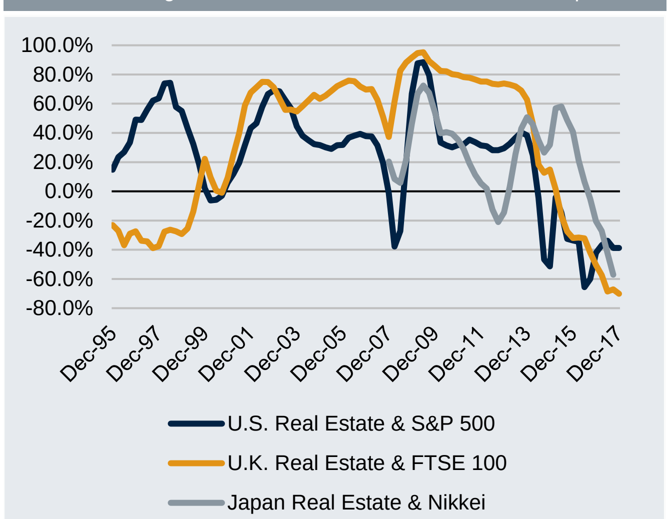
Source: Bloomberg, Oxford Economics, Deutsche Asset Management.
Note: [1] Refers to MSCI World Index.
[2] U.S. equities refer to S&P 500, U.K. equities refer to FTSE 100 Index, and Japan equities refer to the Nikkei Index.
[3] U.S. real estate returns compared against the Bloomberg Barclays Global Aggregate Index. U.K. and Japan real estate returns are compared against the Bloomberg Barclays U.S. Aggregate Index.

Over a 20-year time period, correlations between real estate returns and equities and fixed income markets are relatively low or inversely correlated. This implies that over a longer-term horizon, real estate remains an attractive asset class to hold for diversification purposes against equities and fixed income. In addition, given the relatively low correlation between interest rates and inflation, this would imply that real estate would also be a good inflation hedge.

Looking at the data more closely in terms of five-year rolling correlations, we can see that the correlations do vary over time.

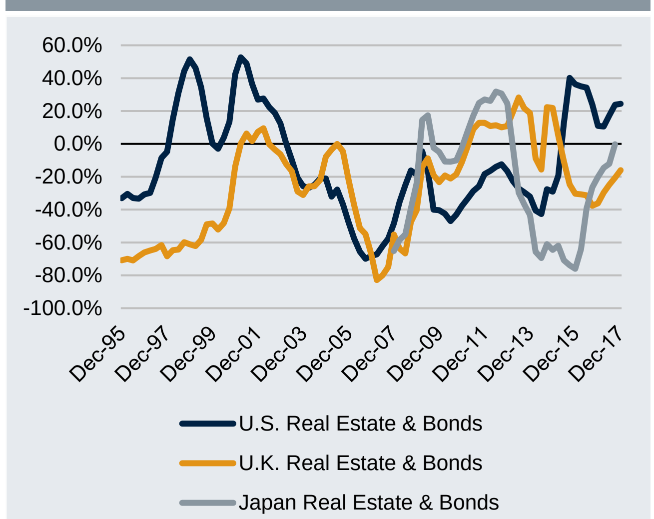
Figure 16: Five-Year Rolling Correlation between Real Estate Returns and Equities and Bonds

5-Year Rolling Correlation of Real Estate Returns and Equities



Source: Bloomberg, Deutsche Asset Management.

5-Year Rolling Correlation of Real Estate Returns and Bonds



Source: Bloomberg, Deutsche Asset Management.

The correlation of real estate returns and equities started breaking down in more recent years starting in 2014, and the latest rolling five-year correlation shows that real estate returns are almost inversely correlated to equities. Why is this the case? Central banks have kept monetary policy relatively loose since the financial crisis to support economic growth, which in turn supported equities and real estate returns. While the equity markets have provided outsized returns during some years since 2013, market gyrations lead to choppy returns, while real estate returns have been fairly steady. In fact, the standard deviation of U.S. real estate returns at 8.0% over the past 20 years is much lower than the S&P 500's 18.2%. Therefore, historical data would suggest that real estate can also be used to diversify from a risk perspective against equities and fixed income holdings.

The exhibit below shows real estate capital appreciation and total return during periods of rising central bank interest rates. Real estate performance was positive during the highlighted periods of rising interest rates, which is likely due to good economic growth during these time periods. Rent growth typically outpaces increases in cap rates, thus resulting in stronger real estate returns. Capital appreciation was also positive during all periods of rising interest rates other than 1993-1995 for the U.S. Negative capital appreciation during the 1993-1995 period was caused by the savings and loan crisis in the U.S. from 1986-1995.

Figure 17: Real estate performance during periods of rising central bank interest rates

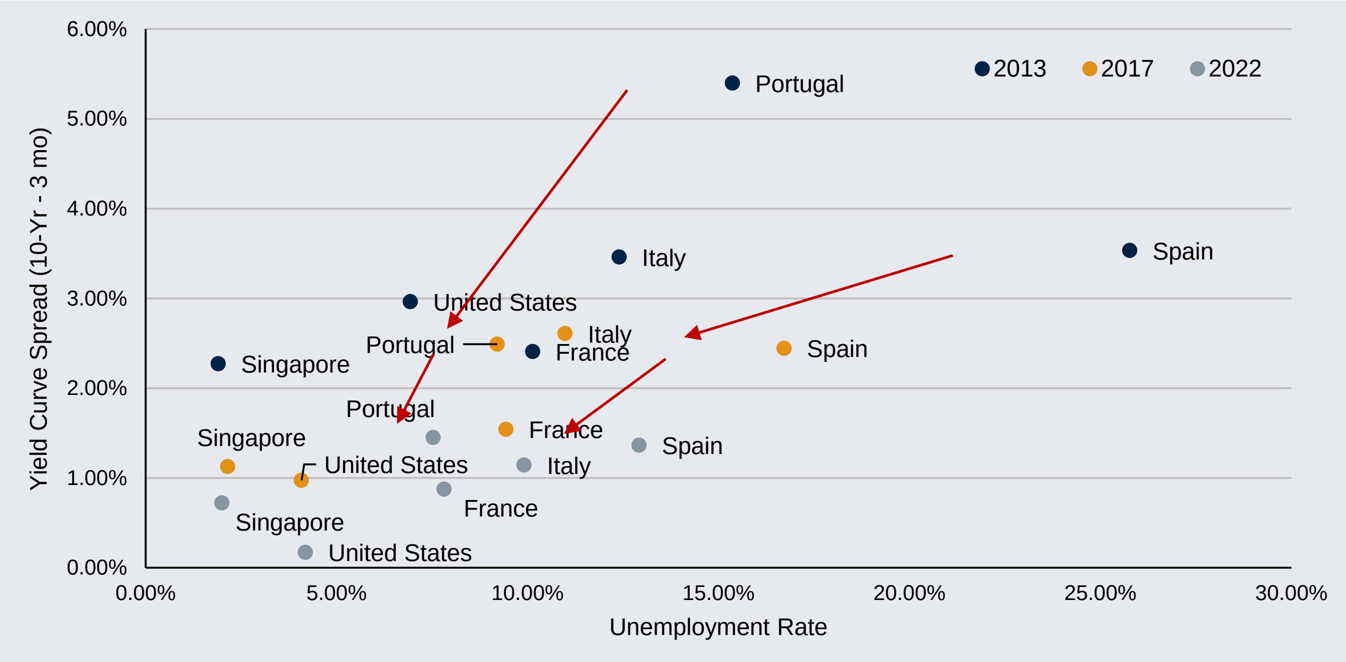
Periods of Rising Interest Rates	Annualized Capital Appreciation	Annualized Total Return	Correlation of Real Estate Total Returns to Central Bank Interest Rate
United States			
1993-1995	-6.6%	3.9%	99.9%
1998-2000	7.8%	13.4%	-62.4%
2003-2006	10.5%	15.4%	77.3%
2014-2017	8.2%	10.4%	-84.5%
Japan			
2005-2007	13.4%	17.8%	7.3%
Europe			
2004-2007	10.9%	16.5%	4.3%

Source: IPD, NCREIF, Deutsche Asset Management. Past performance may not be indicative of future results.

Finally, the slope of the yield curve today is flatter today in the U.S. than it was just a few years ago in 2013. Lower short term interest rates and a steeper curve led to better economic growth. In turn, unemployment declined, which caused additional tenant demand in warehouses in the U.S.

By extension, we see wider yield curves in Europe and APAC which can support economic growth and potentially lead to further declines in the unemployment rate in certain markets namely France, Italy, Spain, and Portugal. Certainly labor market structure is different in Europe when compared to the U.S. However, labor reforms in Spain and those recently adopted in France could pave the way for further declines in the structural rate of unemployment and support higher take-up of real estate space. Looking at the chart below, Oxford Economics project unemployment to decline by 3.8 percentage points in Spain from 2017 to 2022 whereas the current forward yield curve implies a decline of circa 100 bps. The lack of supply in Spain further supports potential reduction in office vacancy.

Figure 18: Yield curve compression may lead to decline in unemployment



Source: Oxford Economics, Bloomberg, Deutsche Asset Management. Past performance may not be indicative of future results.

7 A Tactical View of Currencies

The U.S. Dollar has weakened against other major currencies as more recent Eurozone growth data came in surprisingly strong—GDP growth in the Eurozone was 0.6% during the fourth quarter of 2017, or 2.5% annually, beating economists' and the ECB's expectations. Our CIO View currency forecast for the EUR/USD is 1.15 by year-end 2018, implying 8% Euro depreciation/USD appreciation relative to its price as of February 2nd, 2018. Now that some U.S. economic data has come in more positive (unemployment at 4.1% and wage growth at 2.9% for January 2018), we expect some rebound in the U.S. Dollar. If such a currency move were to occur, it could create some rebalancing in inflation expectations (Europe higher, U.S. lower). If this were to occur alongside the base effects mentioned earlier, it could result in fewer than three rate hikes in the U.S.

What does this all mean for investors of real estate? From a currency perspective, U.S. real estate is less expensive to international investors than it was six months ago, although hedging costs still remain high. When we compare swap costs today with where they were six months ago, the most noticeable changes are for Korea, U.K. and U.S. where swap spreads increased by 40, 30 and 70 basis points respectively. All else equal, on a hedged basis, it has become slightly more dilutive to invest in these countries. In contrast, investors from these countries may find it slightly more accretive to invest off-shore on a hedged basis due to relative purchasing power. For all other countries in our adjoining table, there was not a meaningful difference in hedging costs compared to six months ago.

Figure 19: Currency Hedging Cost of Carry

		Currency of Investment Destination							
Investor Domicile	3-Year Interest Rate Swap (Feb-2018)	AUD	JPY	KRW	CNY	EUR	CHF	GBP	USD
Australia	2.2%		2.1%	0.7%	-2.1%	2.1%	2.5%	1.1%	-0.3%
Japan	0.1%	-2.1%		-1.5%	-4.2%	0.0%	0.4%	-1.0%	-2.4%
Korea	1.5%	-0.7%	1.5%		-2.8%	1.5%	1.8%	0.4%	-1.0%
China	4.3%	2.1%	4.2%	2.8%		4.2%	4.6%	3.2%	1.8%
Germany	0.1%	-2.1%	0.0%	-1.5%	-4.2%		0.4%	-1.0%	-2.4%
Switzerland	-0.3%	-2.5%	-0.4%	-1.8%	-4.6%	-0.4%		-1.4%	-2.8%
UK	1.1%	-1.1%	1.0%	-0.4%	-3.2%	1.0%	1.4%		-1.4%
US	2.5%	0.3%	2.4%	1.0%	-1.8%	2.4%	2.8%	1.4%	

Source: Bloomberg, Deutsche Asset Management. Past performance may not be indicative of future results. Our return projections reflect our view of expected property-level performance and do not include reinvestment of dividends, the use of leverage, potential taxes or fees. Had such fees been deducted, projected returns would have been lower. This is for illustrative purposes and does not reflect the actual returns of an investment or strategy offered by Deutsche Asset Management. There is no guarantee that projections will materialize. An investment in interest rate swaps involves a high degree of risk, including possible loss of principal amount invested, and is suitable only for sophisticated investor who can bear such losses.

8 Outlook for Real Estate by Region

8.1 U.S. Real Estate Outlook

The 2018 outlook for U.S. real estate is bright, in our view. The economy gathered substantial momentum in 2017, a trend that might accelerate with additional support from recently-enacted tax reform and improving global conditions. Increased supply has neutralized some of the resulting impetus to real-estate fundamentals in some sectors and markets (e.g., apartments nationally and offices in some gateway cities), but with vacancy rates sitting near 15-year lows, rental growth should match or exceed inflation in most markets.[2]

Capital markets activity can be more volatile and difficult to predict, but early indicators are promising. After a 20% run-up in U.S. stocks in 2017, it is quite likely, we believe, that many investors are under-allocated to real estate. Interest rates have stepped higher, but tightening credit spreads have preserved real-estate's yield advantage relative to corporate bonds and kept a lid on mortgage rates. Commercial Mortgage Backed Security (CMBS) issuance has picked up following a brief regulatory-driven pause early last year and refinancing needs are slated to fall sharply now that 10-year loans originated at the peak of the last cycle (2007) have matured.[3] According to Federal Reserve surveys, banks' lending appetite appears to be increasing.[4] And a 20% deduction on pass-through income included in the tax reform package might attract additional inflows from taxable investors.

If there is an imminent threat to property values, it is likely centered on interest rates. In theory, a rising cost of risk-free capital is detrimental to all risk assets, including real estate. In practice, the implications are less obvious: historically, real estate performance has, if anything, been positively correlated with interest rates. To be sure, with cap rates at historic lows, we do not expect them to compress further; however, given the market's strong fundamentals and capital markets backdrop, we also do not expect them to rise materially, provided that interest-rate increases are measured.

The outlook is more uncertain beyond 2018, but we remain sanguine, for four reasons: First, leading indicators such as the yield curve suggest that the likelihood of a recession, which would undermine occupational demand, is low, at least for the next two years.[5] Second, construction appears to be peaking amid increasing supply constraints.[6] Third, although valuations are not inexpensive, they appear attractive relative to those of Treasuries and especially corporate bonds.[7] Fourth, the industry is not saddled with unsustainable debts that could otherwise cause or exacerbate a downturn (as occurred, for example, during the early-1990s savings-and-loan and the 2008-09 financial crises).[8] There are risks, stemming primarily from the political domain and financial markets. Returns will eventually decelerate due to recession, overbuilding, rising interest rates, or some combination thereof. Nevertheless, we believe that in a lower-return world, the medium-term outlook for real estate remains competitive on a relative basis.

We believe that fundamental drivers and risks favor the industrial sector and weigh against the apartment and office sectors, and to a lesser extent the retail sector.

Industrial (Overweight): While real estate returns have generally moderated, the industrial sector has proved resilient, sustaining total returns of 13.1% (trailing four quarters) in the fourth quarter of 2017.[9] Tight fundamentals, driven by broad industry expansion and substantial e-commerce related demand, generated net operating income (NOI) growth of 6.9% (year-over-year, four-quarter moving average), nearly matching its fastest pace in at least 36 years.[10] We believe that the industrial sector's outperformance will continue as e-commerce gains further traction and

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[2] NCREIF, as of December 2017.
[3] CRE Finance Council, as of December 2017.
[4] Federal Reserve Senior Loan Office Survey, as of December 2017.
[5] Federal Reserve, as of January 2018.
[6] Census Bureau (multifamily); Dodge Data & Analytics (commercial), as of December 2017.
[7] NCREIF (cap rates); Federal Reserve (bond yields), as of December 2017.
[8] Federal Reserve, as of September 2017.
[9] NCREIF, as of December 2017.
[10] NCREIF, as of December 2017.

investors increasingly strive to capitalize on the sector's strong dynamics. Nevertheless, construction of large-bay warehouses in national distribution hubs (e.g., Atlanta, Chicago, Dallas, and the Inland Empire) has picked up. Given the enduring strength of demand, these markets should continue to perform adequately. However, smaller, local distribution facilities likely offer superior investment prospects.

Retail (Underweight): Total returns for retail property dipped below those of the NCREIF Property Index (NPI) in the second quarter of 2017 for the first time since 2012 on a trailing four-quarter basis and underperformed by 130 basis points (5.7%) in the fourth quarter.[11] Closures among major department stores (e.g., Sears and J.C. Penney) and big-box retailers (Toys 'R' Us declared bankruptcy in September) testify to the challenges wrought by e-commerce to Class B malls and Power Centers. Neighborhood and Community centers, with returns of 6.3% (trailing four quarters), outperformed both Offices and Apartments.[12] We believe the daily needs provided by grocers and drug stores in addition to services such as dining, fitness, healthcare, and personal care are better positioned to endure e-commerce penetration as consumer spending accelerates and new construction remains all but absent. However, given that these formats represent less than a third of the Retail sector in the NPI, we expect the sector as a whole to underperform.

Apartment (Underweight): Absorption has remained robust despite an uptick in homeownership rates over the past year. However, a flood of new construction caused NOI growth to plummet from 11.4% in 2015 to 3.0% (year-over-year, four-quarter moving average) in the fourth quarter of 2017, dragging total returns down to 6.2% (trailing four quarters).[13] The sector's weakness was concentrated in high-rise product in New York and San Francisco, where much of the new supply has been located. In contrast, garden apartments were among the best performing subsectors of the NPI. There are also flickers of light at the end of the tunnel: multifamily starts dropped about 10% in 2017[14], and tax reform, through its reduction of incentives for homeownership, might provide a fillip to demand. Accordingly, while we remain underweight to the sector, our view has improved at the margin.

Office (Underweight): Historically a late-cycle performer, the office sector has failed to meet expectations in recent years. Despite sturdy job growth, absorption has generally been lackluster, while pockets of supply have emerged in major cities including New York, Washington D.C., and San Francisco. Sluggish fundamentals were reflected in total returns, which at 6.0% (trailing four quarters) in the fourth quarter were the second lowest among major sectors.[15] It should be noted that some office markets, including Los Angeles and Boston, have performed well, a trend that we expect will continue. Moreover, on a national basis, in place rents are about 12% below market levels, which could support NOI growth as leases roll over the next several years.[16] The concern, however, is that with the unemployment rate already historically low and labor-force growth constrained by demographic factors, the scope for further job creation, and therefore office absorption, may be limited.

From a strategic perspective, we continue to favor large, coastal, "gateway" markets (e.g., New York), which have produced stronger rent and price appreciation over time while providing superior liquidity. Conversely, we are wary of smaller markets with poor demographic trends (e.g., Cleveland), which have generally underperformed over the long-term. From a tactical perspective, however, we believe that several regional markets offer greater near-term potential.

Gateway Markets: Prices have risen substantially in several coastal markets, and while they are commonly viewed as supply constrained (given their density and stringent planning regimes), several have experienced a wave of new supply, particularly in the apartment and office sectors. Tax reform measures that limit the federal deductibility of state and local taxes and home mortgage interest, as well as a clampdown on immigration (both legal and illegal) might also exacerbate demographic challenges. We remain favorable toward Los Angeles and Boston, where fundamentals are on a strong footing. However, we are more cautious toward markets with weaker or riskier fundamentals, including San Francisco, New York, and Washington D.C. (albeit with important property-type exceptions, notably in the industrial sector).

Regional Markets: Our favored markets are generally smaller coastal cities that share some of the supply barriers of gateway markets but with yields that are somewhat higher, including Portland, Orange County, San Diego, Fort Lauderdale, and to a lesser extent, Seattle and Miami. We are also amenable to several inland markets, including

[11] NCREIF, as of December 2017.
[12] NCREIF, as of December 2017.
[13] NCREIF, as of December 2017.
[14] Census Bureau, as of December 2017.
[15] NCREIF, as of December 2017.
[16] Altus, as of September 2017.

Austin, Charlotte, Dallas, Denver, and Nashville, as well as Houston, where construction has abated and prospects for the local energy industry have improved. While we are mindful of supply risks in these markets, they also benefit from favorable demographic trends, which might accelerate with the advent of tax reform.

8.2 European Real Estate Outlook

With the European economy performing much better than expected, confidence among both businesses and consumers has put the wind in the sails of real estate occupiers. Structural changes will continue to drive broad rental outperformance in logistics, and our near-term forecasts for office rent growth have seen an uplift, in line with a substantially improved outlook for GDP growth and stable to declining unemployment. However, with moderating medium-term economic growth and rising development activity, our five-year rental growth forecasts for both sectors remain unchanged at the aggregate level. Conversely, we have downgraded our near-term outlook for retail, as shopping centre owners in France and Germany have struggled to maintain occupancy and rent levels.

With firm investor interest and monetary policy expected to adjust only gradually, we predict that property values will increase further over the rest of the decade. In general, we expect yields to reach a floor this year; however, there will be differences between sectors and markets. Logistics has been closing the pricing gap to offices and retail over the past five years, and we foresee this trend continuing. While yields in most continental European markets are set to move broadly in unison over the next five years, the United Kingdom looks likely to follow a slightly different path, leading to a period of outperformance in the early 2020s.

While real estate returns have almost certainly peaked in the current cycle, recent performance has shown that there is still momentum as we enter 2018. Nevertheless, returns should moderate as yield compression comes to an end and changes in capital value become more reliant on rental growth. Recent returns have been driven by falling yields and an improving occupier market. All property gross total returns have averaged around 13% per year over the last five years, but with monetary policy beginning to change we are forecasting a return of closer to 8% in 2018 and an average of just over 5% per annum until 2022. Nevertheless, European real estate remains attractive in a multi-asset context thanks to strengthening income growth and a still-significant yield spread over other fixed income products.

The highest absolute returns are expected in the CEE region, while Finland and the Benelux countries are also expected to perform well on a risk-adjusted basis, with the United Kingdom set to outperform towards the end of the forecast period. We continue to expect European logistics to be a relative outperformer, while in general we have an underweight call on the office market. The retail sector will continue to face headwinds, but we believe that urban shopping centres and retail parks have the potential to outperform the wider retail market.

In some respects the outlook for pan-European real estate looks challenging, but not only does the asset class still looks attractive in relative terms, we also believe there will be numerous opportunities to outperform the market through careful asset, market and sector selection.

Office: Broad-based employment growth is translating into record levels of office occupier demand.[17] While the German cities and Paris continue to outperform in this respect, leasing activity has also increased in London, supported by demand from flexible office operators.[18] At the same time, total space under construction is increasing, but not enough to offset the downward trend in European vacancy, which was approaching 8% at the end of 2017.[19] With a particular shortage of space in city centre office markets, prime rent growth has accelerated beyond 3% year-on-year on average.[20] The main Southern European cities, where prime rental values are still comfortably below their last peak, are seeing a particularly strong rental recovery.[21]

The latest E.U. employment growth forecasts bode well for occupier demand, with the creation of over two million office-based jobs due between 2018 and 2022.[22] At the same time, annual net completions are set to average 1.2% of the stock, well below the level recorded in previous cycles. However, this should still be enough to lead to a modest rise in average European vacancy at the end of the decade.

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[17] PMA, Deutsche AM, January 2018.
[18] CBRE, January 2018.
[19] PMA, Deutsche Asset Management, January 2018.
[20] PMA, November 2017.
[21] PMA, November 2017.
[22] Oxford Economics, January 2018.

Prime rents are expected to grow firmly in the majority of the European markets. Southern Europe and Germany should see the strongest rental growth, with the Paris CBD, Amsterdam and parts of the Nordics also doing well. Warsaw continues to suffer from oversupply, but we now feel rents there have reached a floor.

We remain underweight on the United Kingdom in the short term, with Central London rents expected to fall further this year. But with the expectation of a rental recovery as the supply pipeline lessens and business activity starts to pick-up, investors should prepare to return to the U.K. market within the next 1-2 years.

We are currently overweight on Amsterdam, where office vacancy has fallen to under 10% – from a peak of 18% – and rents are picking up pace, while Brussels still offers a yield premium over its peers and should be one of the better performers on a risk-adjusted basis. Select Regional French markets should also offer opportunities thanks to a steady occupier market and yield convergence towards Paris.

Logistics: European logistics continues to go from strength to strength. Demand fundamentals remain solid as the shift to online retailing gathers pace and extends across the continent. With a broad-based economic recovery well underway – supporting private consumption, manufacturing and exports – demand for logistics space remains elevated, pushing the European average vacancy rate down to around 5%, despite high levels of new development.[23]

Occupiers are increasingly focusing on big box distribution and e-fulfilment centres, with ever more space taken in large national distribution hubs and those close to major population centres. Demand for urban logistics is also accelerating and we are noticing growing demand for 'last hour' logistics assets – those in locations from which distribution or deliveries can be undertaken within one-hour drive time of two or more major population centres. Poorly-located peripheral locations are falling out of favour, while older assets in corridor locations are at risk of obsolescence.

To date, not all European markets have seen firm evidence of rental growth for prime distribution assets, but the expectation is that growth will pick up and broaden over the coming five years. In total we expect annual prime rent growth to average 1.8% over the five years to 2022, with cities such as Paris, London, Amsterdam and Milan outperforming as occupiers compete for the best located stock.

The availability of land in some areas will place a brake on rental growth, particularly in polycentric areas such as the Rhine-Ruhr in Germany, and parts of Poland where developers compete for tenants either through lower rents or significant incentive packages. While this is also the case in Madrid, we still expect above average rent growth from the Spanish capital, given the strength of demand.

Where fundamentals are strong, investors could consider funding build-to-suit developments or even speculative construction, particularly where modern stock is in short supply. There is also exceptionally strong occupier demand for urban logistics assets, which can provide the option for alternative use, particularly residential.

We continue to favour XXL distribution assets; however, the yield on these assets is falling sharply given their attractive lot size and long-lease profile, along with favourable structural demand drivers. We remain overweight to European logistics in general, but in particular we favour large distribution assets in the less-advanced online retail markets of France, the Benelux, Iberia, Northern Italy and the CEE, along with select Nordics. Given the strong long-term drivers for the market as a whole, we expect prime returns of between 6% and 9% in the vast majority of markets over the next five years, comfortably outperforming office and retail.

Retail: Excluding the effect of online sales, the drivers of European retail real estate are exceptionally strong; more people are in work, confidence is at record levels, and retail sales growth has accelerated across much of Europe.[24] But with annual online sales growth of around 15%, only a fraction of this additional spend is occurring in-store.[25] In Germany, where total sales growth is set to have been close to 5% last year, landlords are still expressing difficulty in sustaining occupancy and achieving rental growth, a message repeated in France and to a lesser degree the United Kingdom. However, this situation is not yet present in Southern Europe and the CEE, where strong total sales growth and a relatively low online share still mean that rents are expanding.

[23] JLL, November 2017.
[24] Oxford Economics, January 2018.
[25] Centre for Retail Research, June 2017.

Retailing conditions in the United Kingdom and Core Europe will likely remain difficult over the coming five years. Even with a growing understanding that the value of the store is more than just money through the till, projections of very low in-store sales growth leads us to forecast prime shopping centre rent growth of just above 1% per annum between now and 2022.

In Southern Europe and the CEE, we expect annual rent growth of more than 2%. Here, online sales account for little more than 4% of the total, giving landlords the chance to benefit from above-average total sales growth.[26] That said, access to online products and services is likely to expand and converge with the rest of Europe over the longer term,[27] at which point the United Kingdom and Core Europe may well offer the better opportunities.

When the dust settles, we're confident that the European retail landscape will look quite different from today. Retail will almost certainly shrink as a share of the commercial real estate market, while the definition of retail itself will become blurred as destinations increase the proportion of space given over to food, leisure and services.

Major high streets should be resilient to online, but today rents are high and at an average prime yield of close to 3.00% we see fewer attractive opportunities. We expect better opportunities to be found in urban shopping centres and retail warehouses, which should offer investors a higher yield, above average rental growth and the possibility of an alternative use.

While it is becoming more difficult to pick out retail opportunities at the market level, we still see Finland and the Benelux countries as potential outperformers. However, over the next few years French and German shopping centres are expected to underperform, with vacancy currently rising and rents under pressure. The UK retail market is also under threat from rising inflation and continued political uncertainty, but with shopping centre yields likely to converge with Europe once uncertainty subsides, we expect the market to outperform over five years.

8.3 Asia Pacific Real Estate Outlook

Macroeconomic conditions in Asia Pacific saw a significant recovery in 2017, supported by the stronger-than-expected cyclical upturn in global trade conditions since the latter part of 2016. Meanwhile, job growth in the region continues to hover above historical ten-year averages particularly in Japan and Australia. Despite modest tightening in global financial conditions and higher economic growth, monetary policies in Asia remain broadly accommodative underpinned by low inflationary pressures. Nonetheless, risk factors persist ranging from uncertainties surrounding China's growth and economic health, tightening of interest rate policies in major developed nations to global geopolitical risks, which could adversely impact regional trade and export demand. Barring any shocks or unexpected shifts in the baseline scenario, regional economic growth is expected to remain broadly stable at 5.5% in 2018[28].

Real estate performance across much of the Asia Pacific region remains healthy on the back of strong capital markets and stable occupier fundamentals. Across the region, key cities in Japan, China, Hong Kong and Australia continued to see healthy office leasing demand in 2017, while the weight of capital targeting quality assets have contributed to further cap rate compression in core markets. The regional markets in Japan with healthy fundamentals appear increasingly attractive from a risk-return perspective to rationalize as part of a core strategy portfolio.

The outlook of property returns which were heavily front loaded in our previous forecast could flatten over our forecast horizon through 2022. Total returns in the coming years are likely to be driven mostly by income yields with capital growth likely capped by yield expansion driven by increasing prospects of higher interest rates. Nevertheless, in our view, Asia Pacific commercial real estate markets are expected to deliver healthy core unlevered total returns ranging between 5.9% - 7.4% per annum over the next five years with industrial returns outperforming office and retail returns[29].

Office: Office markets in core cities across Asia Pacific continued to perform relatively well in 2017, underpinned by steady occupier demand trends. Sydney and Melbourne led the region in effective rental growth driven by a broad based recovery in tenant demand led by business services, followed by Singapore which experienced a strong rental recovery towards the end of the year. Rents in Hong Kong Central were supported by occupier demand from

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[26] Oxford Economics, January 2018.
[27] European Commission, May 2017.
[28] IMF Regional Economic Outlook: Asia Pacific, October 2017.
[29] Source: Deutsche Asset Management, as at February 2018.

mainland Chinese financial services firms, and in Tokyo rental growth was supported by tight vacancy levels. At the other end, rents in markets such as Seoul and Kuala Lumpur remain in a cyclical downturn weighed down by subdued demand and significant short-term supply pressures. While rents in some Australian cities (Brisbane, Perth, and Adelaide) have declined similarly over the same period, early signs of stabilization have appeared, especially in Brisbane with rents firming in recent quarters.

The regional outlook for the office sector remains broadly positive with a reacceleration in economic activity and favorable demand-supply dynamics for most of the key office markets. For the five year forecast period until 2022, vacancy rates in key office markets in Japan and Australia, Hong Kong Central and Seoul are expected to remain relatively stable or improve from current levels. On the other hand, while short-term vacancy pressures currently persist in the Australian regional cities of Brisbane, Adelaide and Perth, occupancy levels are forecast to improve gradually on the back of a recovery in demand, particularly in Brisbane. Singapore, which experienced a supply surge in 2017, is expected to benefit from a strong cyclical recovery as supply pressures subside significantly. On the other hand, vacancy levels are projected to increase in Kuala Lumpur, Beijing and Guangzhou where large development pipelines are underway.

Correspondingly, we expect a divergence in rental growth trends across the region. Over the five-year forecast period, we expect to see the highest rental growth momentum in Singapore, supported by a cyclical demand recovery combined with limited supply. Robust growth is also expected in the core cities of Australia, while healthy but more moderate growth is expected in Seoul and the Japanese cities with strong corporate demand. At the other end, short-term rental declines are expected in Hong Kong, and other cities such as Adelaide and Kuala Lumpur due to incoming supply pressures, subdued demand or decentralization movements.

The APAC office sector is projected to yield mid to high single digit annual total returns in most cities over the next five years through 2022, on the back of healthy demand and moderate supply. Top tier cities in China and Australia are projected to be among the best performers, followed by regional cities in Japan which are expected to provide good excess returns over the local risk free rate, with enhanced investment returns when local financing is secured. Good opportunities are also appearing for investors willing to ride on the current cyclical rental recovery in Singapore, while offices in Seoul are projected to yield moderate returns underpinned by decent income yields. On the other hand, returns in Tokyo should be more subdued due to the current tight cap rates, while forecast five-year performance in Hong Kong is also projected to be relatively weak.

Retail: The rise in e-commerce remains a major driver in redefining 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. Data from eMarketer[30] indicates the e-commerce market in Asia Pacific grew strongly at 31% in 2017, far outpacing the 7.7% growth in total retail sales in the region. The share of e-commerce sales as a proportion of total retail sales in China had grown rapidly from 15% in 2015 to over 23% in 2017. Similarly, online retail sales in South Korea have grown strongly, ahead of the United States where e-commerce accounts for about 9% of retail sales. E-commerce share levels in Japan and Australia are currently just shy of the United States, but emerging trends such as the entry of Amazon into the Singaporean and Australian markets in 2017 indicate that online retail is likely to gain momentum in the region.

The impact from online retail is expected to be felt more keenly in the discretionary retail segments such as apparel and electronics, compared to the non-discretionary segments such as food staples and daily necessities. Retail sales in the region continue to underperform in some major markets including Hong Kong, Singapore and Malaysia due to soft domestic consumption and subdued tourist spending. Rents have declined in Singapore and Hong Kong, as retailers face margin pressures from weaker retail spending as well as increasing labour costs. On the other hand, key cities in China, Australia, South Korea and Japan continue to see healthy rental growth buoyed by resilient domestic consumption trends or strong tourist arrivals, despite competition from the ongoing proliferation of online retail. Nonetheless, structural shifts in consumer shopping behavior continue to exert pressures on retailers to divert resources from traditional bricks-and-mortar sales to building up omni-channel marketing strategies. As a result, the retail environment remains in favour of tenants as landlords are increasingly forced to offer better incentives especially in the discretionary retail space. Vacancy rates could start to inch upwards in decentralized areas on the back of growing supply while occupier demand from retailers is likely to remain stable in the majority of locations in 2018.

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[30] eMarketer – Asia-Pacific Retail and Ecommerce Sales, January 2018.
Note: f = forecast. There is no guarantee the forecasts will materialize.

Over the five-year forecast horizon, Shanghai and the top Australian cities are expected to experience the strongest growth in retail rents in the region, although growth should be more moderate in sub regional centers (SRC) in Australia, where demand could be adversely affected by e-commerce and a slowdown in the housing market. In Seoul and Tokyo, retail rental growth is likely to be modest at below 2% per annum, broadly in line with inflation expectations. Near-term rental growth is projected to be minimal in Hong Kong, Singapore and Kuala Lumpur with rents affected by diminished tourist spending. Looking ahead, retail assets in China and Australia appear attractive underpinned by higher income yields. While Tokyo looks attractive with the highest projected excess returns (i.e. annual total returns minus bond yields), healthy spreads of circa 2%-4% are expected in most other key retail markets in the region.

Industrial: Prime logistics space across the region continues to see healthy take-up driven by e-commerce and third party logistics providers, resulting in positive rental growth trends across the region. The availability of prime development land and quality modern warehousing facilities is critical for logistics markets undergoing modernization changes coupled with rising domestic consumption, particularly for locations such as Seoul and tier-one cities in China.

The rise of e-commerce is also gradually taking place in Southeast Asia, driven by the region's rapidly rising middle class population and consumption trends. Amazon made its foray into the Singapore market in the second half of 2017 with the launch of Amazon Prime Now served by the largest Amazon fulfillment centre in the world, and it also entered the Australian market in late 2017.This followed Alibaba's own expansion through several acquisitions of local and regional e-commerce players operating within and outside China, outlining the increasing growth potential of online retail and needs for logistics spaces in the region.

In the industrial sector, e-commerce and third party logistics (3PL) companies are expected to remain major leasing demand drivers for modern logistics space across the region, supported by rising e-commerce spending as described in the retail section. Rental growth is expected to be moderate in the region at around 1.5%-2.5% per annum, broadly in line with inflation trends as tenants, 3PL companies, retailers and consigners remain mindful of logistics costs.

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. Five-year return forecasts for the key cities in Australia, China, Singapore and Seoul look favourable at high levels in excess of 7%, though investors could find themselves constrained by the limited deal flow of high quality completed assets in most of these markets. While total returns in Tokyo look to be one of the lowest in the comparison group, excess returns could turn out to be the highest on the back of expected low bond yields.

9 Global Portfolio Allocation Positioning

This section provides a generalized framework for international investing relative to an investors' local returns and the purchasing power of their home currency. This provides a disciplined approach to identify regions, markets and property sectors that may complement an investor's domestic portfolio and can either improve performance, reduce risk, or provide diversification.

The following table is generated from our previously published regional forecasts and hedging costs based on three-year currency swap spreads. There is no guarantee the forecasts will materialize. This analysis takes into account our expected returns, correlations, and potential currency hedging costs, but does not incorporate taxes.

We consider possible investment opportunities across specific countries as a means to help develop a global approach. Investors may also be able to minimize hedging costs and currency drag by establishing a portfolio which is also diversified by currencies. Investors that adopt a longer investment horizon can expect to minimize currency fluctuations, thereby limiting the need for complex hedging overlays.

Figure 20: Domestic vs. Hedged Expected Real Estate Total Returns (2018-2020)

			Hedged Country Level Returns											
Investor Domicile	3-Yr Rate Swap	Home Country Return	Australia	Japan	Korea	China	Germany	Swiss	UK	France	Netherlands	Spain	Italy	US
Australia AUD	**2.2%**	**6.0%**	6.0%	7.5%	5.4%	4.2%	7.7%	6.2%	6.3%	8.0%	9.5%	10.1%	8.4%	4.8%
Japan JPY	**0.1%**	**5.4%**	4.0%	5.4%	3.4%	2.2%	5.6%	4.1%	4.2%	5.9%	7.4%	8.0%	6.3%	2.7%
Korea KRW	**1.5%**	**4.8%**	5.3%	6.8%	4.8%	3.5%	7.0%	5.5%	5.6%	7.3%	8.8%	9.4%	7.7%	4.1%
China CNY	**4.3%**	**6.2%**	8.1%	9.6%	7.5%	6.2%	9.8%	8.3%	8.4%	10.1%	11.6%	12.2%	10.5%	6.8%
Germany EUR	**0.1%**	**5.6%**	4.0%	5.4%	3.4%	2.2%	5.6%	4.1%	4.2%	5.9%	7.4%	8.0%	6.3%	2.7%
Swiss CHF	**-0.3%**	**3.7%**	3.6%	5.0%	3.0%	1.8%	5.2%	3.7%	3.8%	5.5%	7.0%	7.6%	5.9%	2.3%
UK GBP	**1.1%**	**5.2%**	4.9%	6.4%	4.4%	3.1%	6.6%	5.1%	5.2%	6.9%	8.4%	9.0%	7.3%	3.7%
US USD	**2.5%**	**5.1%**	6.3%	7.8%	5.7%	4.5%	8.0%	6.5%	6.6%	8.3%	9.8%	10.4%	8.7%	5.1%
Local Currency Return			**6.0%**	**5.4%**	**4.8%**	**6.2%**	**5.6%**	**3.7%**	**5.2%**	**5.9%**	**7.4%**	**8.0%**	**6.2%**	**5.1%**

Sources: Deutsche Asset Management, Bloomberg. As of January 2018.

Note: Total returns for each market based on market-cap weighted sector returns. Green shading indicates hedged returns that are more than 100 bps above the home country return, yellow shading indicates hedged returns that are within a 100 bps range of the home country return and red shading indicates hedged returns are that more than 100 bps below the home country return. We have assumed that for each investor, the allocation to their home country is accounted for in their domestic real estate portfolio. Therefore the weighted-average return to the home cluster excludes the home country return.

Figure 21: Country Level Market Return Correlations (Local Currency)

	1998-2017	Australia	Japan	South Korea	China	Germany	Swiss	United Kingdom	France	Netherlands	Spain	Italy	United States
Investor Domicile	Australia	1.00											
	Japan	0.64	1.00										
	South Korea	0.50	0.08	1.00									
	China	0.13	0.43	0.02	1.00								
	Germany	0.54	0.23	0.35	(0.23)	1.00							
	Swiss	0.34	(0.09)	0.73	(0.12)	0.40	1.00						
	United Kingdom	0.38	0.27	0.30	0.10	0.26	0.57	1.00					
	France	0.75	0.18	0.69	(0.16)	0.75	0.69	0.50	1.00				
	Netherland	0.70	0.41	0.21	(0.08)	0.67	0.22	0.47	0.65	1.00			
	Spain	0.76	0.46	0.46	(0.19)	0.63	0.47	0.66	0.80	0.78	1.00		
	Italy	0.64	0.29	0.69	(0.27)	0.59	0.52	0.27	0.71	0.60	0.70	1.00	
	United States	0.84	0.60	0.55	0.21	0.49	0.32	0.49	0.67	0.62	0.72	0.47	1.00

Sources: Deutsche Asset Management. As of January 2018.Past performance may not be indicative of future results.

Since our last Global Strategic Outlook in October 2017, U.S. interest rates have notably increased, thus pushing up the three-year swap rate by 70 bps. This creates a hedging gain for U.S. investors when investing internationally. In addition, as mentioned before, the decline in the U.S. dollar has made U.S. real estate more attractive for many global investors.

Generally, investors from the U.S. and Asia Pacific should find many European markets attractive due to hedging gains that help boost total returns. Likewise, European-based investors should find other markets in Europe to be attractive, as well as Japan. Investors based in the U.S., Switzerland and the U.K. should find Japan and Australia appealing. The U.S. would still be an attractive investment destination for investors based in Switzerland, Japan, Korea and China assuming a more specific sector allocation strategy.

From a diversification standpoint, hedged returns correlations are low for most countries. Correlations are even lower on an unhedged basis, but investors would face more currency volatility in exchange for greater diversification.

9.1 Australian Investor Allocation

For an Australian investor, we believe their home market can potentially provide an annual total return of 6.0% per year over the next three years, with industrial producing total returns of 7.1% ahead of office and retail.

Referring to figure 20, our forecasts suggest Australian investors could outperform their domestic market by investing in Japan and some European countries including Germany, France, Netherlands, Spain and Italy. Australian investors also benefit from currency hedging gains since swap rates in Australia are about 200 bps higher than in Japan and the Eurozone. In local currency terms, the Netherlands and Spain are expected to outperform the Australian real estate market by 140-200 bps. Real estate correlations are for these countries range from 0.54 for Germany to 0.76 for Spain, which would add diversification to an Australian investor’s portfolio.

Switzerland and the United Kingdom also offer competitive hedged returns of 20-30 bps higher compared to the Australian market. These two countries also offer good diversification due to low correlations with the Australian real estate market.

9.2 Japanese Investor Allocation

We believe Japanese investors can potentially obtain total returns of 5.4% in their home market over the next three years. The industrial sector is expected to outperform with total returns at 6.3%, followed by retail at 5.5% and office at 5.3%.

Referring to our hedged return chart (figure 20), our forecasts suggest Japan-based investors would find European markets as most appealing due to similarly low interest rates. More specifically, the Netherlands and Spain, which in local currency terms are expected to deliver total returns of 7.4% and 8.0%, respectively. As interest rates are low in Japan as well as in the Netherlands and Spain, hedged returns are similar. The correlation between Japanese real estate returns and those of the Netherlands and Spain are relatively low at 0.41 and 0.46, respectively, which adds to the case for diversification.

Germany, France and Italy also provide attractive hedged returns of 20-90 bps ahead of the local Japanese market. Hedging costs are insignificant due to minimal interest rate differentials with Japan. Europe provides good diversification of Japan-based investors due to low correlation ranging from 0.18 in France to 0.46 in Spain. In addition, our correlation table shows that the Japanese real estate market has low correlations with these countries, ranging from 0.18 to 0.29.

The U.S. could still be appealing assuming a more selective sector allocation. We are still forecasting industrial real estate to outperform at 7.1% total return for the next three years, and 4.8% after accounting for hedging costs.

9.3 South Korean Investor Allocation

We believe the South Korean real estate market can potentially deliver total returns of 4.8% over the next three years. The industrial sector is expected to outperform with total returns of 7.1%, whereas the retail market is expected to lag at 4.1%.

Our hedged returns chart shows the most attractive countries for South Korean investors are Japan and certain European countries, including Germany, France, Netherlands, Spain and Italy. These markets have low swap rates compared to South Korea which adds to returns. We expect hedged returns for these markets to range from 6.8% to 9.4%. These markets also provides good diversification due to low return correlations. Correlations are the lowest with Japan, Germany, the Netherlands and Spain at 0.08 – 0.46 and are highest with France and Italy at 0.69.

Australia, Switzerland and the United Kingdom also offer relatively good hedged returns, ranging from 5.3% - 5.6%, which are 50-80 bps ahead of the local South Korean market. Correlations are relatively low and range from 0.30 for the United Kingdom to 0.73 for Switzerland.

While hedged returns are not as strong in the U.S. and Australia, these markets still provide good diversification with correlations at 0.55 and 0.50, respectively. In addition, South Korean investors can still outperform by being more selective by sector (for example, overweight both U.S. and Australian industrial).

9.4 German Investor Allocation

Our forecasts show that total returns for the German real estate market are in the range of 5.6% p.a. over the next three years, led by industrial at 7.6%. German retail is expected to underperform at 3.2%.

German investors will likely find other European markets to be attractive investment destinations, particularly Spain, and the Netherlands. We forecast returns for the Netherlands and Spain to be 7.4% and 8.0%, respectively. As these countries also use Euro as its currency, there are no associated hedging costs. Correlations with these markets are 0.67 for the Netherlands and 0.63 for Spain, providing some diversification benefits.

France and Italy also provide good opportunities as we forecast returns to be 30-70 bps ahead of the German local market. Japan may also be a good investment destination as it provides good diversification as return correlations are only 0.23 and hedged returns are somewhat similar to Germany’s.

9.5 Swiss Investor Allocation

We forecast Swiss investors to have relatively muted home country returns of 3.7%. The retail sector is expected to outperform at 6.9%.

According to our hedging chart, the most attractive markets for Swiss investors are Japan, Germany, France, the Netherlands, Spain and Italy. We forecast hedged returns for these countries to range from 5.0% to 7.6%. Swiss investors would experience currency hedging losses as the three-year swap rate in Switzerland is -0.3%, compared to 0.1% for the target European markets. Despite the hedging losses, real estate market returns are still attractive.

Correlations vary quite greatly across these markets. The lowest correlation is with Japan at -0.09 and the highest correlation with France at 0.69. A case for diversification can be made for the markets with relatively low correlations, which would be Japan, the Netherlands, Spain and Italy.

A case can be made for investing in Japan if investors are more selective of sectors and markets. For example, industrial is forecasted to deliver 7.1% total returns in local currency terms, and 4.4% after accounting for hedging costs. U.S. industrial real estate would then deliver returns 70 bps ahead of Swiss home country returns.

9.6 U.S. Investor Allocation

We forecast U.S. total returns to be 5.1% over the next three years, with the industrial sector leading at 7.1%, and the office sector lagging at 4.3%.

Referring to our hedging chart, most markets screen as attractive for U.S. investors, with the most appealing being European countries (Germany, Switzerland, U.K. France, the Netherlands, Spain and Italy) as well as Japan and Australia. Hedged total returns for European countries range from 6.5% to 10.4%, boosted also by currency hedging gains against the Euro. Hedging gains for U.S. investors investing in these target European countries are expected to add approximately 2.4% to total returns. Similarly, hedged returns for Australia and Japan are also expected to be boosted by currency hedging gains. Local currency returns in Australia and Japan are 6.0% and 5.4%, respectively. Currency hedging adds 30 bps and 240 bps to total returns, respectively. Hedged returns for South Korea are 60 bps ahead of local market U.S. returns.

Correlations vary greatly across these markets. The lowest correlation is with Switzerland at 0.32 and the highest correlation is with Australia at 0.84. U.S. investors can diversify their portfolio by gaining exposure to certain markets, including Germany, Switzerland, U.K. and Italy.

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