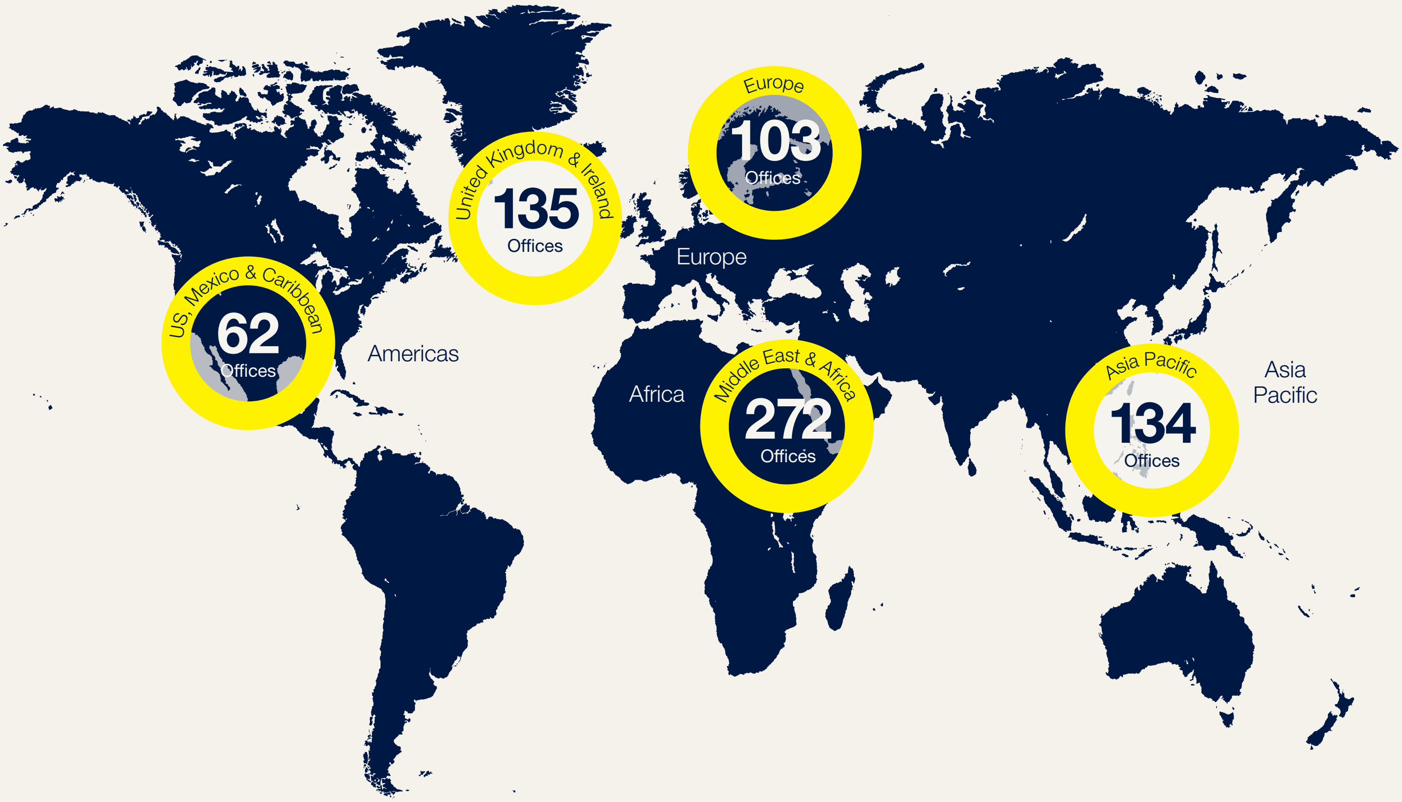
World Office Yield Spectrum

1H/2017

Savills global presence

More than 700 owned and associate offices worldwide



UK, Ireland & Channel Islands
England
Guernsey
Ireland
Jersey
Northern Ireland
Scotland
Wales

Asia Pacific
Australia
Cambodia
China
Hong Kong
India
Indonesia
Japan
Macau
Malaysia
Myanmar
New Zealand
Philippines
Singapore
South Korea
Taiwan
Thailand
Vietnam

Continental Europe
Austria
Belgium
Croatia
Denmark
Finland
France
Germany
Gibraltar
Greece
Italy
Luxembourg
Monaco
Montenegro
Netherlands
Norway
Poland
Portugal
Russia
Serbia
Spain
Sweden
Switzerland

Middle East & Africa
Bahrain
Botswana
Kenya
Mauritius
Mozambique
Namibia
Oman
Qatar
Seychelles
South Africa
United Arab Emirates
Zambia
Zimbabwe

Americas, Canada & Caribbean
Bahamas
Barbados
Canada
Cayman Islands
Colombia
Grenada
Mexico
Panama
St Kitts & Nevis
St Lucia
US

Introduction

With investment capital becoming more global in its search for returns and diversification, the need for a standardised set of indicators to make sense of opportunities, risk and return expectations has become critical.

The Savills/Deakin University World Office Yield Spectrum is designed to fill a void in market knowledge.

For too long the global property investment community has been denied a credible, factual yields series which can be reliably used to compare 'apples with apples.' This unique global publication is the culmination of substantial work by dozens of researchers in the international Savills team.

Savills Research trusts you find this body of work useful, illuminating and of value to you in your endeavours. As always your thoughts, feedback and ideas are most welcome. Please feel free to contact your Savills representative with regard to this publication.

Methodology

Market Yields

This yield is derived by capitalising current market rents (Net Face) against current capital values for office buildings. The Net Face rent is the rent payable by the tenant excluding both statutory and operating outgoings (recoverables) and includes the value of any incentive paid to the tenant by way of fitout, cash, rental rebate or rent free. The capital value is calculated to be for the office component only and excludes retail, excess car parking, signage, storage and other "non-office" sources of income.

Effective Yields

This yield is derived by capitalising current market rents (Net Effective) against current capital values for office buildings. The Net Effective rent is the rent payable by the tenant excluding both statutory and operating outgoings (recoverables) and **excludes** the value of any **incentive** paid to the tenant by way of fitout, cash, rental rebate or rent free. The capital value is calculated to be for the office component only and excludes retail, excess car parking, signage, storage and other 'non-office' sources of income.

Weighted Average Cost of Capital (WACC)

The WACC is derived by having reference to the rents described above, the rental growth outlook and the management fee recoverable from owning the building (in sum a proxy for equity) and the current cost of debt. Using a 30 percent/70 percent equity/debt split, a WACC is calculated.

Accretive Premiums

By subtracting the effective and market yields derived above from the WACC we can calculate the 'accretion' inherent in each market using the metrics as described.

Market Risk Premiums

Having reference to the market yield calculated above we subtract the risk free rate (10 year bond) then add the expected annual income growth rate to establish the 'expected return for risk.'

Effective Risk Premiums

Having reference to the effective yield calculated above we take that yield, subtract the risk free rate (10 year bond) then add the expected annual income growth rate to establish the 'expected return for risk.'

World Cities

Globally, monetary policy remains accommodative as global growth continues a below-average rate of growth. When reported, the numbers for the second half of 2016 are expected to show global growth marginally improving.

Growth in China has stabilised and the Government continues to support property markets and infrastructure spending. GDP in the US picked up in the September quarter of 2016 whilst growth in Europe and Japan remained at modest levels. Whilst conditions remain supportive of consumption growth around the world, business investment remains relatively subdued.

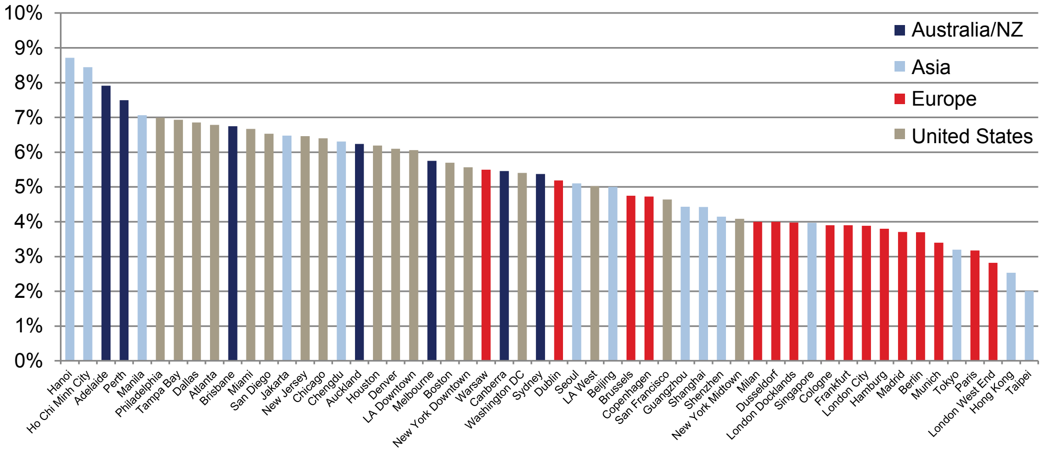
Labour markets globally have seen substantial improvement however the quality of work the wages offered and the part-time and contractual nature of the employment growth undermines the quality of employment growth. Substantial capacity through underemployment remains.

Consequently, headline inflation numbers remain below most central bank's target ranges. Inflation expectations have been little changed over the past twelve months however a late pick-up in inflation expectations following the results of the US presidential election has seen bond yields move substantially at the end of 2016.

The capital markets have been relatively strong over the six months to end of December 2016 with the S&P500 finishing the six months up over 7 percent. European bourses fared better with most indices up strongly over the six months to December 2016. Bourses in Asia have been generally healthy over the last six months of 2016. 10 year bond yields have risen by an average of 44 basis points around the world in the past six months and average around 1.7%. The negative rates prevalent in Japan and Germany in mid-2016 have reversed to be 0.05% and 0.21% respectively.

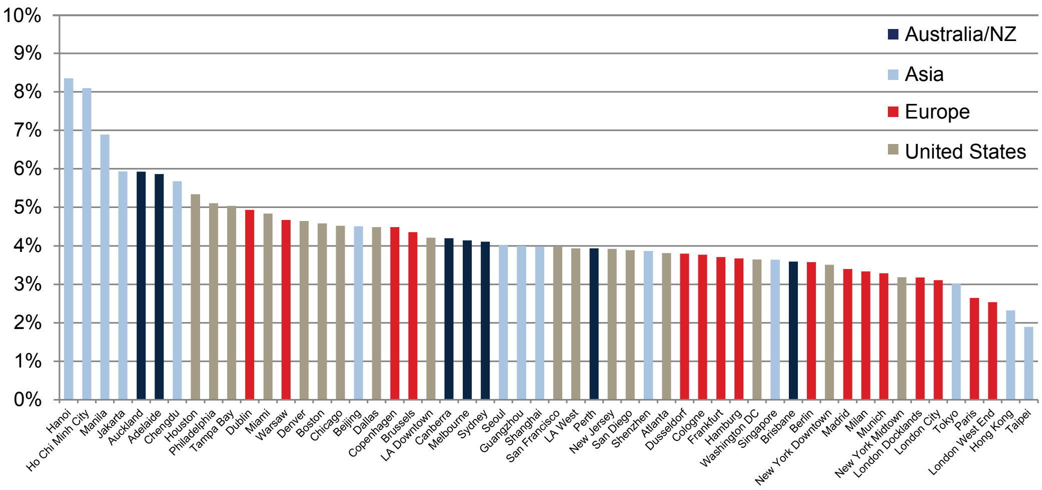
Most of the move in global bond yields followed the outcome of the US presidential election in early November. The move in bond yields were associated with expectations of infrastructure spending, tax cuts, trade renegotiations and further support for economic growth. Expectations for rising interest rates in the US firmed.

World Office CBD Grade A Market Yields (percent) by Region and City
December 2016



Source: Savills Research

World Office CBD Grade A Effective Yields (percent) by Region and City
December 2016



Source: Savills Research

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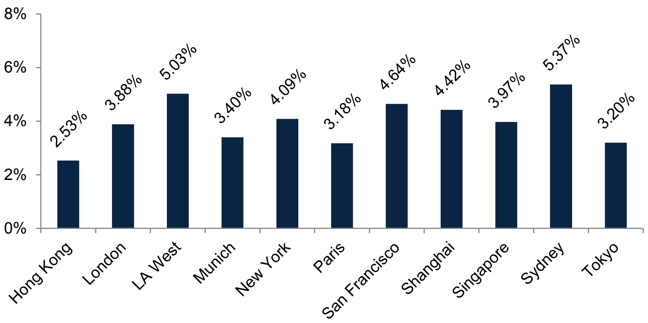
CHALLENGE: WATCHING OTHERS PASS YOU
ONE WAY

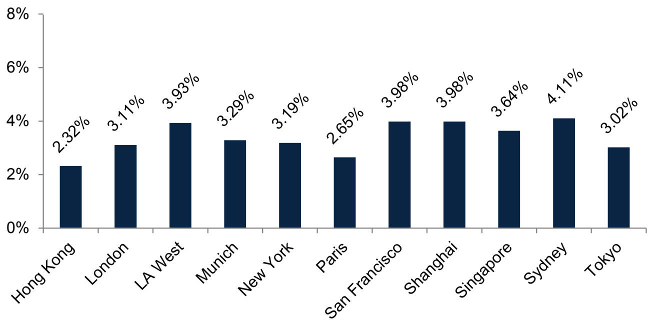
World Cities/CBD/Grade A Office

Market Yields December 2016



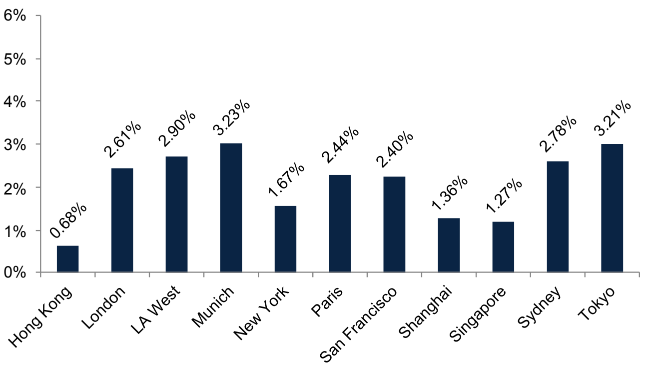
Source: Savills Research

Effective Yields December 2016



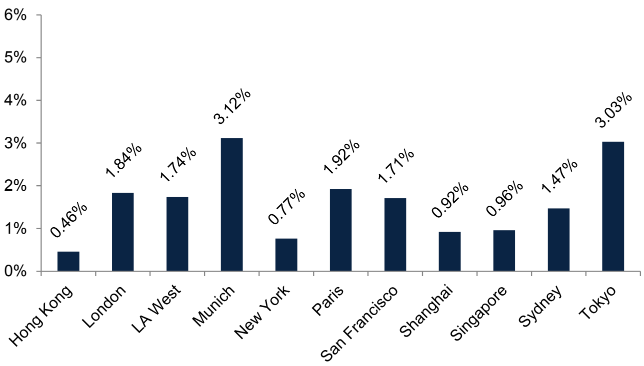
Source: Savills Research

Market Risk Premium December 2016



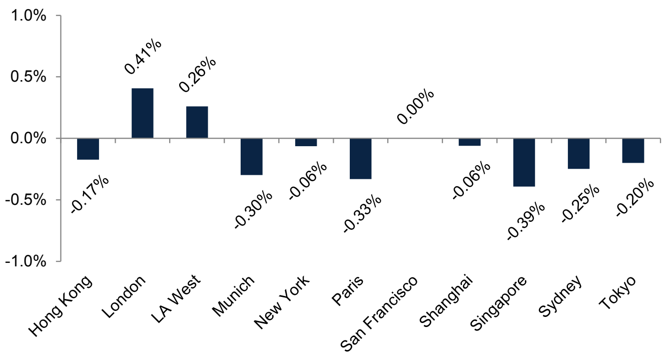
Source: Savills Research

Effective Risk Premium December 2016



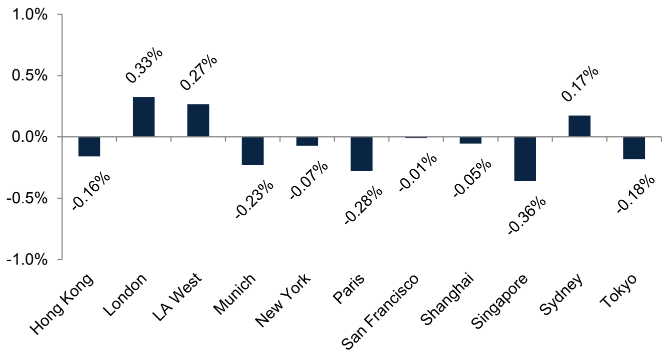
Source: Savills Research

Market Yield Change June 2016 – December 2016



Source: Savills Research

Effective Yield Change June 2016 – December 2016



Source: Savills Research

Asia

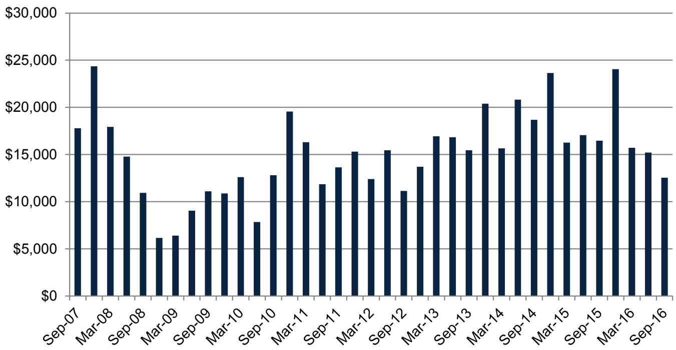
In a world racked by political uncertainty induced by Brexit negotiations, European elections and a new presidency in the US, the Asian markets appear to have maintained their appeal in 2016.

Office yields across all major cities hardened over the second half of last year and we believe there is still some (limited) scope for them to fall further in 1H/2017; the low interest rate environment, the ongoing 'search for yield' and increasing allocations to real estate are all considered to be positives for the sector.

One of the most significant challenges for investors is a lack of prime office stock, however, and volumes have fallen consistently compared with 2015, a situation which is unlikely to reverse any time soon. This lack of liquidity across most asset classes has arguably been masked by the above average number of portfolio deals recorded over the second half. Scarcity of assets has resulted in money accumulating on the sidelines, causing fundraising to decline versus the previous year.

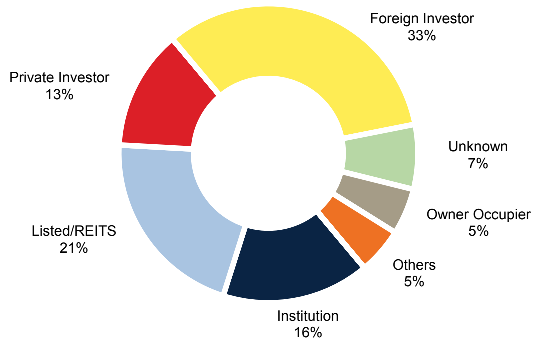
Despite its inward focus, Asian real estate capital has continued to explore overseas markets with the US attracting the lion's share of deals, followed by the UK. Cross border activity in 2016 was dominated by China, South Korea, Singapore and Hong Kong in that order while South Korean activity registered the highest rate of increase. It will be interesting to see how Asian capital reacts to rate hikes by the Federal Reserve and a strengthening US dollar set against a less predictable policy landscape in 2017 if that is what comes to pass.

Asian Office Property Sales (US$ million)
September 2007 – September 2016



Source: RCA/Savills Research

Asian Office Property Buyer Profile
9 months to September 2016



Source: RCA/Savills Research

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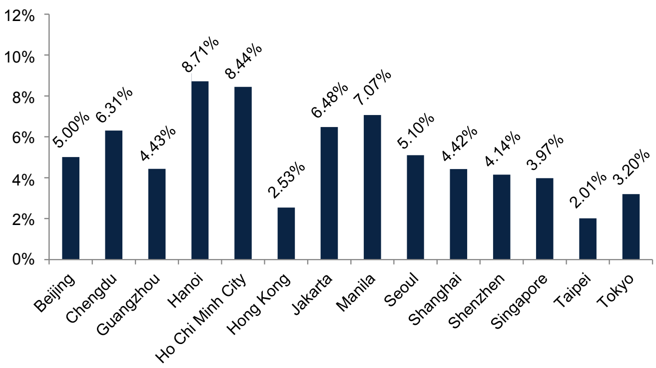
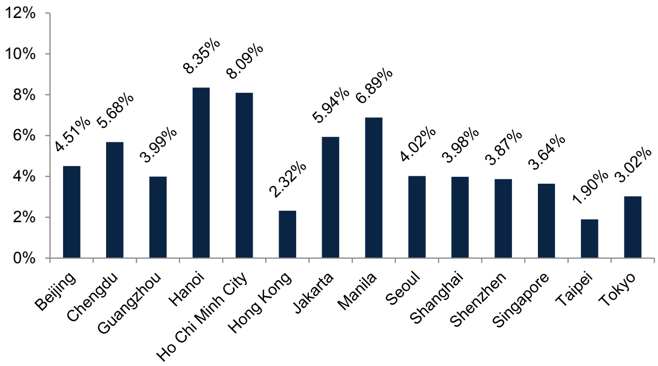
Asia/CBD/Grade A Office

Market Yields December 2016



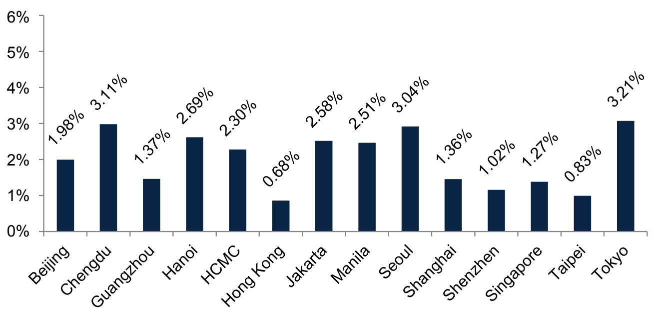
Source: Savills Research

Effective Yields December 2016



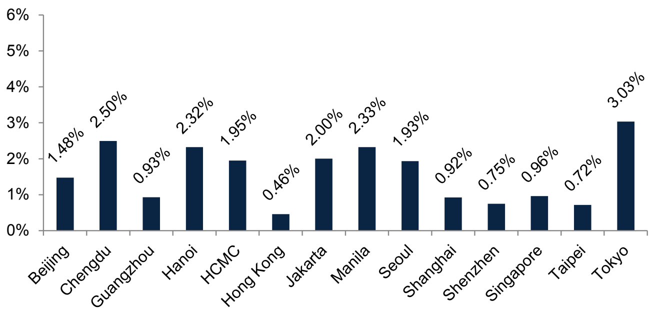
Source: Savills Research

Market Risk Premium December 2016



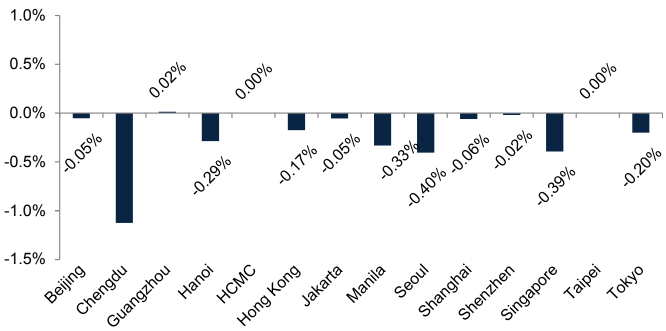
Source: Savills Research

Effective Risk Premium December 2016



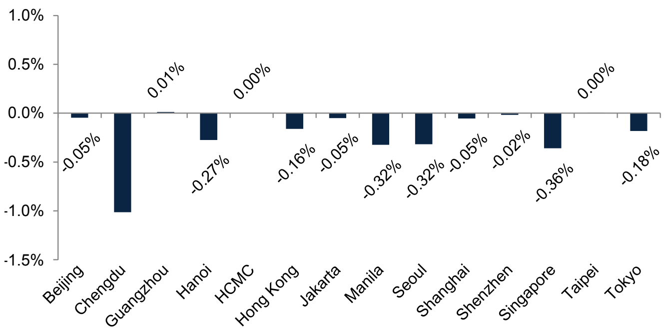
Source: Savills Research

Market Yield Change June 2016 – December 2016



Source: Savills Research

Effective Yield Change June 2016 – December 2016



Source: Savills Research

UK/Europe

The UK commercial property investment markets were already past their peak in both pricing and volume terms a year ago, and the result on the referendum on EU membership has arguably done little to change the trend.

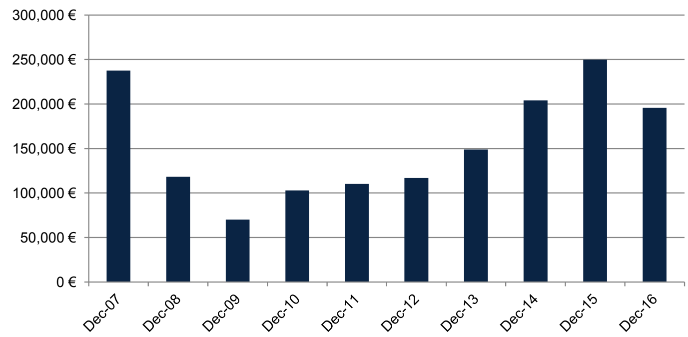
Confidence was definitely rocked in the third quarter of 2016, but by the end of last year there was acceptance that Brexit is a long process, rather than a one-hit event.

What has changed since the referendum is the make-up of investors that are active in the UK, with less activity by institutions and a sharp rise in demand from overseas private investors. Many investors have been attracted by the weakening of the pound, and at present this is seen as enough to compensate for a perceived increase in occupational risk.

Overall, our predictions for 2017 and beyond are investment volumes are expected to trend downwards towards £50 billion per annum, with a swing away from opportunistic deals to income-security plays. Yields are expected to rise in most sectors, though the stable debt market, low vacancy rates, and global investor demand is expected to put a lower ceiling on prime yields than was reached during the GFC. Brexit definitely carries a risk of creating a sustained period of occupier uncertainty, but to some degree this should be balanced by lower levels of development activity. However, until some clarity emerges as to how Britain will exit from the EU, the real impact on the UK market will be hard to quantify.

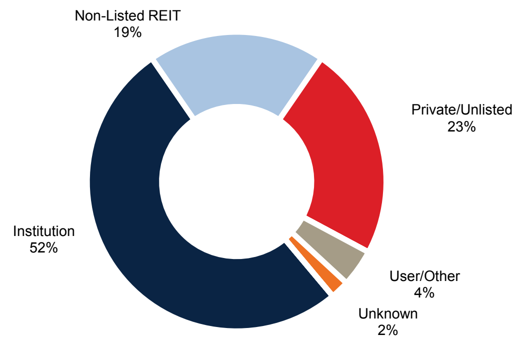
We expect investment volume in Continental Europe in 2017 to be similar to that of 2016. Although interest rates are expected to rise to 1.16% in the Eurozone, the property market should remain high on investors' radar. In France, Germany and the Netherlands, where elections will be held, we expect a wait and see attitude by some investors during the first half of the year. However, the prevailing story regarding core countries is the lack of prime product. At the other end of the spectrum, prime yields in non-core countries are still above the European average, offering more attractive returns and yield compression potential. This is especially so in countries like Spain and Italy where strong property fundamentals combined with the availability of portfolio opportunities are attracting foreign investors.

Europe and UK Office Property Sales (€ million)
December 2007 – December 2016



Source: Savills Research

Europe and UK Office Property Buyer Profile
Q1-Q3 2016



Source: Savills Research

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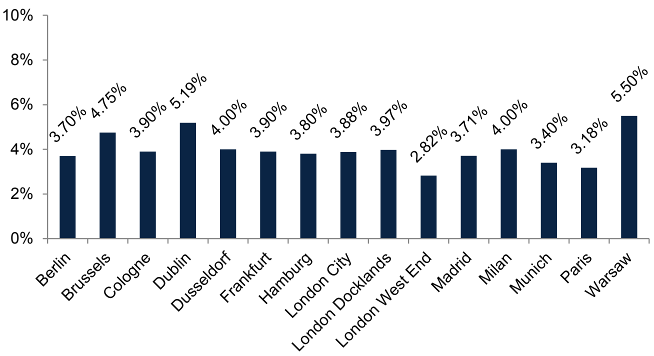
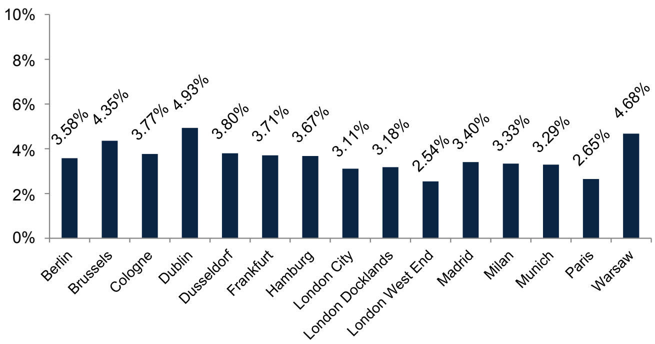
Europe/CBD/Grade A Office

Market Yields December 2016



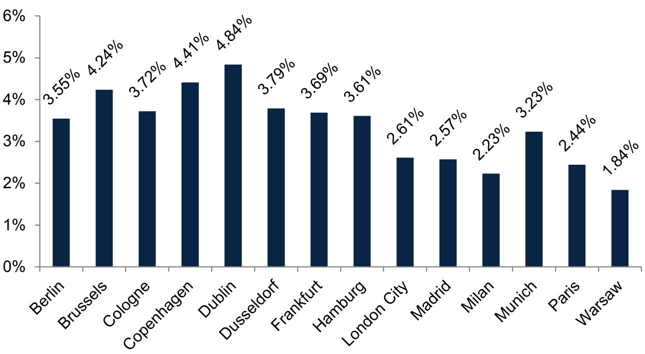
Source: Savills Research

Effective Yields December 2016



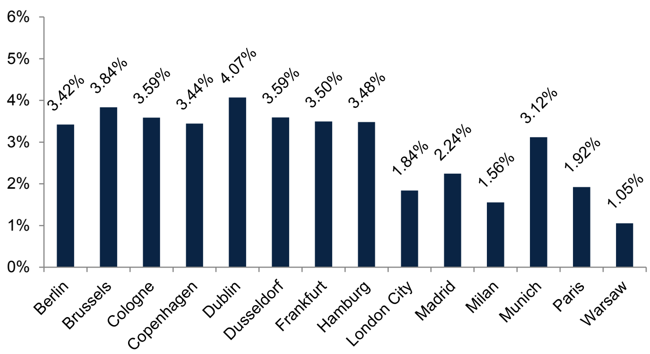
Source: Savills Research

Market Risk Premium December 2016



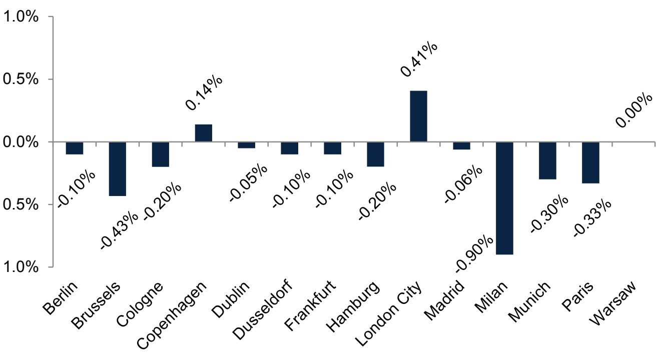
Source: Savills Research

Effective Risk Premium December 2016



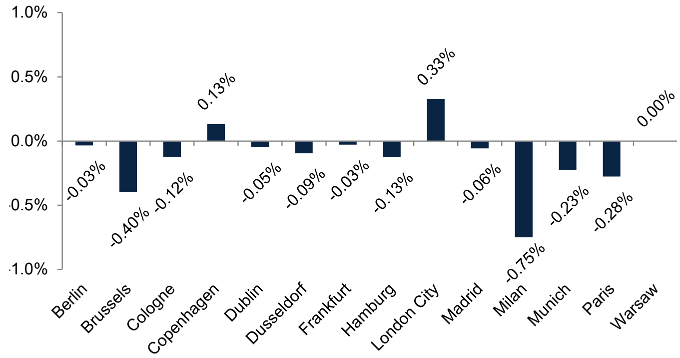
Source: Savills Research

Market Yield Change June 2016 – December 2016



Source: Savills Research

Effective Yield Change June 2016 – December 2016



Source: Savills Research

United States

The last 12 months has brought a dose of healthy moderation to the US economy.

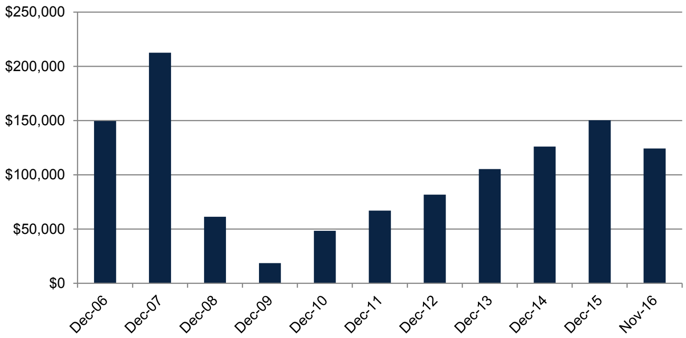
Investors and lenders forced a recalibration of high-flying tech firms and oil and gas prices found a floor. There seems to be some convergence in residential and commercial property markets as well – pricing in luxury markets is levelling off. In comparison to the volatility in equity markets, real estate in the US held up very well. Office property sales in the US totalled $124 billion through November of this year, roughly 4 percent below the $129.6 billion in the first 11 months of 2015. This slight decline comes as no surprise. Many of the trophy assets in gateway markets such as Manhattan and Chicago changed hands in 2014 and 2015, the novelty of the industrial sector has worn off, and there simply are not as many institutional-grade or conversion opportunities in secondary or tertiary markets to keep pace with the gateway markets.

Unlike the fundamentals underlying retail sales and office markets this is not a demand deficiency – it is a supply shortage. In this sense investment sales are performing a bit like labour markets – investors and top employers have been turning over every stone in every market. So far, most investors seem to be maintaining appropriate selectivity. Many are following the demographic upside to Sunbelt markets such as the Carolinas as well as Mountain West markets including Salt Lake City and Las Vegas. Steady population and job growth and controlled construction activity in these markets leaves some room for NOI growth in the next couple of years. Europe has seen a similar phenomenon - volume is up significantly in the Netherlands, Spain and Sweden but there are only so many investment grade assets in these markets.

The "most-favoured market" status of some gateways is slipping slightly. Most buyers are showing disdain for gateway markets such as Manhattan and Washington DC, where demand is running short of growing supply. On the other hand, they have remained active in Boston and Los Angeles, where the life science and entertainment/social media sectors continue to grow. Boston's market fundamentals are in fact among the strongest in country and appear as though they have more to run than San Francisco, which has seen a recent spike in sublet supply and drop-off in leasing. Similarly, Los Angeles has seen its strongest leasing volume in a decade. Office property sales have surged more than 75 percent during 2016 from 2015 levels. Finally, buyers are acknowledging that some of the traditionally "low barrier to entry" markets that were always seen as a risk due to chronic overbuilding may have matured in this cycle. Atlanta and Dallas/Fort Worth stand out as markets that are reaping the rewards of a controlled development pipeline.

United States Office Property Sales (US$ million)

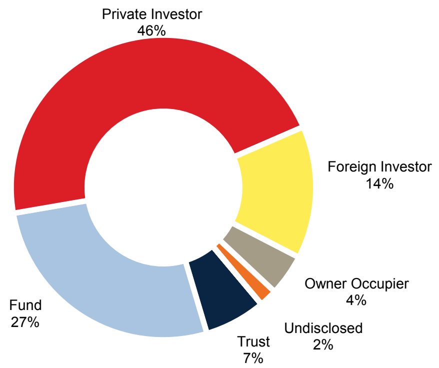
December 2006 – November 2016



Source: RCA/Savills Research

United States Office Property Buyer Profile

Calendar year to November 2016



Source: RCA/Savills Research

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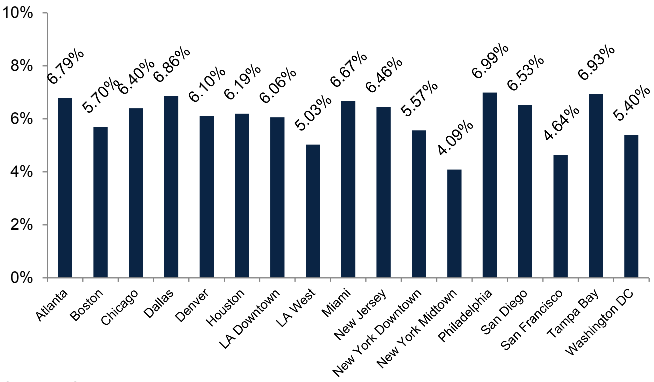
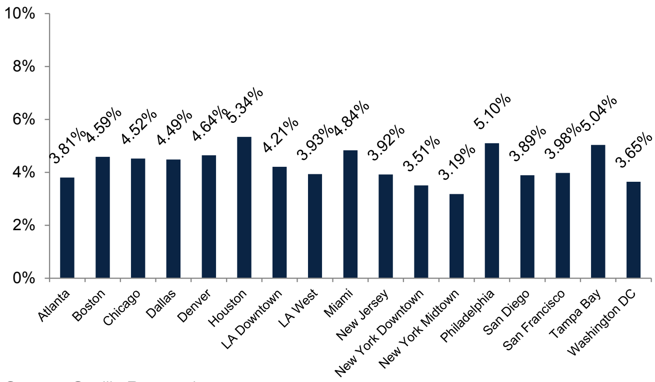
United States/CBD/Grade A Office

Market Yields December 2016



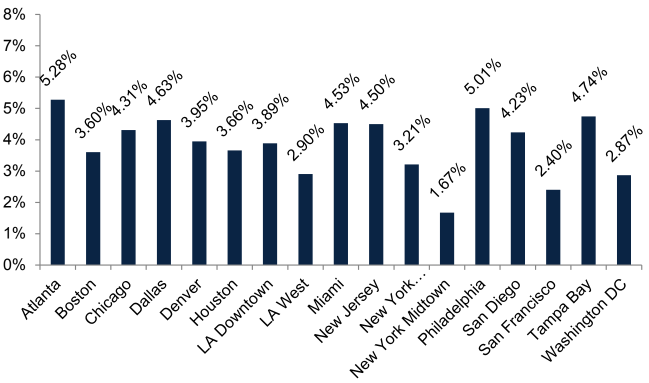
Source: Savills Research

Effective Yields December 2016



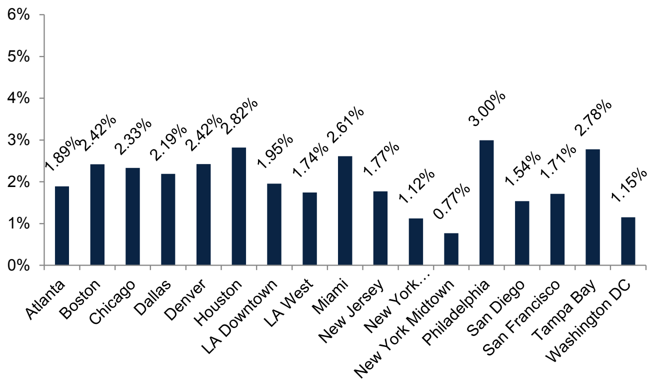
Source: Savills Research

Market Risk Premium December 2016



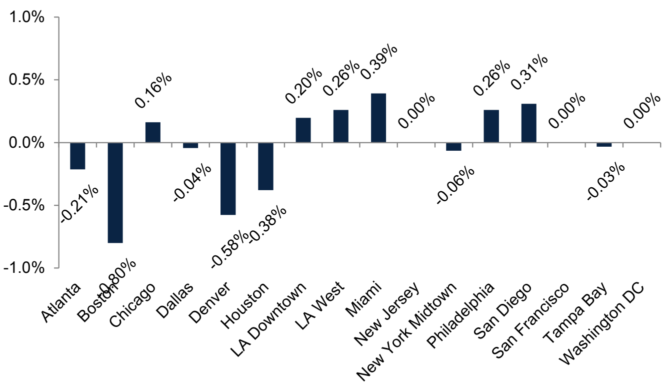
Source: Savills Research

Effective Risk Premium December 2016



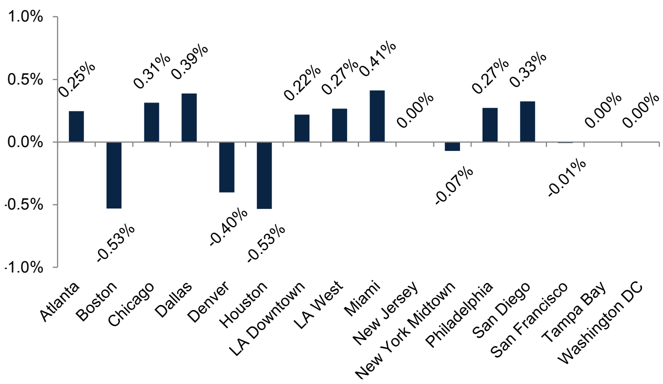
Source: Savills Research

Market Yield Change June 2016 – December 2016



Source: Savills Research

Effective Yield Change June 2016 – December 2016



Source: Savills Research

Australia/New Zealand

The calendar year 2016 marked another year of strong performance in property investment markets.

Commercial property investment yields continued to firm across the board (by an average 20 basis points) – a theme we have been writing about for several years now. Whilst the “bond yield” story has run its course, in some markets, fundamentals are improving rapidly. We believe this improvement will lead to further tightening in yields as investment capital starts to price in expectations of future NOI growth. This part of the yield cycle is just beginning.

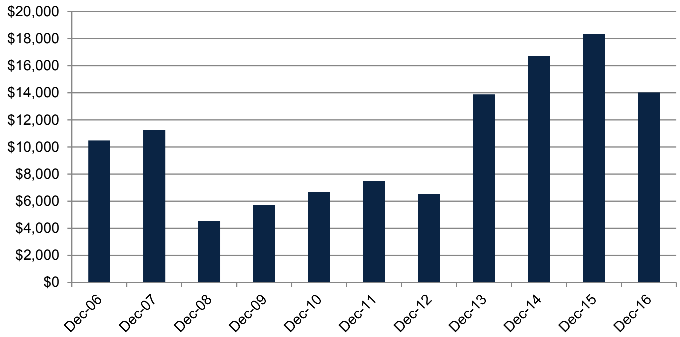
In Australia, Savills recorded approximately $27 billion worth of commercial property transactions in the 12 months to December 2016, down from $33.74 billion in the previous year, but much the same as the five year average ($25.6 billion). A lack of portfolios and a diminishing supply of prime properties for sale continues to weigh on investment volumes.

Foreign investors were the most active in the investment market in 2016, purchasing 40 percent of stock reported sold or approximately $10.7 billion. Professional investors, represented by Trusts, Funds and Syndicates, purchased a total of $8.75 billion of commercial property. Both buyer groups remain keenly interested with ongoing appetite for commercial property investment.

A slowdown in resource demand from China, a reversal of commodity prices and the end of the mining investment boom (coupled with the GFC) saw interest rates in Australia fall to historic lows. A subsequent pickup in occupier and investment demand in Melbourne and Sydney followed whilst there was a substantial reversal in fortunes in Brisbane and Perth. Whilst Brisbane has stabilised, Perth continues to be challenged (more office supply is in the pipeline), Melbourne is meeting both occupier and investment demand with a supply response whilst Sydney remains challenged on the supply front. An added difficulty in both Melbourne and Sydney is the continual withdrawal of office space and development sites (both in CBD and non-CBD office markets) for conversion to residential or compulsory acquisition for public works.

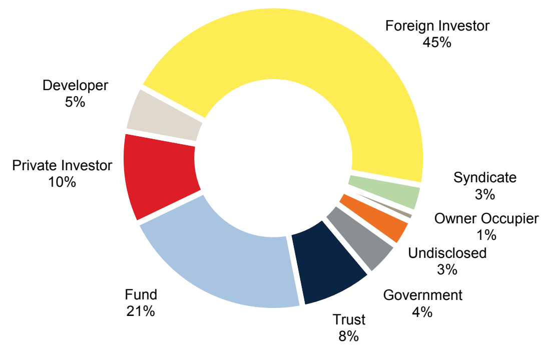
Capital markets exhibited greater degrees of volatility throughout 2016 and have finished the year stronger with the ASX200 rising 9 percent over the last six months, the Australian dollar ended up largely unchanged against the US dollar and 10 year bonds yields softened by 90 basis points to approximately 2.9%.

Office Property Sales (AU$ million)
December 2006 – December 2016



Source: Savills Research

Office Property Buyer Profile
12 months to December 2016



Source: Savills Research

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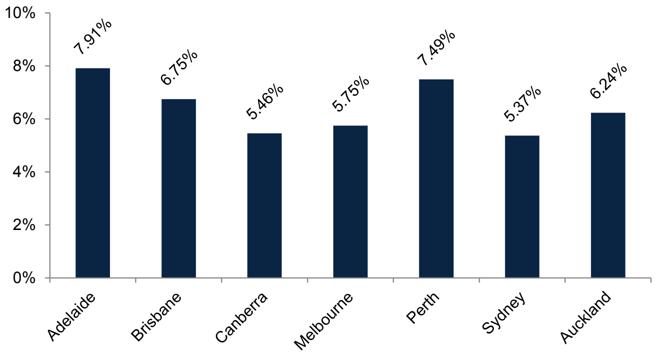
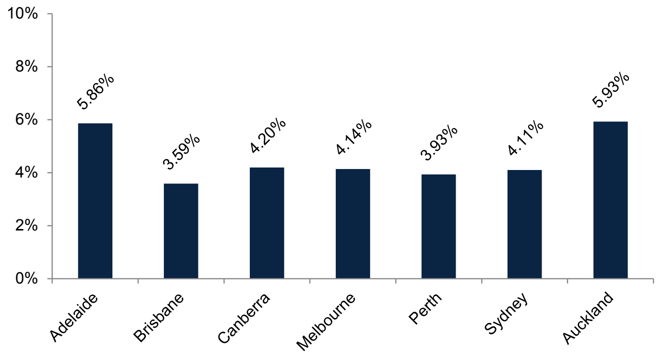
Australia/New Zealand/CBD/Grade A Office

Market Yields December 2016



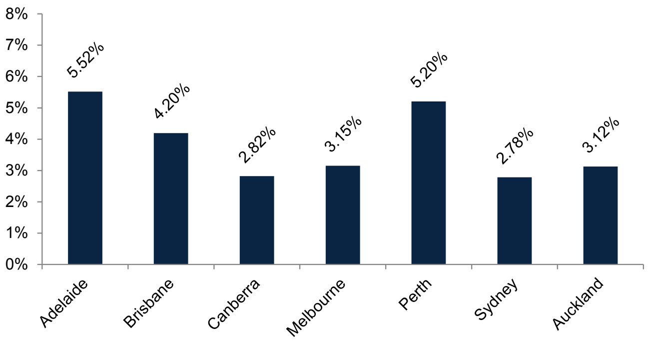
Source: Savills Research

Effective Yields December 2016



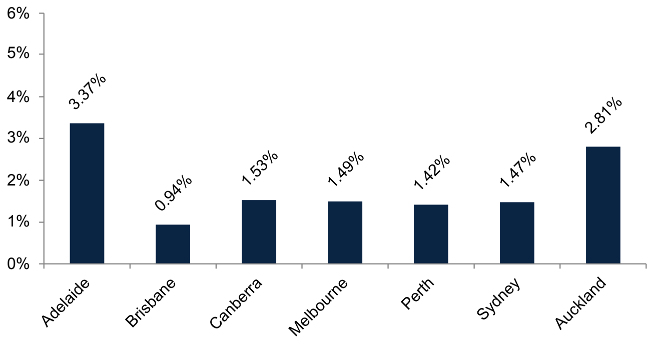
Source: Savills Research

Market Risk Premium December 2016



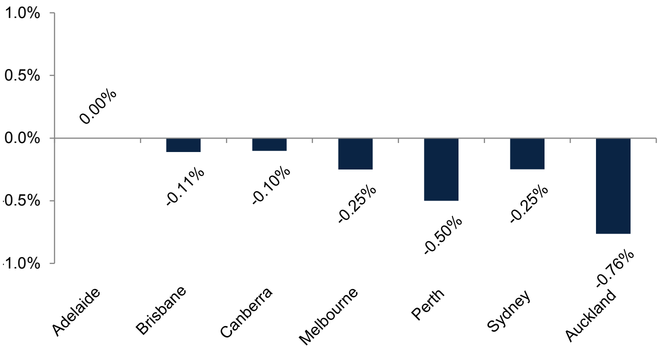
Source: Savills Research

Effective Risk Premium December 2016



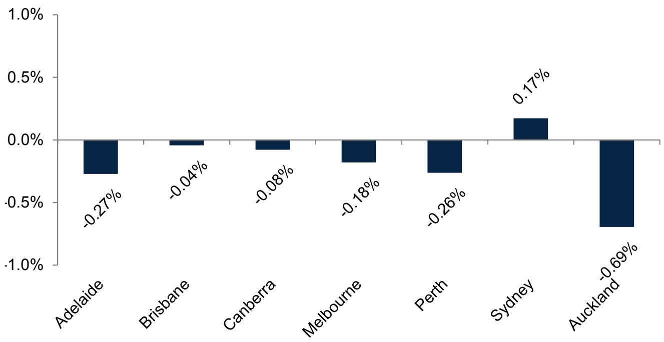
Source: Savills Research

Market Yield Change June 2016 – December 2016

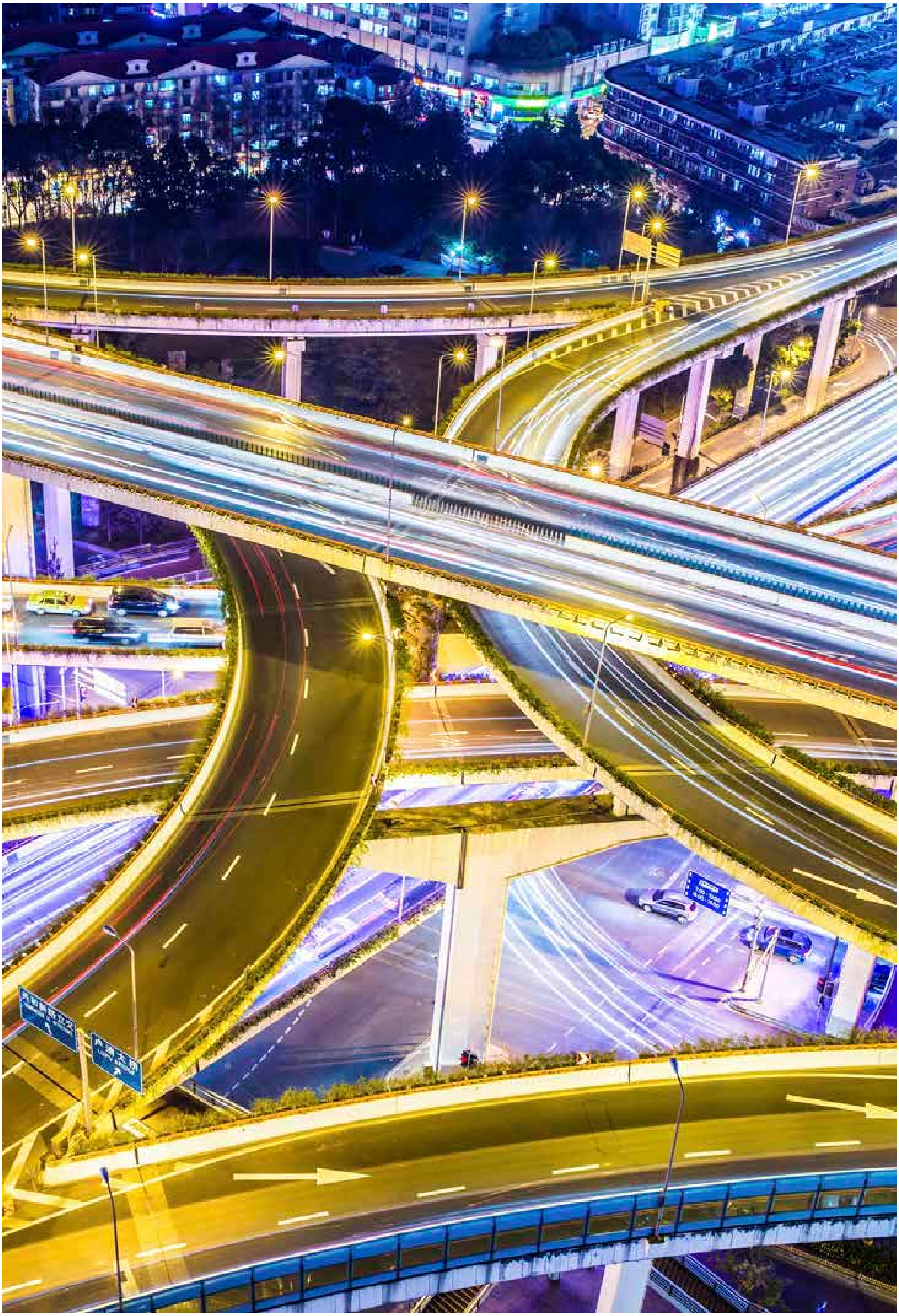


Source: Savills Research

Effective Yield Change June 2016 – December 2016



Source: Savills Research



About

Savills

With a rich heritage and a reputation for excellence that dates back to 1855, Savills is a leading global real estate provider listed on the London Stock Exchange.

Savills advises corporate, institutional and private clients, seeking to acquire, lease, develop or realise the value of prime residential and commercial property across the world's key markets.

Savills is a company that leads rather than follows with more than 700 owned and associate offices throughout the UK, Europe, Americas, Asia Pacific, Africa and the Middle East. With more than 30,000 staff, we seek out people who possess that rare mix of entrepreneurial flair and rock solid integrity, and are focused on delivering clients with advice and expertise of the highest calibre.

A powerful combination of global connections and deep local knowledge provides Savills with an almost unparalleled ability to connect people and property.

Savills extensive Asia Pacific network spans 50 offices throughout Australia, New Zealand, China, Hong Kong, India, Indonesia, Japan, Korea, Macao, Malaysia, Myanmar, Philippines, Singapore, Taiwan, Thailand and Vietnam.

Savills offers the full spectrum of services from providing strategic advice to managing assets and projects and transacting deals. With a firmly embedded corporate culture that values initiative, innovation and integrity, clients receive outstanding service and can be assured of the utmost professionalism.

For advice that gives advantage, contact Savills.

Deakin University

Through its agenda LIVE the future, Deakin aims to build the jobs of the future, using the opportunities of the digital age to widen access to education and make a difference to the communities it serves.

Deakin enjoys a reputation for being accessible, helpful and friendly. It has a longstanding record for its use of cutting-edge information technology while providing highly personalised experiences, whether in the cloud on Deakin's media-rich campuses or through a combination of cloud and campus learning. Deakin has over 50,000 students, with a third choosing to study wholly in the cloud (online).

Deakin was awarded a 5-star rating by the prestigious university ranking organisation Quacquarelli Symonds (QS); the rating indicates Deakin is world-class in a broad range of areas, has cutting-edge facilities and is internationally renowned for its research and teaching. Deakin is in the top 50 of the QS ranking of the world's universities under 50 years.

Deakin is now in the top 3 percent of the world's universities in each of the three major international rankings including the prestigious Shanghai Jiao Tong Academic Ranking of World Universities (ARWU), Times Higher Education and QS World University Rankings. Established in 1974, Deakin was Victoria's fourth university and the first in regional Victoria. In 2014 Deakin celebrated its 40th anniversary.

Deakin has been strengthened by a series of successful mergers with strong partners, each of whom has contributed significantly to our character and approach. Today, Deakin operates in a global, connected world with the digital economy influencing every aspect of our activities.

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Revisions: None for this edition.

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