



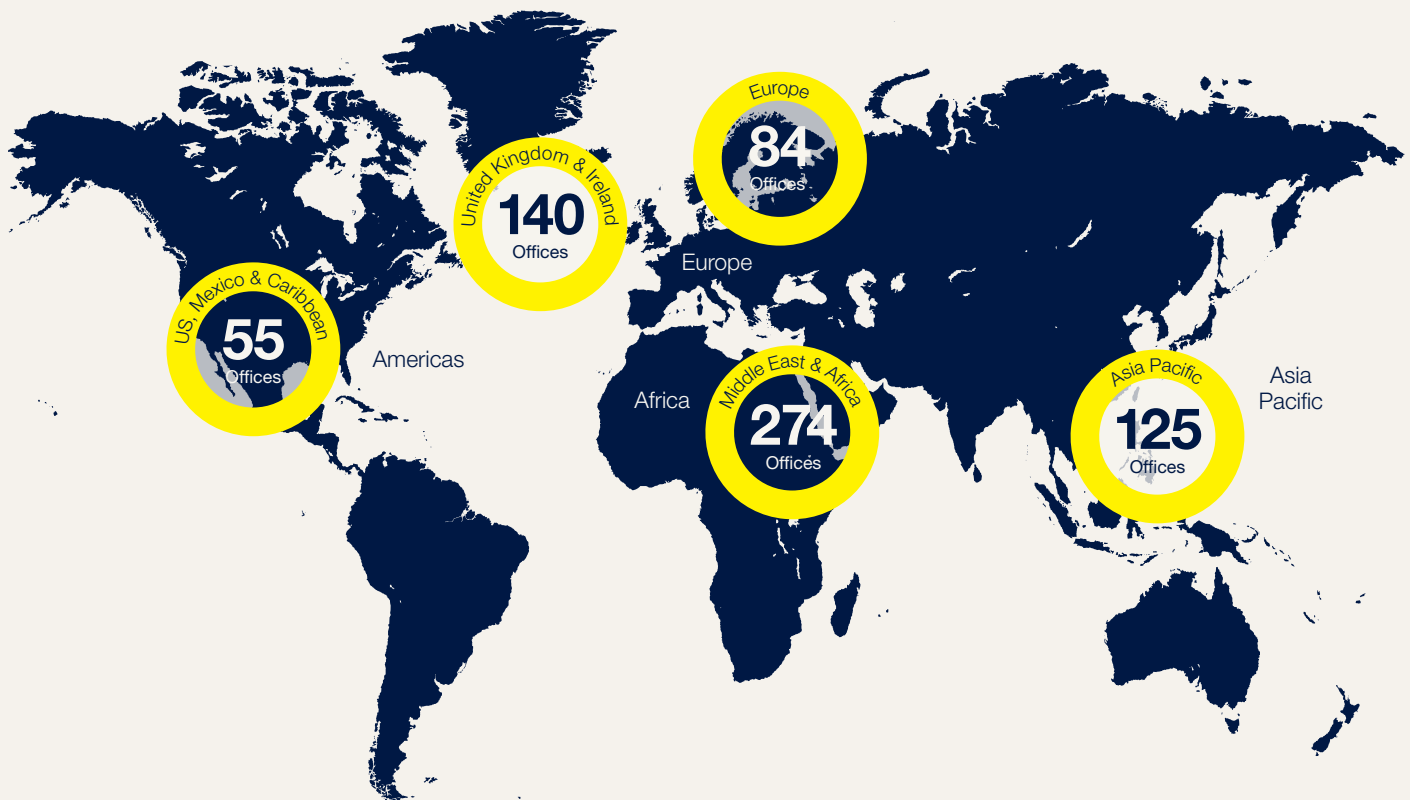
World Office Yield Spectrum

2H/2015



Savills global presence

Over 600 owned and associate offices worldwide



UK, Ireland & Channel Islands

England
Ireland
Jersey
Scotland
Wales

Asia Pacific

Australia
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
Spain
Serbia
Sweden
Switzerland

Middle East & Africa

Bahrain
Kenya
Mauritius
Mozambique
Namibia
Oman
Qatar
Seychelles
South Africa
UAE
Zambia
Zimbabwe

Americas & Caribbean

Antigua & Barbuda
Bahamas
Barbados
Cayman Islands
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 world first publication is the culmination of over a year's work by dozens of researchers in the 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%/70% 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



10 year bond yields
have finished the six month
period relatively unchanged
around the world despite
volatility caused by
Greece and China.

Bond yields fell substantially in Australia, Vietnam, Malaysia and South Korea and rose substantially in Singapore and Spain.

Effective yields have also firmed around the world by an average of 19 basis points over the last six months whilst market yields have firmed 26 basis points.

\$221 trillion is estimated to be the current size of world debt. It has been estimated by many organisations including a recent publication by McKinsey and Company (February 2015) which is very thorough. Global debt has increased 20 percent since the onset of the GFC in 2007 where it was estimated to be \$180 trillion. The \$41 trillion increase over the ensuing eight years has been a combination of sovereign debt and private debt. With the onset of the GFC, interest rates globally fell to historically low levels. Private investors and corporations that had little or no debt were undoubtedly enticed to borrow money. Sovereign debt has doubled since the onset of the GFC from some \$30 trillion to approximately \$60 trillion. It has also come about due to large amounts of Quantitative Easing – a government policy of buying financial assets from banks and other corporations, effectively keeping yields (artificially) low. The banking system is effectively flooded with liquidity, keen to lend money, which leads to inflation. That is the theory at least.

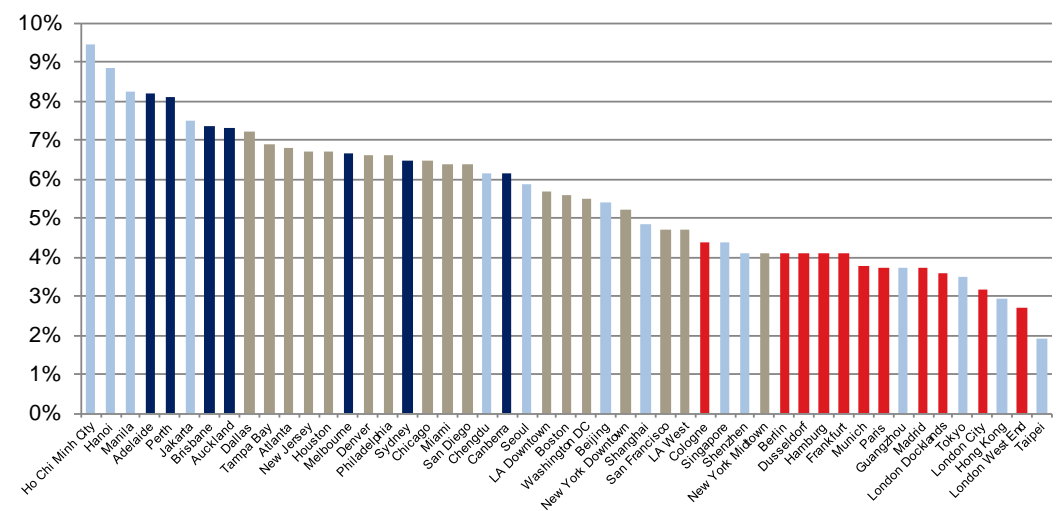
In any case, world debt is at unprecedented levels. If global interest rates were to rise, the amount of money paying interest would divert so much money from elsewhere in the economy, that it is quite possible a severe recession would ensue. Let's remember, debt is rising, not going down. There are currently no plans, anywhere, to pay off debt.

So, in a highly leveraged world, the prospect of significantly higher interest rates seems unlikely. The 'lower for longer' scenario appears to have greater credibility than the 'resumption of normal transmission' scenario.

The recent devaluation of the Chinese currency raises the prospect of interest rate differentials being used to achieve currency and trade outcomes – this is sometimes referred to as 'a currency war'. These policy changes have the potential to further delay a rise in US interest rates until 2016. Currency movements are playing a substantial role in global investment capital flows and play a prominent part in capital allocations to global property investment.

World Office CBD Grade A Market Yields (%) by Region and City

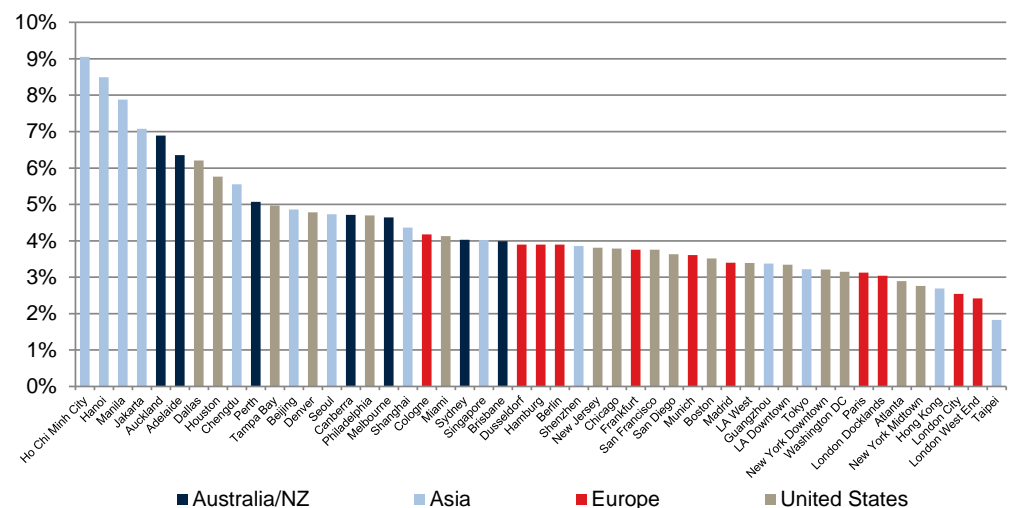
June 2015



Source: Savills Research

World Office CBD Grade A Effective Yields (%) by Region and City

June 2015



Source: Savills Research

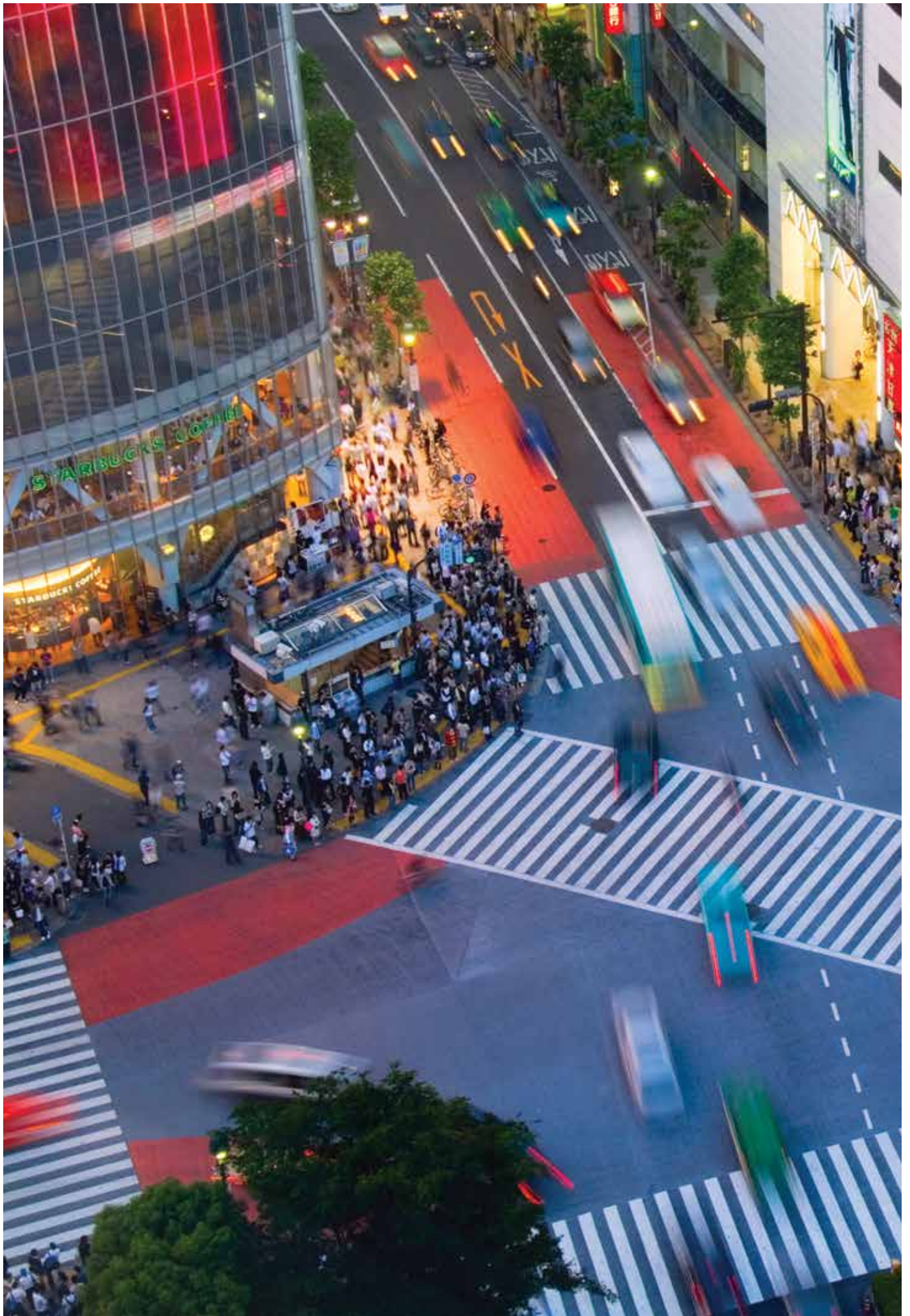


Tony Crabb

National Head – Research Australia

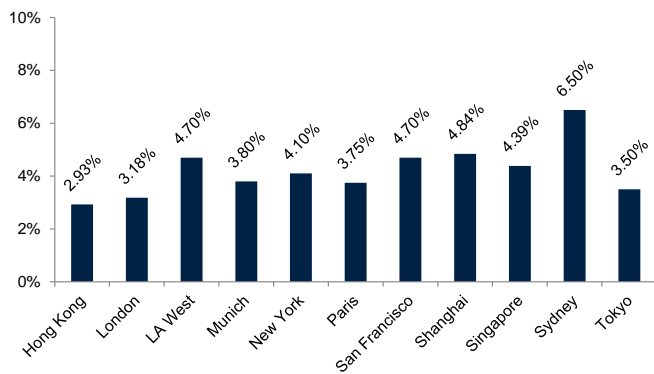
+61 (0) 422 221 604

tcrabb@savills.com.au



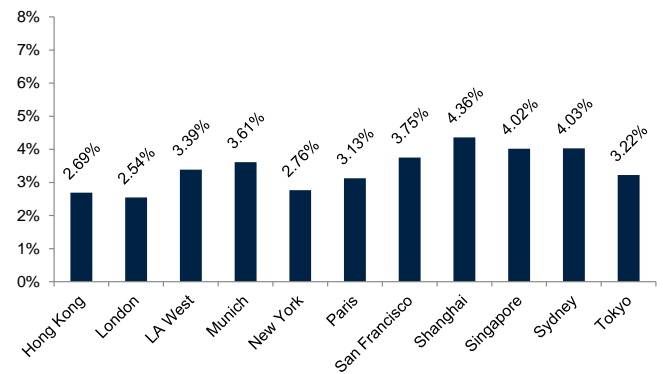
World Cities/CBD/Grade A Office

Market Yields June 2015



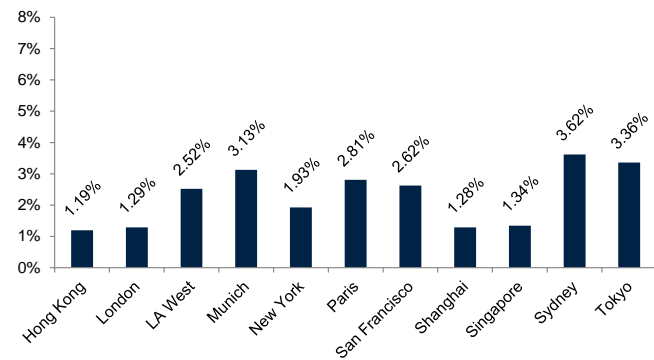
Source: Savills Research

Effective Yields June 2015



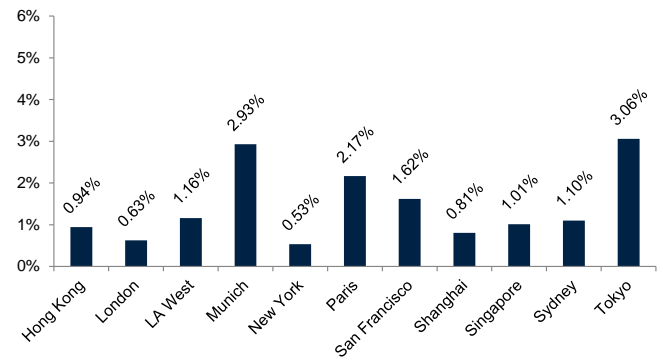
Source: Savills Research

Market Risk Premium June 2015



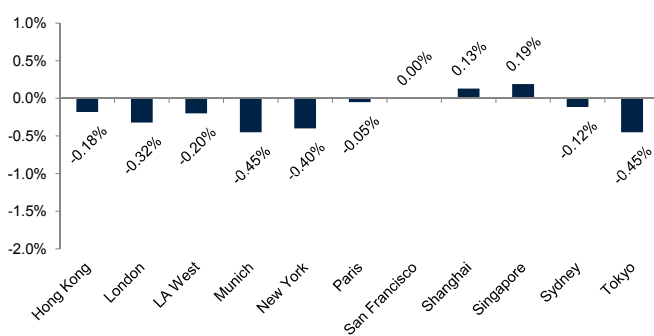
Source: Savills Research

Effective Risk Premium June 2015



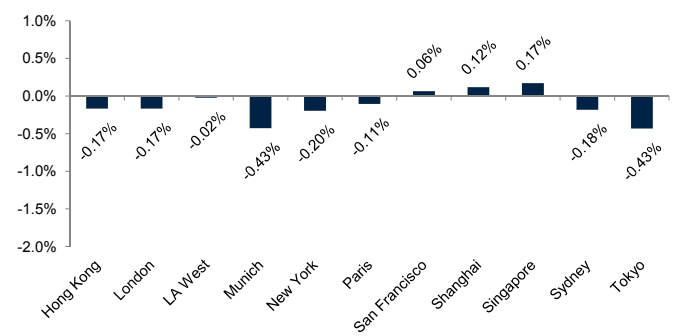
Source: Savills Research

Market Yield Change December 2014–June 2015



Source: Savills Research

Effective Yield Change December 2014–June 2015



Source: Savills Research

Australia



The Australian economy continues its transition from growth driven by mining investment to one driven by non-mining investment, consumption and population growth.

The Reserve Bank of Australia has cut official interest rates further and maintains an easing bias, the currency continues to weaken against the US dollar but remains elevated against major trading partner currencies, commodity prices have fallen substantially and inflation remains low.

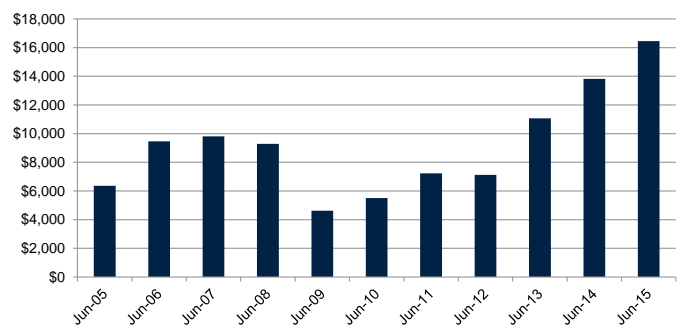
Low interest rates and tax advantaged investment constraints have seen investors commit large amounts of investment capital into the residential property market. This, in turn, has led authorities to put prudential lending measures in place to help curb demand and temper the rate of price appreciation. The commercial property markets in Australia continue to enjoy elevated levels of transaction volumes as both domestic and international capital competes for prime assets.

Over the past twelve months approximately \$28 billion of commercial real estate has transacted, official and market interest rates have firmed and the combination has served to see market yields firm on investment grade assets, particularly prime CBD office towers. The sale of the Investa portfolio by Morgan Stanley to the Chinese Investment Corporation on a blended yield of approximately 5.7 percent is a case in point.

Tenant demand for office space is gathering momentum in both Melbourne and Sydney where substantial growth in net absorption is being delivered, whilst Brisbane and Perth continue to soften with both markets reporting lower occupancy levels. This situation is reflected in capitalisation rates across the markets.

Office Property Sales (AU\$ million)

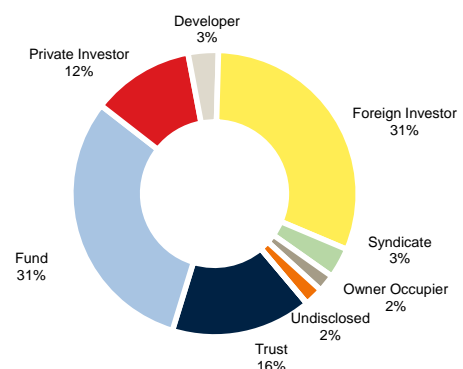
June 2005 – June 2015



Source: Savills Research

Office Property Buyer Profile

12 months to June 2015



Source: Savills Research



Tony Crabb

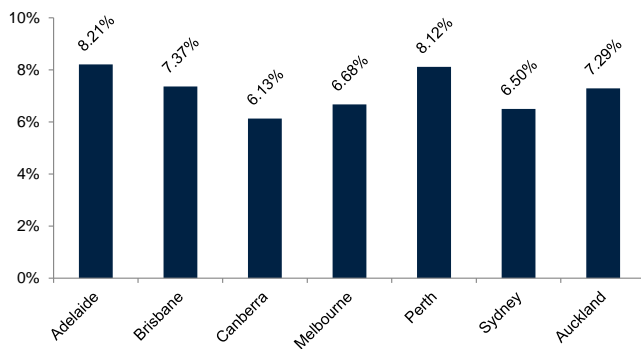
National Head – Research Australia

+61 (0) 422 221 604

tcrabb@savills.com.au

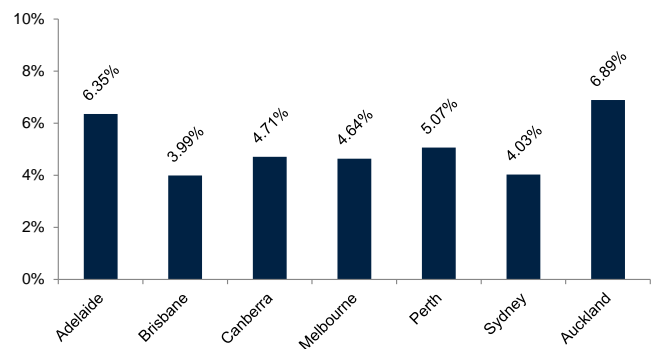
Australia & New Zealand/CBD/Grade A Office

Market Yields June 2015



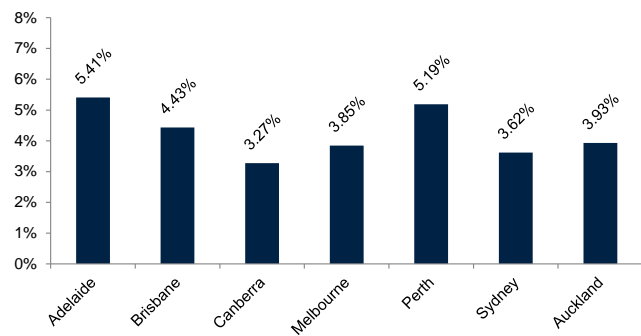
Source: Savills Research

Effective Yields June 2015



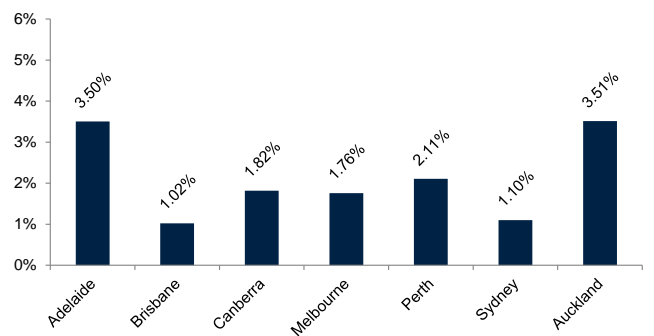
Source: Savills Research

Market Risk Premium June 2015



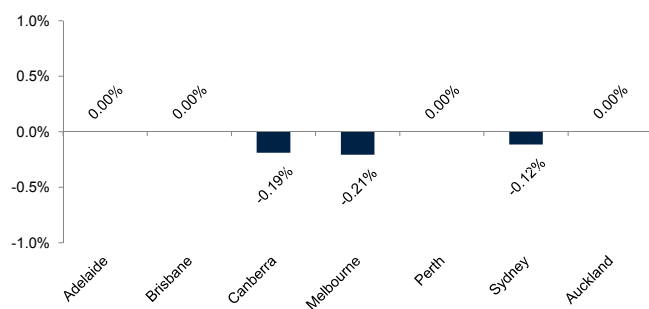
Source: Savills Research

Effective Risk Premium June 2015



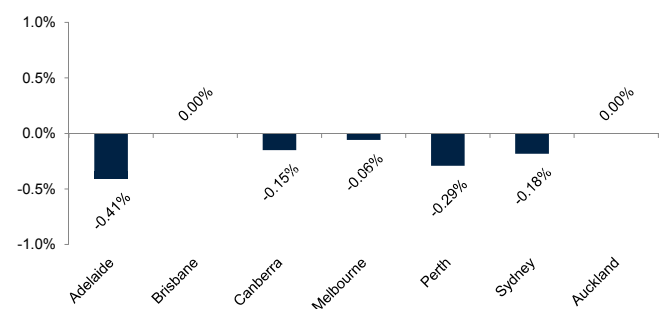
Source: Savills Research

Market Yield Change December 2014–June 2015



Source: Savills Research

Effective Yield Change December 2014–June 2015



Source: Savills Research

Asia



Asia has presented its usual mixed picture over the past six months.

In Japan, the economy appeared to have revived after the consumption tax hike of April 2014 but growth remains tepid and the Bank of Japan's 2 percent inflation target still seems some way off. Expectations of further stimulus persist.

In Korea, the Bank of Korea lowered the benchmark interest rate by 25 basis points to an historical low of 1.5 percent in June 2015. With a pronounced cap rate compression in the office market over recent quarters, investors are diversifying into other sectors including retail and logistics. In Taiwan, a new capital gains tax due to come into effect in January 2016 combined with other government cooling measures has taken transactions

volumes to new lows and prices are expected to fall further in the second half of 2015.

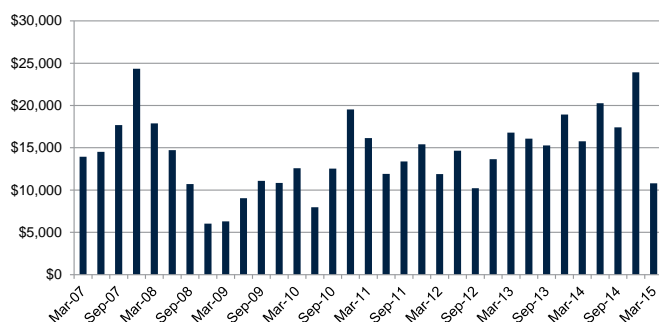
In Hong Kong, a revival in office leasing demand has resulted in rent rises, while values rose on higher volumes. It is still too early to tell what impact uncertainty in the mainland China equity markets will have on real estate investment sentiment.

In Singapore, concerns over the upcoming supply glut alongside already high prices and lower yields means that many investors are deferring decisions. Big ticket commercial asset transactions will determine whether investment sales this year perform in line with 2014.

A rapid reduction in interest rates to their lowest levels in over 25 years has resulted in a revival of the office investment market in China. Soft economic conditions and an unstable stock market lead many to believe the supportive measures will continue stoking expectations of further cap rate compression, despite historically high levels of new supply expected in the coming two years.

Office Property Sales (US\$ million)

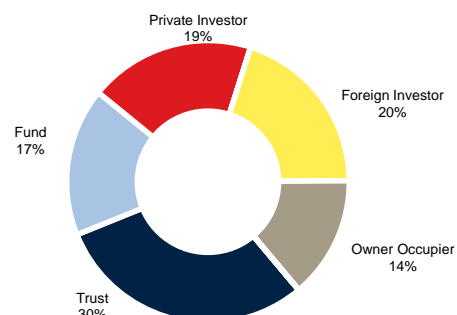
March 2007 – March 2015



Source: RCA/Savills Research

Office Property Buyer Profile

12 months to December 2014



Source: RCA/Savills Research



Simon Smith

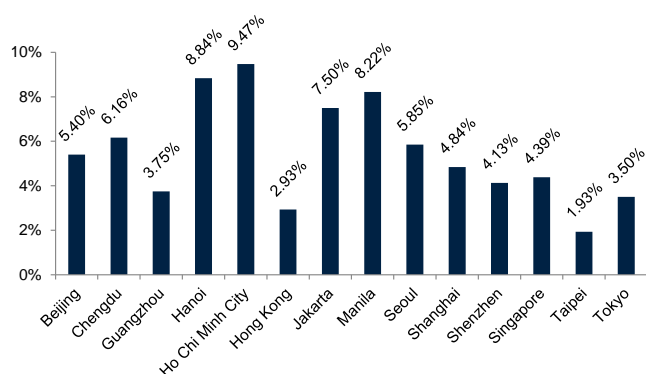
Senior Director – Research Asia Pacific

+852 2842 4573

ssmith@savills.com.hk

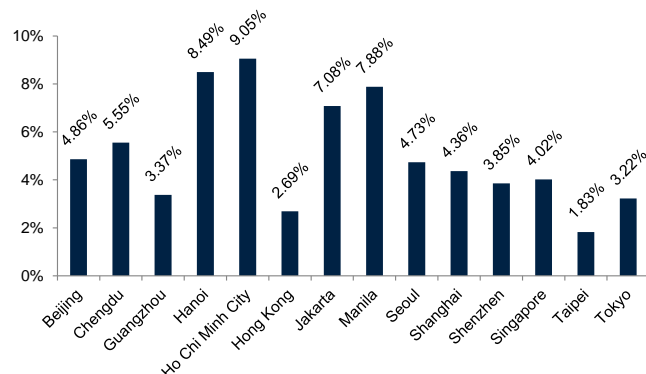
Asia/CBD/Grade A Office

Market Yields June 2015



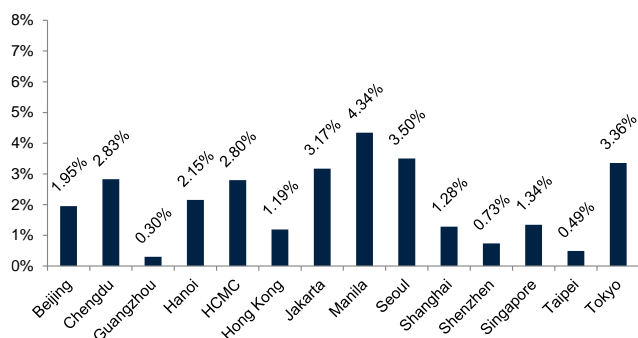
Source: Savills Research

Effective Yields June 2015



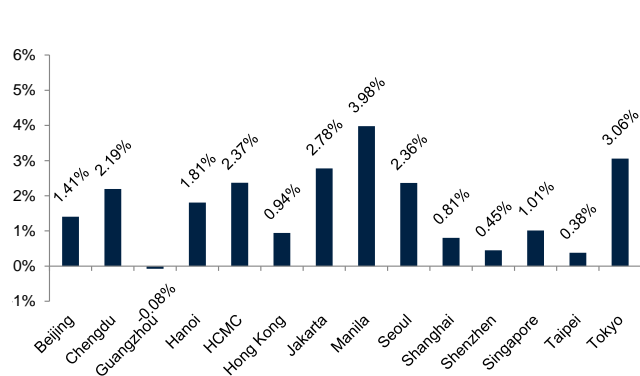
Source: Savills Research

Market Risk Premium June 2015



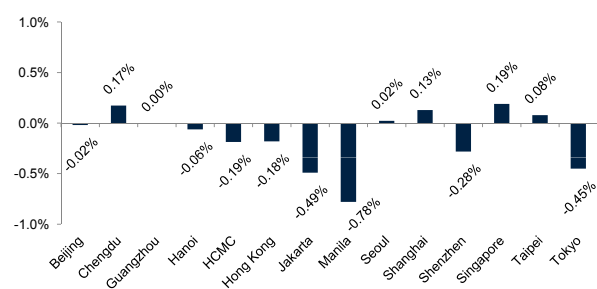
Source: Savills Research

Effective Risk Premium June 2015



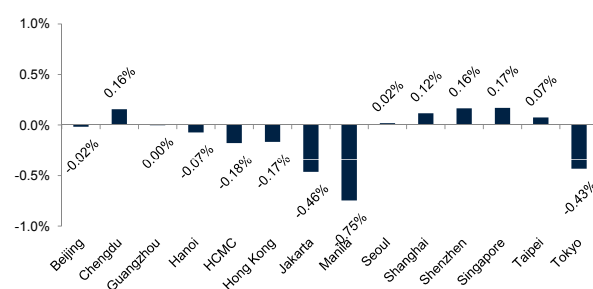
Source: Savills Research

Market Yield Change December 2014-June 2015



Source: Savills Research

Effective Yield Change December 2014-June 2015



Source: Savills Research

Europe

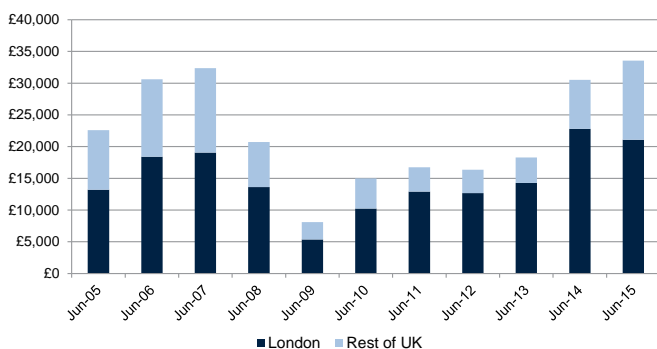


Greece has been the main focus of the European Union in the second quarter of 2015 with the possibility of a Grexit becoming alarmingly possible.

Despite concerns about contagion in the economies of Southern Europe, the magnitude of the impact has been limited compared to four years ago. The Quantitative Easing program launched by the European Central Bank in March has provided support to bond markets keeping interest rates low and limiting the rise in yields mainly to Greek bonds.

UK Office Property Sales (£ million)

June 2005 – June 2015



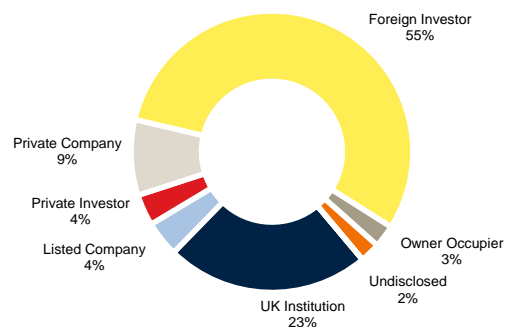
Source: Savills Research

Property investment activity has been high this year with the investment volume across the 16 European countries analysed at nearly €102.5 billion in the first half of 2015. This is the strongest semester since 2007 and almost 25 percent higher than the same period last year. Investors continue to favour core markets with the UK, Germany and France still accounting for 67.8 percent of the total volume.

Overall investors are more open to move up the risk curve. They seek future yield compression by targeting secondary or alternative assets in core capital cities, or prime assets in regional cities or secondary markets. Property prices continue to rise, pushing yields down. The average prime CBD office yield in Europe has dropped in Q2/2015 below the past 10 year low, to 4.6 percent. The main uncertainties hanging over the future of the market is the future development of the American and Chinese economies and the risk of a Grexit that would affect investor confidence and potentially shift once again their focus to core markets such as the UK, Germany and France.

UK Office Property Buyer Profile

12 months to June 2015



Source: Savills Research



Lydia Brissy

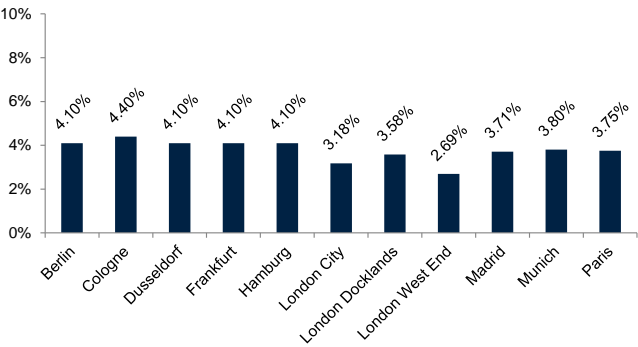
Director – Research Europe

+33 1 44 51 73 88

lbrissy@savills.com

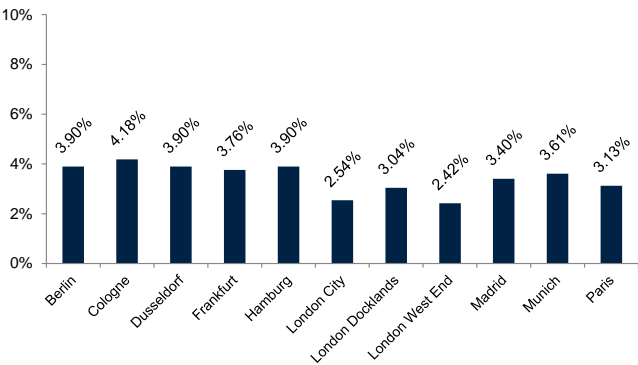
Europe/CBD/Grade A Office

Market Yields June 2015



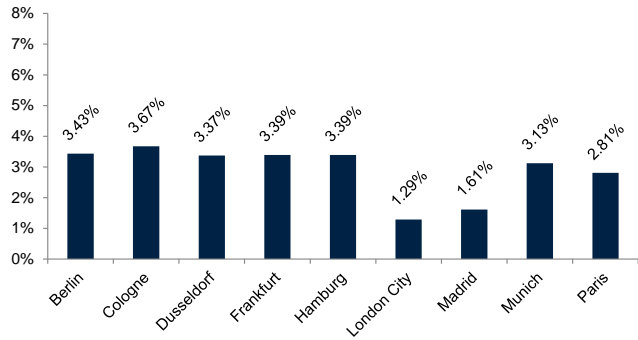
Source: Savills Research

Effective Yields June 2015



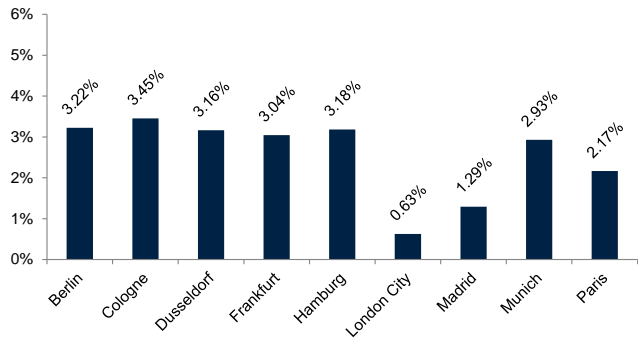
Source: Savills Research

Market Risk Premium June 2015



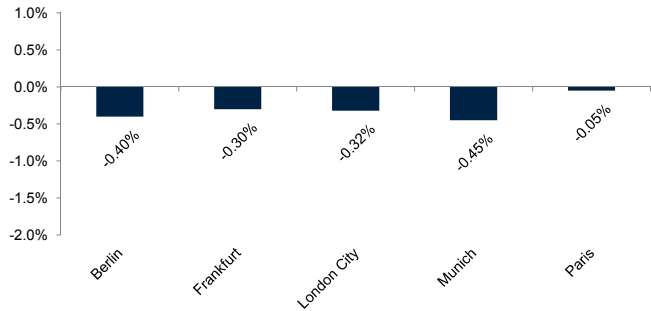
Source: Savills Research

Effective Risk Premium June 2015



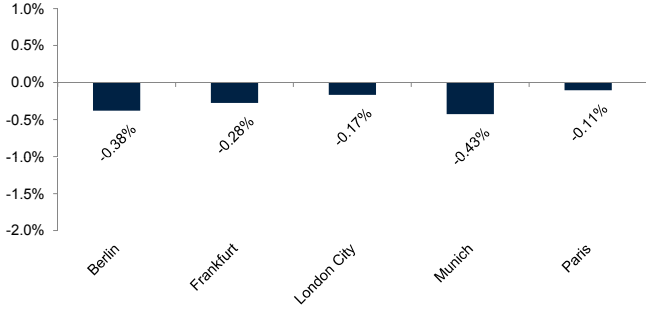
Source: Savills Research

Market Yield Change December 2014-June 2015



Source: Savills Research

Effective Yield Change December 2014-June 2015



Source: Savills Research

United States



**Compared to a year ago
the U.S. economy is better
positioned to withstand
crises that may arise.**

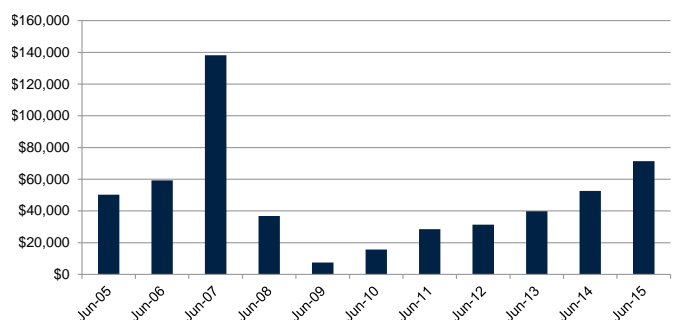
The much anticipated and imminent hike in Fed interest rates has been on the list of possible stumbling blocks for the U.S. economy for quite some time. In the short term, it is probably much ado about nothing. The gap between treasuries and cap rates/IRRs remains wide enough to provide a cushion for several smaller rate hikes.

In prior cycles, an increase in treasury rates has been accompanied by rising cap rates in anticipation of declining cash flows and increased risk aversion. Neither appears to be right around the corner. Instead, the office and industrial sectors are in a sweet spot in terms of NOI potential. Construction activity is ramping up, but is still expected to fall short of net absorption for the next couple of years in most markets. Additionally, there is little sign of a decline in the appetite for risk. Investors are expressing some concerns about whether properties are being overvalued and yet they continue to increase their allocations to commercial real estate.

As long as interest rate increases are accompanied by continued momentum in hiring, household income and moderate inflation growth, it will give institutional investors all the more rationale for increasing their holdings in the U.S. After all, NOI will rise along with inflation. A more distant concern is that the Fed may overcompensate and hike rates too abruptly if it appears that asset values are becoming overheated. This scenario appears unlikely until 2017 or 2018.

Office Property Sales (US\$ million)

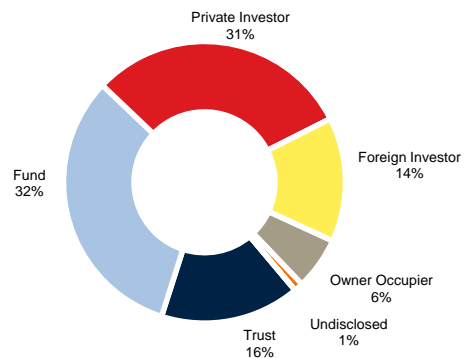
June 2005 – June 2015



Source: RCA/Savills Research

Office Property Buyer Profile

12 months to June 2015



Source: RCA/Savills Research



Steve Coutts

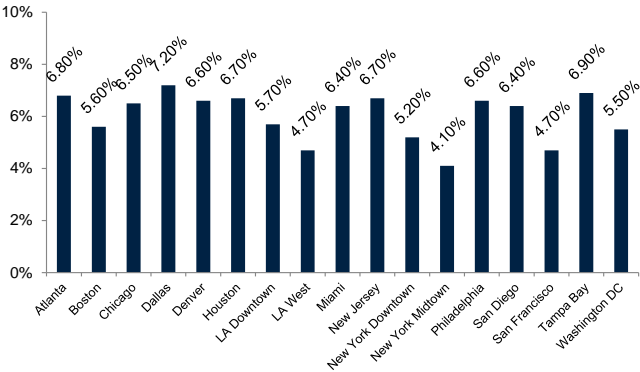
National Head – Research United States

+1 (212) 326 8610

scoutts@savills-studley.com

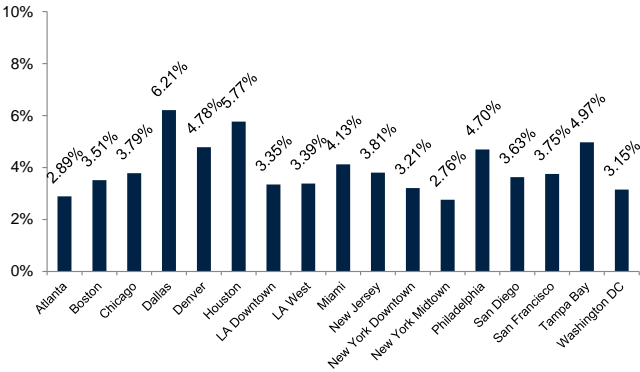
United States/CBD/Grade A Office

Market Yields June 2015



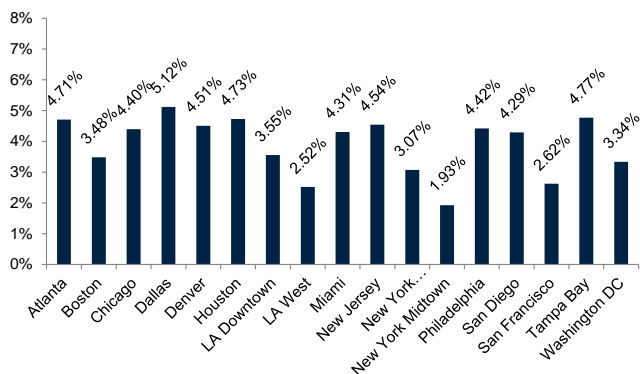
Source: Savills Research

Effective Yields June 2015



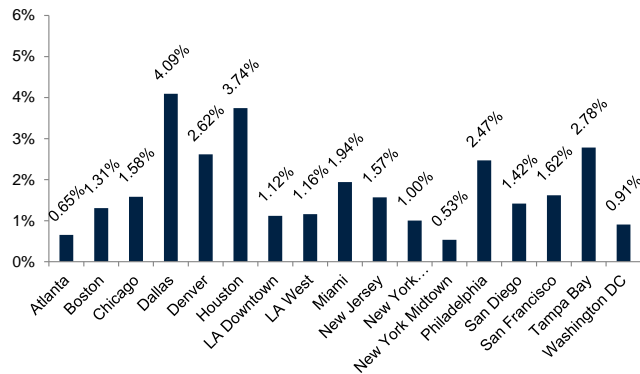
Source: Savills Research

Market Risk Premium June 2015



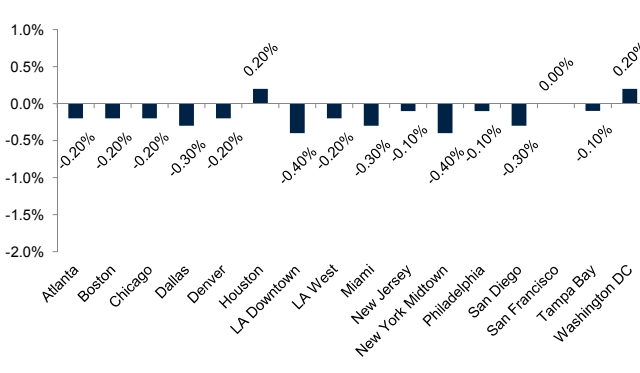
Source: Savills Research

Effective Risk Premium June 2015



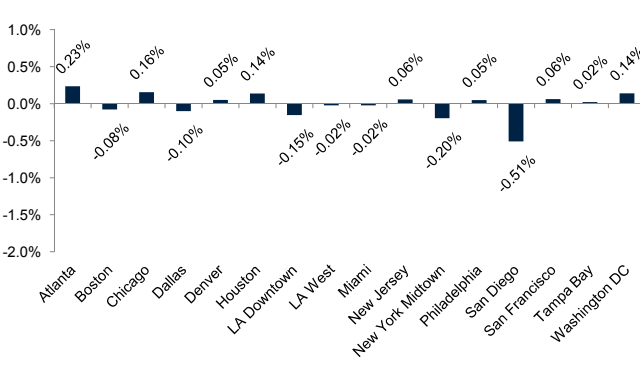
Source: Savills Research

Market Yield Change December 2014–June 2015



Source: Savills Research

Effective Yield Change December 2014–June 2015



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 600 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.



Tony Crabb

National Head – Research Australia

📞 +61 (0) 422 221 604

✉️ tcrabb@savills.com.au



Professor Richard Reed

Chair in Property & Real Estate

📞 +61 (0) 3 9251 7605

✉️ r.reed@deakin.edu.au

Savills Key Contacts



Cross Border Investment

United Kingdom

Simon Hope

Head of Global
Capital Markets
+44 (0) 20 7409 8725
shope@savills.com

Rasheed Hassan

Director, Head of
Cross Border Investment
+44 (0) 20 7409 8836
rhassan@savills.com

Ned Baring

Director, Residential
Cross Border Investment
+44 (0) 20 7409 9998
nbaring@savills.com

Cordea Savills**Jon Crossfield**

Head of Investment Mandates
+44 (0) 207 409 8886
jon.crossfield@cordeasavills.com

Europe

Tristram Larder

Director, European Investment
+44 (0) 20 7409 8014
tlarder@savills.com

Nick Hart

Head of UK & European
Shopping Centre Investment
+44 (0) 207 409 8837
nhart@savills.com

Dirk Hoenig-Ohnsorg

Director, Cross Border
Investment
+49 89 427 292 303
dhohnsorg@savills.com

Asia Pacific

Frank Marriott

Regional Head,
Capital Markets
+852 2842 4475
fmarriott@savills.com.hk

Middle East

Hassan Farran

Director, Cross Border
Investment
+44 (0) 20 7409 8923
hfarran@savills.com

Australasia

Paul Craig

Managing Director
+61 (0) 8 9488 4180
pcraig@savills.com.au

North America

Robert Stamm

Managing Director
+1 (949) 679 9090
rstamm@savills.com

Guy Benn

Director, Cross Border
Investment
+1 (212) 328 3964
gbenn@savills.com

Revisions: For technical reasons revisions were undertaken to the previous edition in the following markets: Vietnam, Singapore, Paris, the United States.

This information is general information only and is subject to change without notice. No representations or warranties of any nature whatsoever are given, intended or implied. Savills will not be liable for any omissions or errors. Savills will not be liable, including for negligence, for any direct, indirect, special, incidental or consequential losses or damages arising out of our in any way connected with use of any of this information. This information does not form part of or constitute an offer or contract. You should rely on your own enquiries about the accuracy of any information or materials. All images are only for illustrative purposes. This information must not be copied, reproduced or distributed without the prior written consent of Savills. ©Savills 2015

Worldwide Research

Asia Pacific

Simon Smith

Senior Director, Research
+852 2842 4573
ssmith@savills.com.hk

Australia

Tony Crabb

National Head, Research
+61 (0) 422 221 604
tcrabb@savills.com.au

China

James Macdonald

Director, China
+8621 6391 6688
james.macdonald@savills.com.cn

Joan Wang

Director
+8610 5925 2042
joan.wang@savills.com.cn

Dave Law

Senior Associate Director
+8628 8658 7120
dave.law@savills.com.cn

Sam He

Senior Manager
+8620 3892 7350
sam.he@savills.com.cn

Hong Kong

Jack Tong

Director, Research & Consultancy
+852 2842 4213
jtong@savills.com.hk

Ron Mak

Assistant Manager, Research & Consultancy
+852 2842 4287
rclmak@savills.com.hk

Indonesia

Anton Sitorus

Associate, Research & Consultancy
+62 (21) 293 293 80
Anton.sitorus@propertyconnection.co.id

Japan

Hafiz Ismail

Research & Consultancy
+81 (3) 5562 1787
hismail@savills.co.jp

Korea

JoAnn Jieun Hong

Director, Research & Consultancy
+82 2 2124 4182
jhong@savills.co.kr

Jihe Lee

Senior Manager, Research & Consultancy
+82 (0) 2 2124 4183
jihealee@savills.co.kr

Philippines

Antton Nordberg

Head of Research
+63 (917) 599 44 30
antton.nordberg@kmcmaggroup.com

Singapore

Alan Cheong

Senior Director, Research & Consultancy
+65 6415 3641
alan.cheong@savills.com.sg

Spain

Gema de la Fuente

Director, Research
+34 91 310 10 16
gfuente@savills.es

Taiwan

Erin Ting

Senior Manager
+886 (2) 8789 5828 137
eting@savills.com.tw

Vietnam

Troy Griffiths

Deputy Managing Director
+84 (0) 933 276 663
tgriffiths@savills.com.vn

Europe

Mat Oakley

Head of European Research
+44 (0) 20 7409 8781
moakley@savills.com

Lydia Brissy

European Research Director
+33 1 44 51 73 88
lbrissy@savills.com

Eri Mitsostergiou

European Research Director
+31 20 301 2087
emitso@savills.com

France

Marie Josée Lopes

Head of France Research
+33 1 44 51 17 50
mjlopes@savills.fr

Germany

Matthias Pink

Head of Germany Research
+49 30 726 165 134
mpink@savills.de

United States

Steve Coutts

National Head Research
United States
+1 (212) 326 8610
scoutts@savills-studley.com

Keith DeCoster

Senior Manager, U.S. Real Estate Analytics
+1 (212) 326 1023
kdecoster@savills-studley.com

Mike Roessle

Manager, U.S. Real Estate Analytics
+1 (212) 326 8621
mroessle@savills-studley.com

