

European Real Estate Society
Global Investors Change The Rules
Delft, June 29th 2017

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Thesis

Real Estate & The Risk Free Rate Investment Model

Traditionally a lot hung on the concept of the “risk-free” rate

Investors want to be rewarded with a return premium

Financial theory dictates that assets are priced by comparison with the cash or bond markets:

- Equities offer a “risk premium” in form of higher return to compensate for additional volatility
- Real estate offers a “risk premium” in the form of higher returns to compensate for illiquidity

Formula 17.1

$$\text{Real risk free rate } (R_f) = \frac{(1 + \text{nominal risk-free rate})}{(1 + \text{inflation rate})} - 1$$

- The Risk Free investment model was developed by investors when real estate markets were:
 - Dominated by domestic capital
 - Priced RELATIVE to competing asset classes

“...the last decade has witnessed “globalisation” of real estate investment markets with significant implications for market pricing and structure.....

Source: Fidelity International, INREV, June 2017.

The Changing Global Real Estate Market

Changing Nature Of Investment Capital

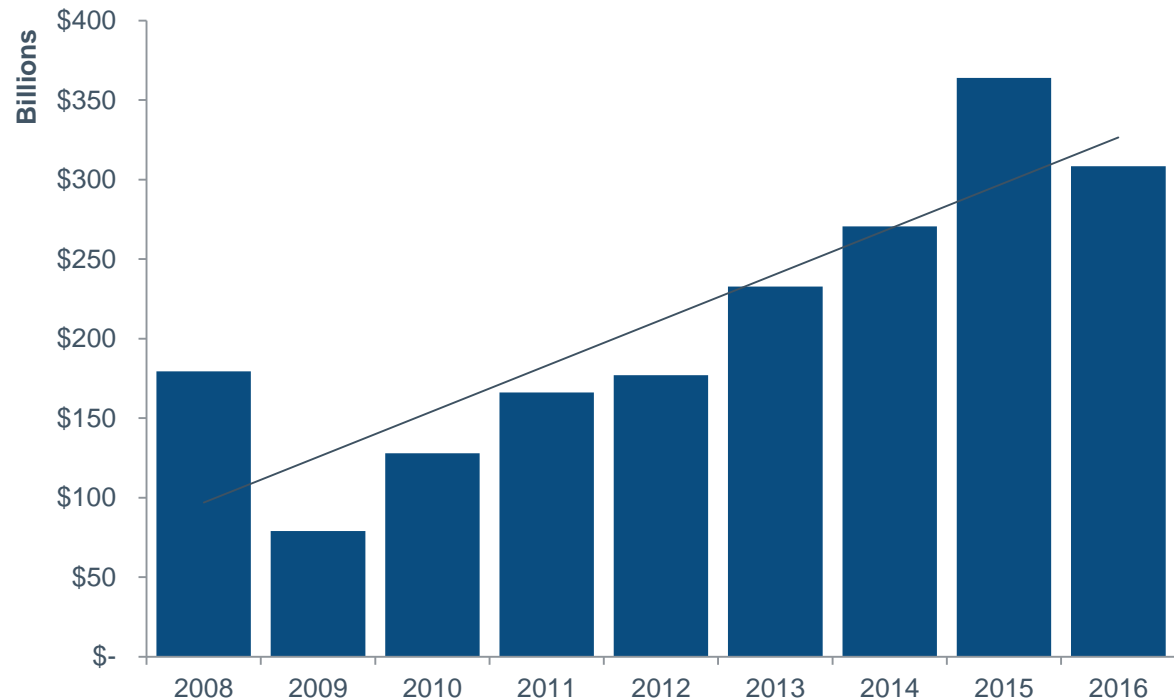
Growth in cross border investment has driven significant changes

Real estate investment markets are increasingly “globalised”

Major implication
for future market
pricing models

- Cost of capital determined at source, NOT relative to local bond market
- International investors have a wider range of risk return expectations
- Weight of money determining price in key centres

Value Of Global Cross Border Real Estate Investment Purchases 2008 to 2016
US\$ bn



Source: Fidelity International, INREV, Real Capital Analytics, May 2017.

Cross Border Investment: No Single World View

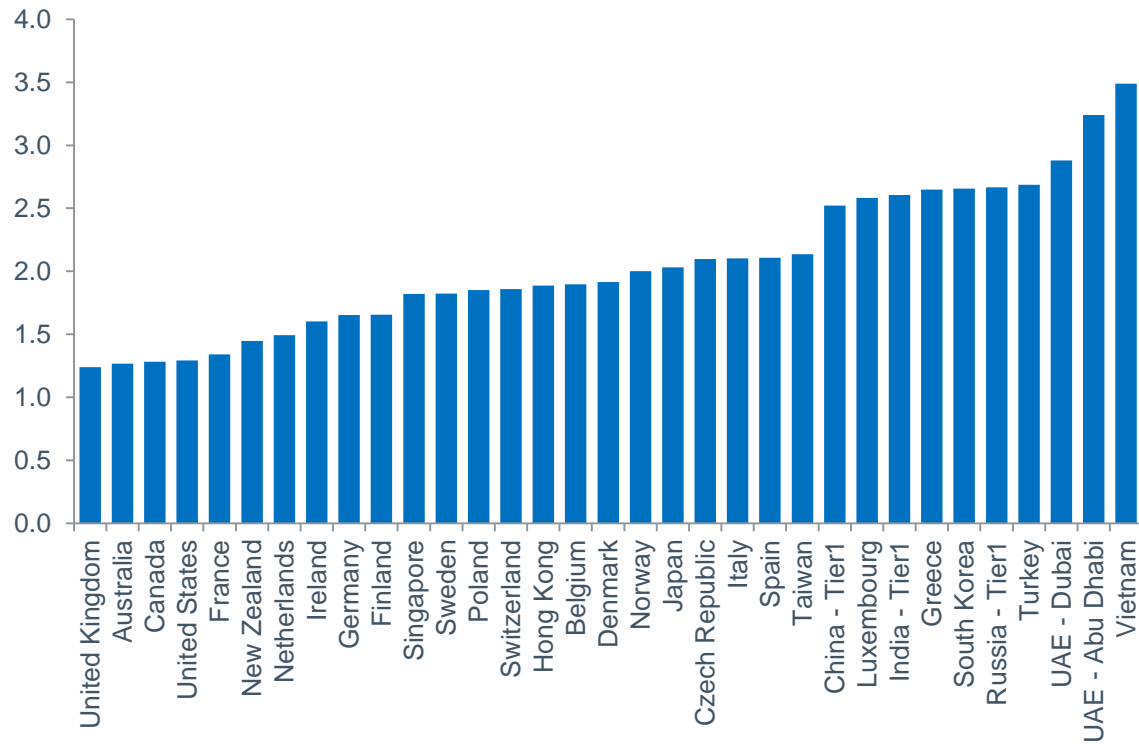
It's a whole lot more than performance

International investors can have a wider range of risk return expectations

International investors are often less price or performance sensitive

- They see additional value beyond just the price
 - Portfolio diversification
 - Wealth protection
 - Political stability
 - Legal security

JLL Global Real Estate Investment Transparency Index 2016
Score Closer to 1.0 Denotes Greater Transparency



Source: Fidelity International, INREV, JLL, January 2017.

Cross-border Investors Are Different

Big players march to a different tune

Compare UK balanced fund to Norwegian GPF

Traditional domestic

“We target a wide range of carefully chosen properties – including retail, office and industrial units across the UK. Our long-term goal is to maintain a balanced portfolio with the potential to grow sustainably.

Objective: to outperform the IPD other Balanced PUT Index by 0.5% p.a. over a rolling three-year period”

Cross-border

“We will target 10 to 15 global cities with favourable long-term fundamentals. The target cities share long-term economic attractiveness, and real estate markets characterised by transparency, liquidity and supply restrictions.

- *In the US, we focus on New York, Boston, Washington, D.C. and San Francisco.*
- *In Europe, we concentrate on London, Paris, Berlin and Munich.*
- *In the developed markets in Asia, we target Tokyo and Singapore.*
- *We may consider other cities if attractive opportunities arise”*

Benchmark: 62.5% equity, 37.5% bonds

Sources: Hermes Property Unit Trust; Norges Bank Investment Management

Towards A Globalised Real Estate Investment Market

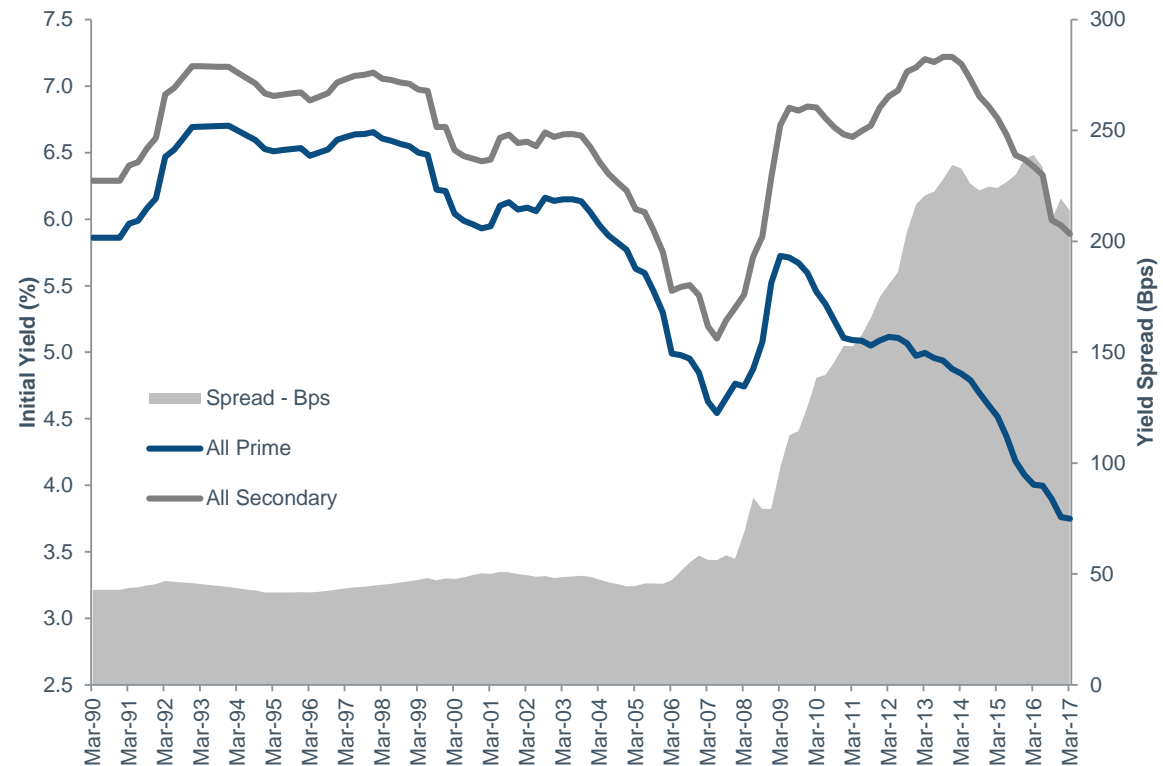
Real Estate Market Starting To Resemble Other Global Asset Classes

Core real estate investment markets are being restructured

Emergence of a two tier market in many countries

- Broadly divided into “prime” and “secondary” or “AAA- A” and “the rest”
- Prime values increasingly influenced by global capital flows
- Pricing of secondary markets driven by local investors

Core Eurozone* All Property - Prime v Secondary Initial Yields 1Q1990 to 1Q2017



*Core Eurozone = Germany, France & Benelux.
Source: Fidelity International, CBRE, 31/03/2017.

Multiple & Changing Sources Of Capital

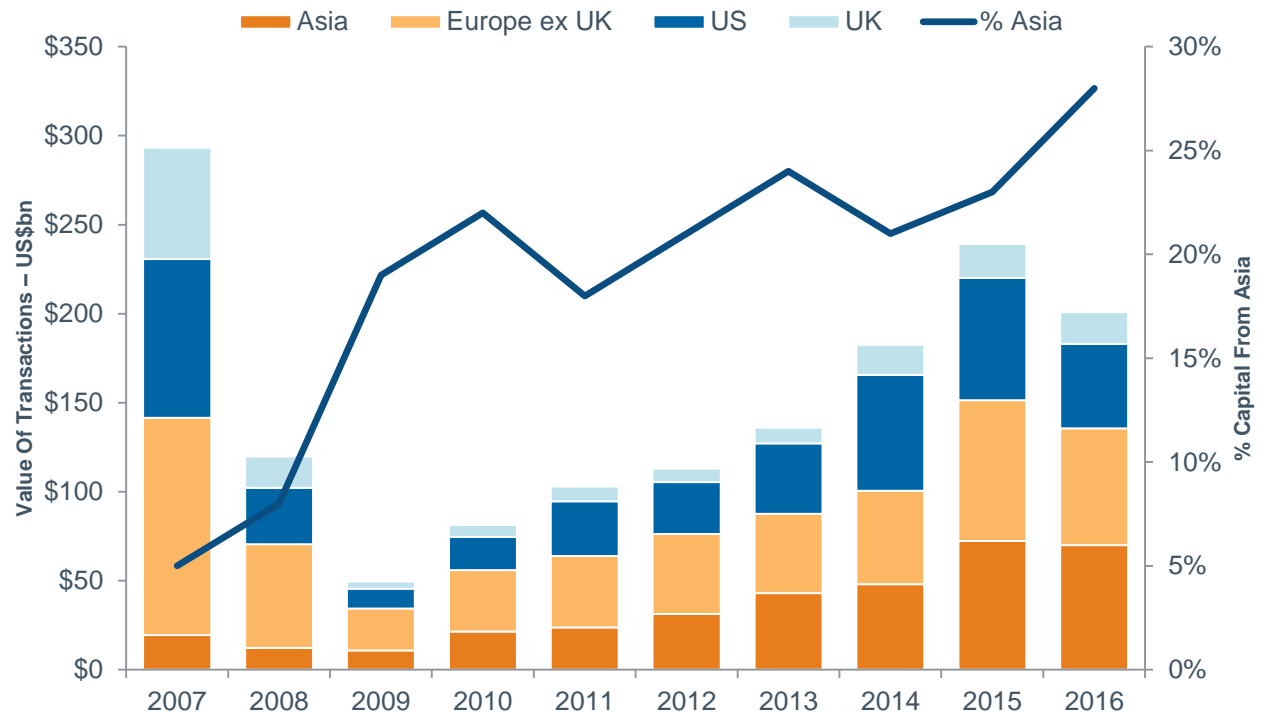
Now Asia takes top spot

Increasing dislocation of the historic relationship between bond and real estate yields

Cost of capital determined at source, NOT relative to local bond market

- Sources of capital evolve over time
- For each capital source, required rate of return also varies over time
- Link to domestic risk free rate is weakened

Value of Cross Border Transactions By Source Of Capital
US\$bn per annum 2007 to 2016

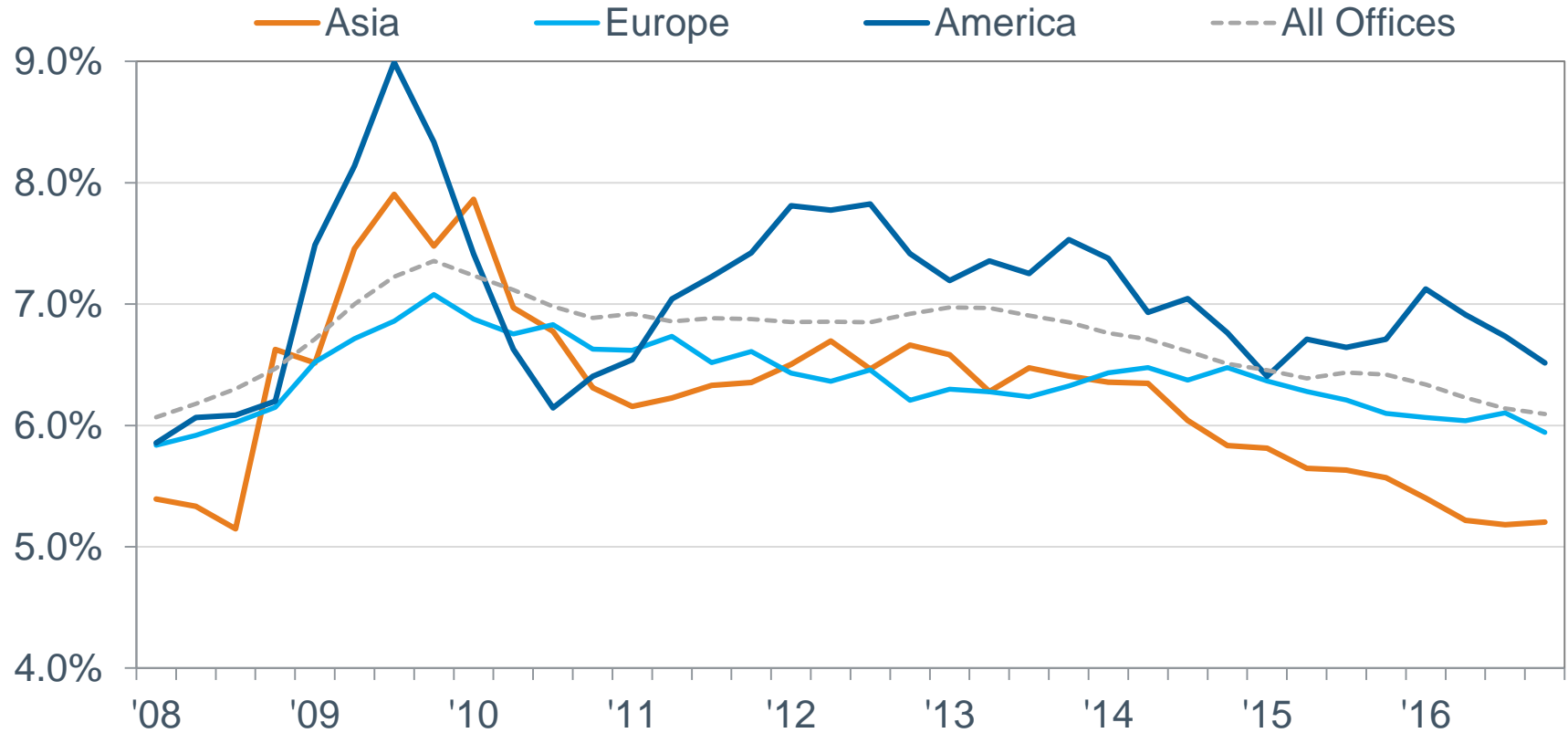


Source: Fidelity International, Real Capital Analytics, March 2017.

Yields by Source of Capital

Considerable difference in required rates of return

Asian, European and American investors have changed positions over time



Office Transaction Yields by Source of Capital, Cross Border Deals Only. Rolling 12 Month Average

Implications For Future

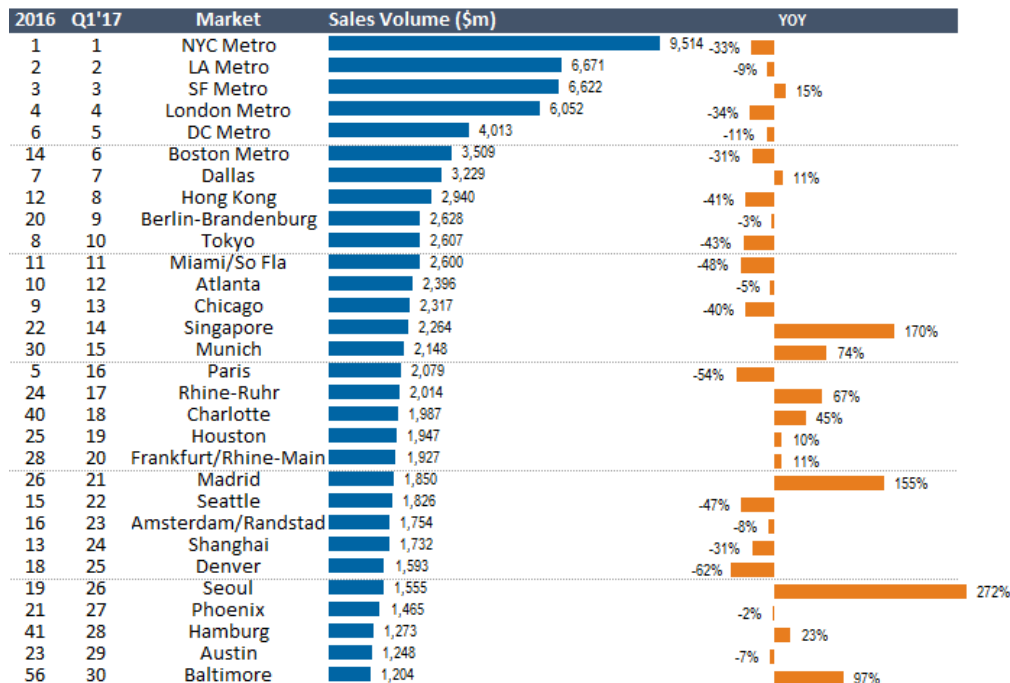
Investible Universe Redefined

Cross border investment highly focused in most liquid markets

70% of investment turnover in 12 months to March 2017 was in just 5 countries

	Last 12 Months	
	\$b	YOY Chg
United States	387.8	-8%
Germany	68.5	-4%
United Kingdom	53.1	-45%
China	35.0	-2%
Japan	31.3	-19%
France	30.5	-12%
Australia	23.8	-26%
Canada	18.5	1%
Spain	17.9	76%
Sweden	17.3	12%
Netherlands	14.7	7%
South Korea	14.0	30%
Hong Kong	13.2	-10%
Italy	10.1	-4%
Singapore	10.0	107%
All Others	78.1	-13%
Grand Total	823.9	-10%

* excluding development sites, rank based on Last 12 Months



“...Cross border investment increasingly focused in small number of key countries and cities

Source: Fidelity International, INREV, Real Capital Analytics, March 2017.

Investor Universe Redefined

Emergence Of The Global “Super” Investor

Top insurers, pensions, managers and SWFs together have 1.8 trillion in buying power

Assets in top ten insurers, pension funds, sovereign wealth funds and property fund managers

Insurers		Pension funds		Sovereign wealth funds (non-pension)		Real estate fund managers	
AXA	970	GPIF, Japan	1,163	ADIA	828	The Blackstone Group L.P.	143
Allianz	928	GPF, Norway	866	China Investment Corporation	814	Brookfield Asset Management	141
Metlife	878	Federal Retirement Thrift, US	443	Kuwait Investment Authority	524	PGIM, Inc	116
Prudential Financial	757	National Pension, South Korea	435	SAMA Foreign Holdings	514	TH Real Estate	92
Ping An Insurance	735	ABP, Netherlands	384	Hong Kong MPIF	457	Hines	91
Japan Post Insurance	686	National Social Security, China	295	SAFE Investment Company, China	441	CBRE Global Investors	82
Legal & General	588	CalPERS, US	286	GIC, Singapore	350	UBS Asset Management	74
Nippon Life	586	Central Provident Fund, Singapore	211	Qatar Investment Authority	335	Principal Real Estate Investors	68
Aviva	575	Canada Pension, Canada	202	Investment Corporation of Dubai	201	AXA IM - Real Assets	66
Prudential plc	573	PFZW, Netherlands	186	Temasek Holdings, Singapore	180	J.P. Morgan Asset Management	65
Total assets	7,276		4,471		4,644		938
Available for real estate	364		224		232		938

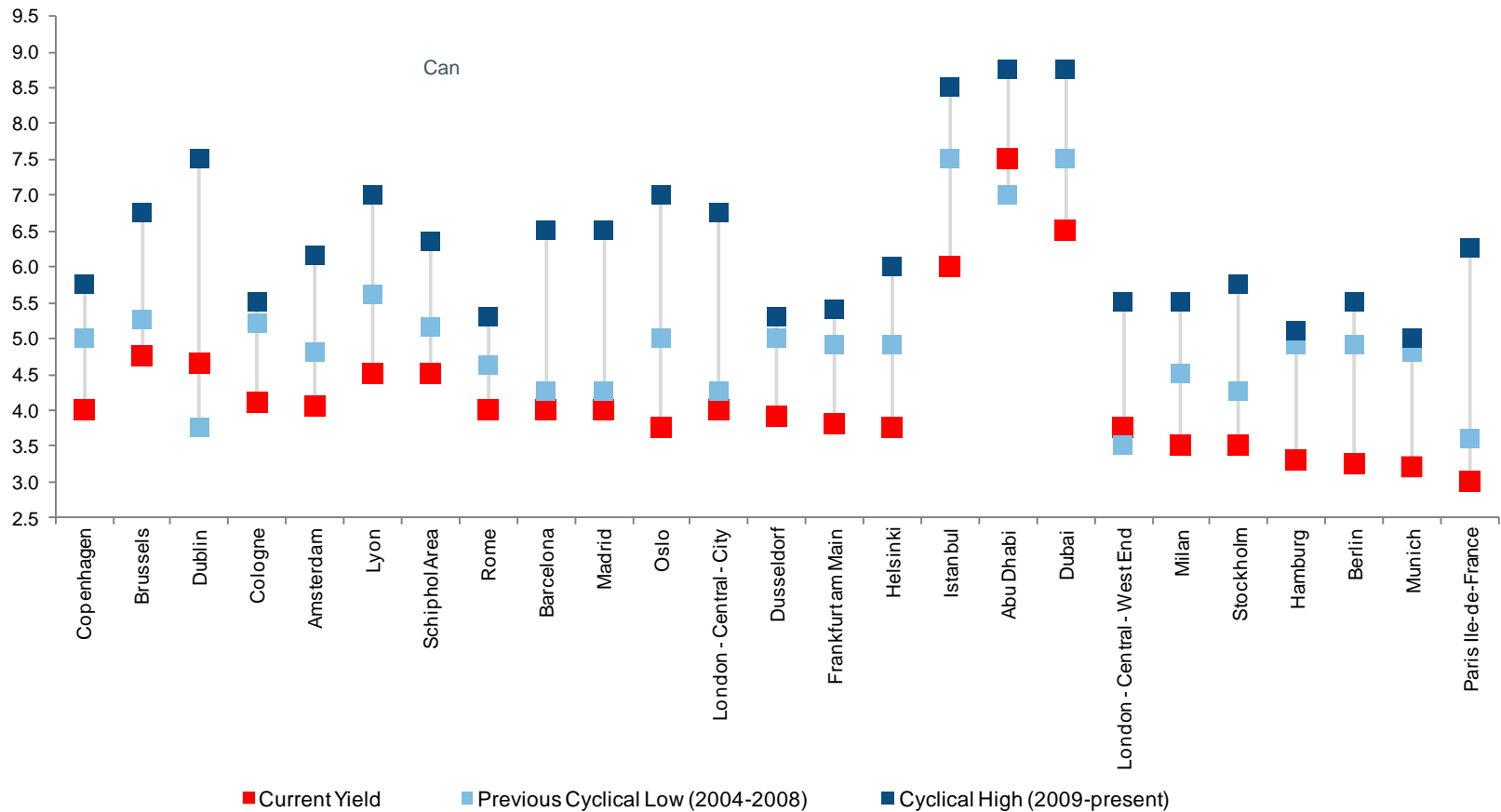
Assuming a 5% allocation to real estate

Source: INREV; Willis Towers Watson; Statista; SWF Institute

Impact Of Cross Border Flows On Pricing

Pricing for prime assets in most core markets now at record levels

Prime Office Initial Yields March 2017 vs Previous Cyclical High & Low - %



Source: Fidelity International, INREV, CBRE, March 2017.

My Risk Is Not Your Risk

And therefore our definitions of risk free are also different

Some super league members require significantly lower yields

- “For a safe-haven investor intending to hold prime property in perpetuity, values could feasibly rise much further while still maintaining relative value.”
- For these investors, “fair value could be achieved with prime office yields ranging from 1.8% to 2.4% in London, Paris, New York and Tokyo, pointing to a substantial premium above investors with a more conventional approach”
- “For a certain set of investor preferences, the market remains good value despite recent yield compression”

Source: IPF Short Paper 24, What is Fair Value? 2015

The Rules Are Being Redefined

Global cities and global “super” investors change the rulebook

Super sized have new heuristic, textbook is atrocious



- ✓ Increasing cross-border capital flows leads to greater global integration
- ✓ Integration is not happening at every level in every market
- ✓ The largest cross-border investors focus on one layer of the market only
- ✓ The key characteristics of this market layer are:
 - a. Reliable liquidity
 - b. Transparency
 - c. Big lot sizes
 - d. Locations recognised as global cities
- ✓ Bond investors might call this layer triple AAA; equity investors might call it blue chip

Implications

A New Market

What investors can expect

1. Investment decisions made differently
 - Less focus on classic approach (risk free rate + premium)
 - Very long holding periods
 - More focus on transparency, liquidity, capital preservation
 - More focus on diversification in widest sense (not just real estate)
2. Greater pricing volatility in market for prime assets in global cities
 - Prices driven by weight of money
 - Property fundamentals seen through different prism
3. New indices will be required
 - Global rather than regional or national
 - Top tier rather than whole of market
 - Suitable for large global investors
4. Potential impact on DCF valuation
 - What's the discount rate for a transparent, liquid global city?