



# Trends in the Ports Sector

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# 01

## Introduction to Macquarie

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## Who we are

Macquarie Capital is one of Macquarie Group’s six operating groups, with 36 offices in 21 countries.

The team is responsible for the Group’s corporate advisory and equity and debt capital markets activities.

In the year ended 31 March 2016, Macquarie Capital advised on...

395 transactions  
worth more than  
\$US **130** billion

## How we work

Macquarie Capital’s advisory activities are aligned with six industry groups, reflecting deep expertise across a broad range of sectors.

FINANCIAL INSTITUTIONS	MERGERS & ACQUISITIONS	PROJECT FINANCE	EQUITY CAPITAL MARKETS	DEBT CAPITAL MARKETS	PRIVATE CAPITAL MARKETS	PRINCIPAL INVESTMENTS
INDUSTRIALS						
INFRASTRUCTURE, UTILITIES & RENEWABLES						
REAL ESTATE						
RESOURCES						
TELECOMMUNICATIONS, MEDIA ENTERTAINMENT & TECHNOLOGY						

# Advisor, lender, investor, developer



Macquarie Capital can provide advice, capital and expertise across the spectrum of client needs

## Investor/Principal

- Underwrite and distribute equity capital
- Principal mindset

 <b>APEX CLEAN ENERGY</b> Sale of 300MW Balko Wind Farm in Oklahoma <b>\$408m</b> Principal Investor, Exclusive Financial Advisor <b>MACQUARIE</b> 2014	 <b>MACQUARIE</b> ANZ terminals, equity sell-down to Fengate and Northleaf <b>\$US525m</b> Financial Advisor <b>MACQUARIE</b> 2014	 <b>Apache</b> Acquisition of Apache's Australian oil & gas portfolio <b>\$US2.1bn</b> Principal Investor, Financial Advisor <b>MACQUARIE</b> 2015
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## Developer/Sponsor

- Development capital and equity capital
- Consortium formation and pursuit of capital

 <b>Footprint Power</b> Development of greenfield CCGT plant in Salem, MA <b>~\$US1bn</b> Financial Advisor 2015	 <b>HALTON</b> <b>MERSEYLINK</b> Mersey Gateway Bridge PPP Project <b>£600m</b> Lead Sponsor and Financial Adviser 2014	 <b>MAEDA</b> <b>MACQUARIE</b> Development of a 6.5MW solar plant Principal Investor and Financial Advisor <b>MACQUARIE</b> 2016
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## Lender

- Underwriting and syndication
- Leveraged loans, mezzanine debt, preferred equity, hybrid

 <b>Advanced Disposal</b> Acquisition of Veolia's North American solid waste business by Highstar Capital <b>\$US1.9bn</b> Financial Advisor/Joint Bookrunner/Lead Arranger <b>MACQUARIE</b> 2013	 <b>COVANTA ENERGY</b> Provided senior and junior debt to Dublin Waste to Energy project <b>€80m</b> Financial Advisor/Equity arranger Junior & Senior Lender <b>MACQUARIE</b> 2014	 <b>SunEdison</b> <b>TerraForm</b> Joint acquisition of First Wind by Terraform and SunEdison <b>\$US2.4bn</b> JointBookrunner/Lead Arranger <b>MACQUARIE</b> 2014
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## Advisor

- Financial advisor
- Debt and equity arranger

 <b>ifm</b> <b>CHUBU Electric Power</b> <b>FREEPORT LNG</b> Freeport LNG Liquefaction Project <b>\$US11bn</b> Financial Advisor <b>MACQUARIE</b> 2014	 <b>QUEENSLAND MOTORWAYS</b> Adviser to Queensland Government on the sale of Queensland Motorways <b>\$A7.1bn</b> Financial Advisor <b>MACQUARIE</b> 2014	 <b>CLECO</b> Acquisition of Cleco Corp. by Macquarie-led Consortium <b>\$US4.7bn</b> Financial Advisor <b>MACQUARIE</b> 2016
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# Global port advisory experience



Macquarie has provided advice in relation to port infrastructure assets and shipping businesses in Australia, Asia, the UK, US, Europe, Canada and South Africa

## Advisory experience in ports and shipping sector

Date	Description	Value (FX)	Value (\$A)
2015	Advisor to the CPPIB and Hermes Infrastructure Consortium on the acquisition of 33% stake in <b>Associated British Ports (ABP)</b>	£1.6bn	\$A3.09bn
2015	Advisor to a bidding consortium on the acquisition of <b>Port of Darwin</b> from the Northern Territory	\$A0.5bn	\$A0.5bn
2015	Advisor to the Queensland Government regarding the potential lease of the <b>Port of Gladstone</b> (transaction suspended)	n/a	n/a
2015	Advisor to the Queensland Government regarding the potential lease of the <b>Port of Townsville &amp; Mt Isa Rail Line</b> (transaction suspended)	n/a	n/a
2014	Advisor to the second highest bidding consortium on the acquisition of the <b>Port of Newcastle</b> from the NSW State	\$A1.75bn	\$A1.75bn
2013	Advisor to a competing bidder consortium comprising QIC, Canada Pension Plan Investment Board and Alberta Investment Management Corporation, on the acquisition of <b>Port Botany and Port Kembla</b> from the NSW State	\$A5.1bn	\$A5.1bn
2012	Advisor to Adani Group on project financing of the <b>Abbot Point Coal Terminal</b> in Queensland, Australia	\$A1.25bn	\$A1.25bn
2011	Advisor on the acquisition of <b>Abbot Point Coal Terminal</b> in Queensland, Australia	\$A1.8bn	\$A1.8bn
2010	Advisor to the QPH consortium, composed of IFM, GIP, QIC and Adia on the acquisition of the <b>Port of Brisbane</b> from the Queensland State	\$A2.3bn	\$A2.3bn
2009	Advisor to Prime Infrastructure on the sale of 49.9 per cent in <b>DBCT</b> to Brookfield Infrastructure Partners in Australia	\$A295m	\$A295m
2008	Advisor to Macquarie Korea Infrastructure Fund on its investment in <b>Busan New Port Container Terminal</b> , the concession company with the right to develop, operate and maintain Busan New Port	KRW259bn	\$A308.3m
2008	Advisor to Macquarie Infrastructure Partners on the acquisition of <b>Penn Terminals Inc.</b> , a break bulk and container terminal located in Pennsylvania	Confidential	
2007	Advisor to Macquarie Infrastructure Partners on the purchase of a group of entities that lease and operate a container and break bulk terminal in <b>Vancouver, British Columbia</b>	C\$144.0m	\$A151.2m
2006	Led the Britannia Ports consortium in a bid for the ~£2.8 billion private sale of <b>Associated British Ports</b> (owner of 21 UK ports)	£2.8bn	\$A7.0bn
2006	One of two bidders in ~£1.6 billion private sale of <b>Peel Ports</b> (UK's second biggest port operator)	£1.6bn	\$A4.0bn
2006	Advisor to Macquarie European Infrastructure Fund on the refinancing of debt facilities for <b>Wightlink Shipping</b>	£225m	\$A516.0m
2006	Advisor to Macquarie European Infrastructure Fund on the acquisition of a stake in <b>Hanjin Shipping's six international container terminals</b> located in the US, Japan and Taiwan	KRW844.0bn	\$A1.16bn
2005	Advisor to Macquarie Global Infrastructure Fund on the acquisition of a stake and further equity injection in <b>DCT Gdansk</b> in Poland	€178.0m	\$A283.3m
2005	Advisor to Macquarie European Infrastructure Fund on the acquisition of <b>Wightlink Shipping Limited</b> in the UK	Confidential	
2005	Advisor to Macquarie International Infrastructure Fund on the acquisition of a 38 per cent stake in <b>Changshu Xinghua Port</b> in China	S\$158m	\$A126.4m

# 02

## Investing in infrastructure and real assets

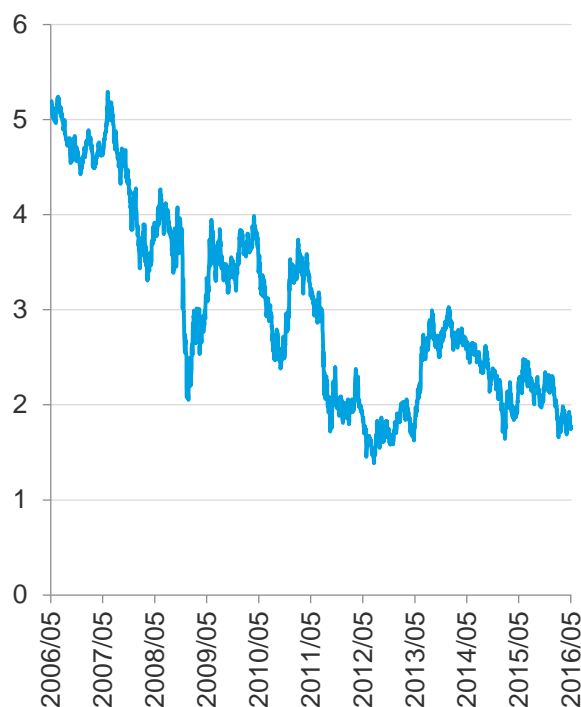
# Macroeconomic trends – interest rates



Lowest level of global interest rates favours investment into infrastructure

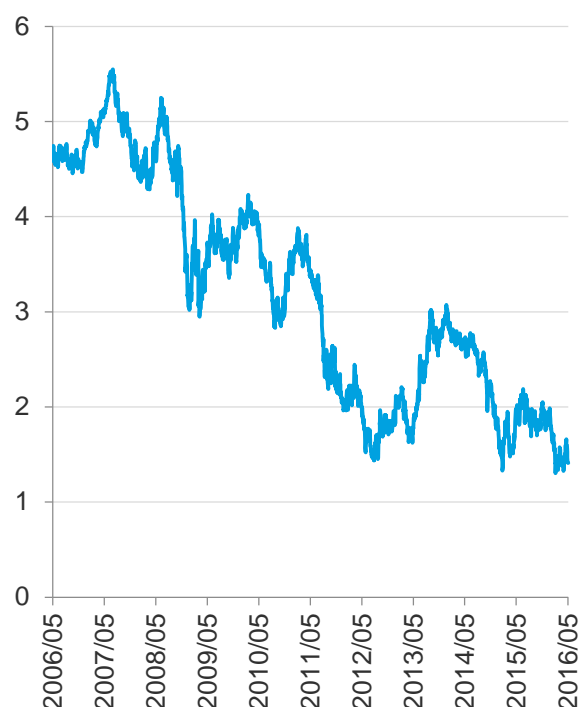
## 1. US Interest Rates

US Treasury 10 Years



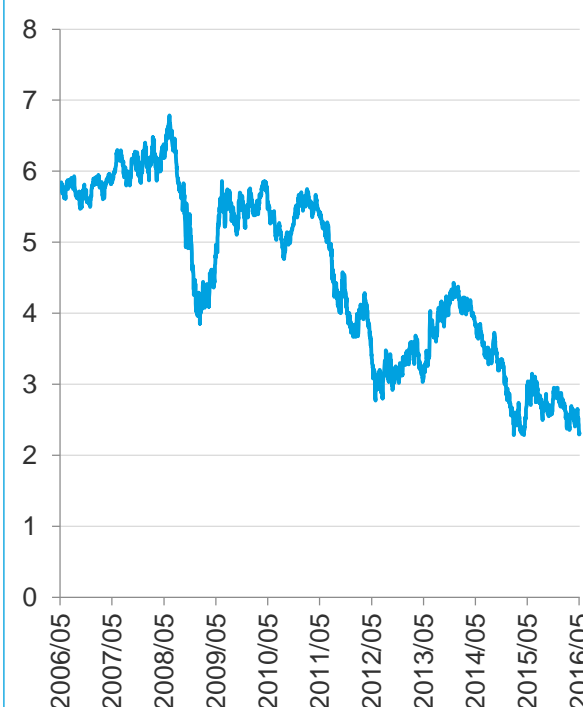
## 2. UK Interest Rates

UK Gilt 10 Years



## 3. AUS Interest Rates

AUS Gov Bond 10 Years



Source: Bloomberg

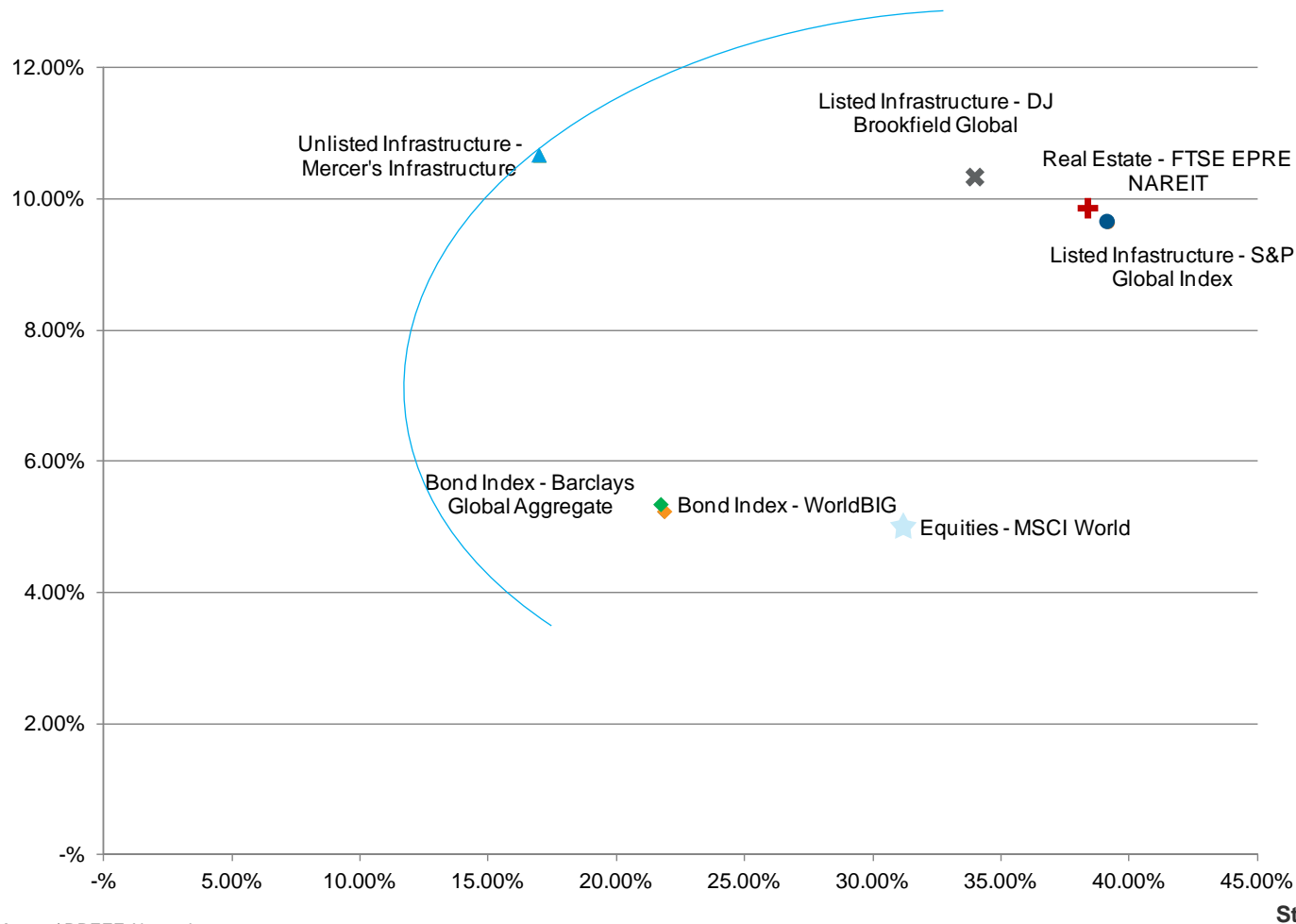
# Macroeconomic trends – liquidity



Attractive investment class over last 15 years on a risk adjusted basis

## Return vs Standard Deviation

Annualised return



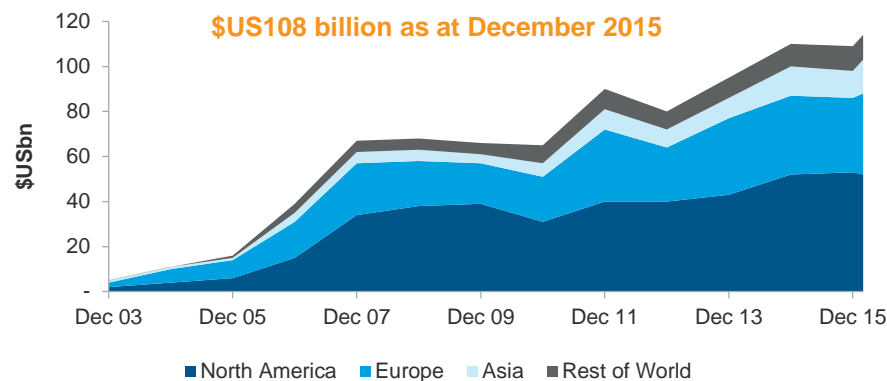
Source: Indices - Bloomberg / Mercer / RREEF Alternatives



# Macroeconomic trends – liquidity

Increasing capital flows in the infrastructure sector are chasing the few attractive assets that come to market and driving aggressive asset pricing

## Dry powder (equity) – global unlisted infrastructure funds

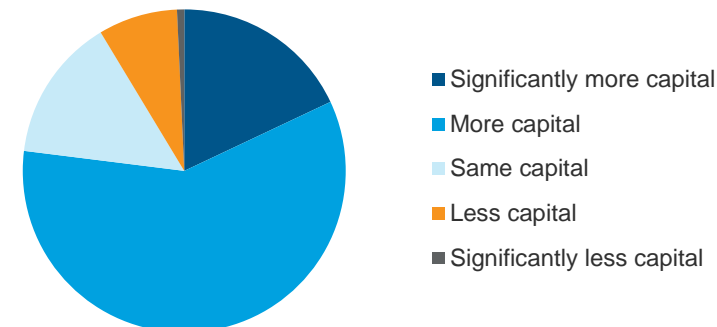


Substantial backlog of capital to put to work  
**– over \$US100 billion of dry powder**  
 from unlisted infrastructure funds

## A lack of attractive opportunities in other sectors has ramped up interest in infrastructure

Investors want to be very aggressive in pricing opportunities, via either or both of low discount rates and higher risk-weighted assumptions

## Amount of capital fund managers plan to deploy in 2016 in infrastructure



Survey of 65 fund managers found that  
**75% expect to be deploying more capital in the infrastructure sector**  
 in 2016 vs 2015

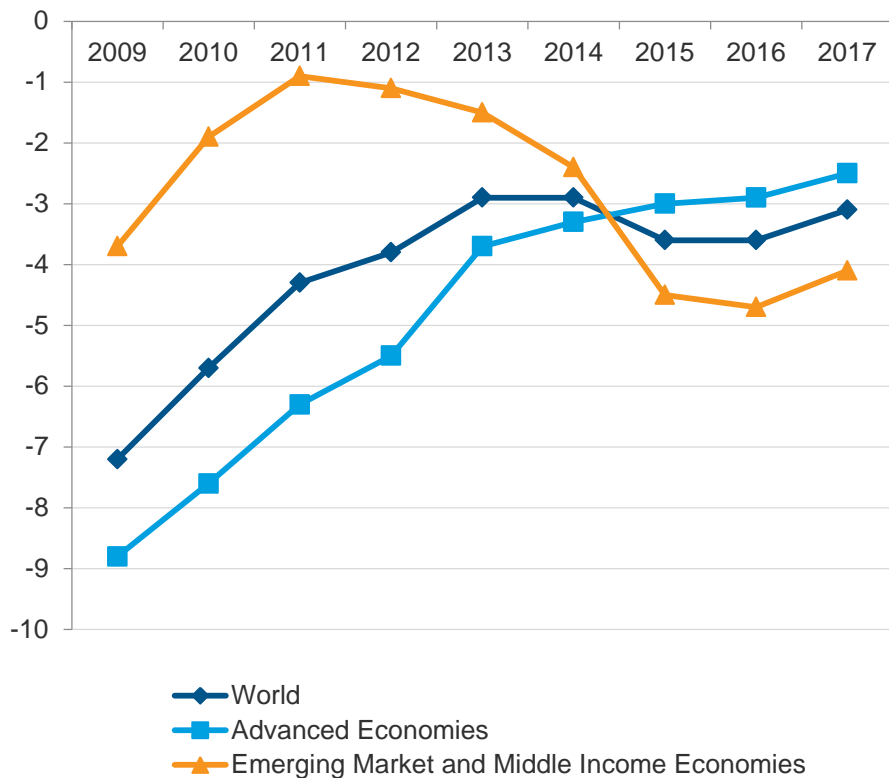
# Macroeconomic trends – Government constraints



Increasing pressure on Government budgets and increasing Government debt

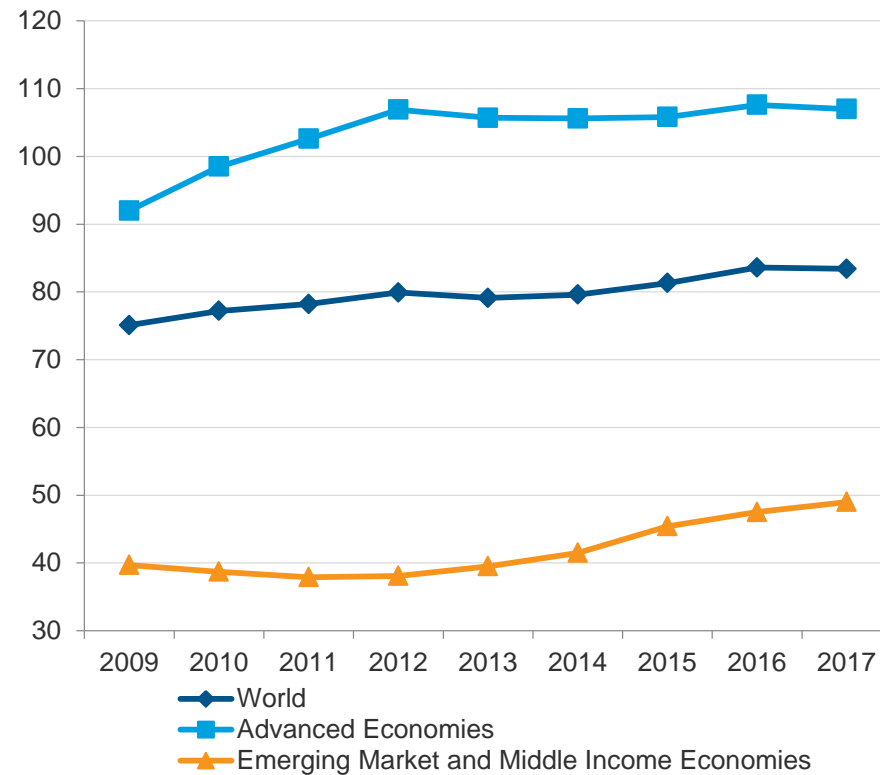
## Worsening fiscal positions...

Fiscal balance as a percentage of GDP



## ...and increasing Government debt

General Government debt as a percentage of GDP



Source: IMF, April 2016

# Where does this lead to?

Under the pressure of increasing competition, returns in core and core+ investments are decreasing

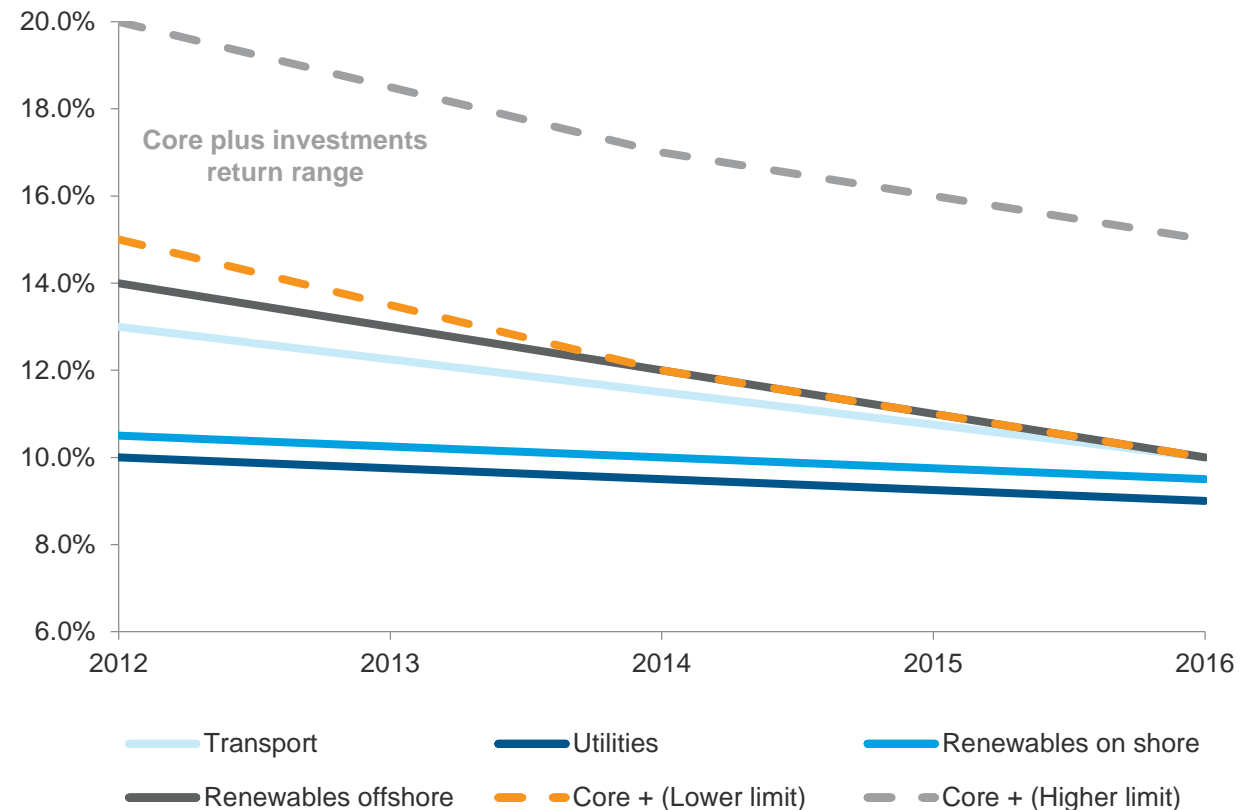
## Returns are going down

Because of their relatively low risk profile, **infrastructure investments are attracting investors in search of yield that the bond market can no longer provide**

As a result, returns have been pushed down across **all sectors under the pressure of increasing competition and sustained low interest rates**

Drop in returns has been the strongest in **transport assets and core plus assets**

## IRR range by type of investments

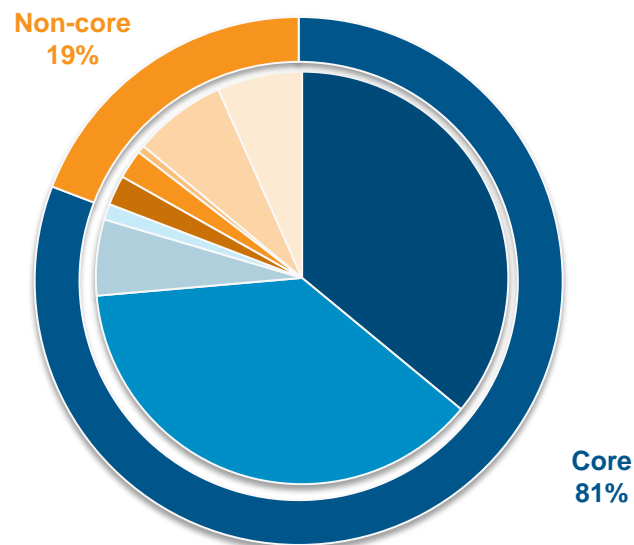


# The evolving definition of infrastructure

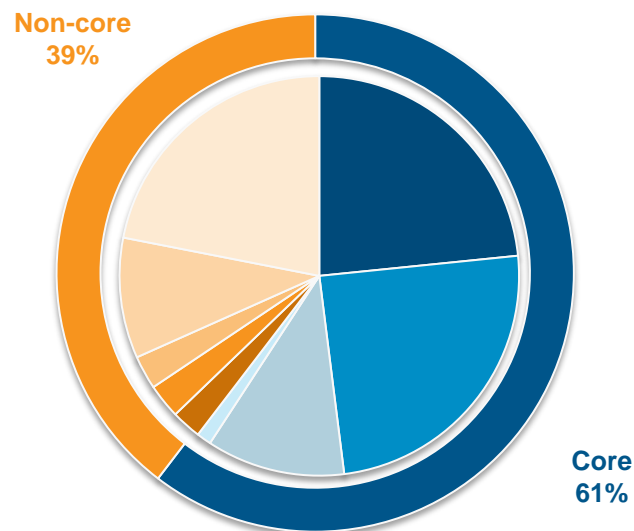


In the 10 years to 2013, 19% of transactions were non-core infrastructure. In 2014-2015 this increased to 39%

Infrastructure acquisitions and financings, % of value (2004-2013)



Infrastructure acquisitions and financings, % of value (2014-present)



■ Transport ■ Utilities ■ Renewable ■ Social & Defence ■ Waste ■ Telecommunications ■ Storage ■ Transport service ■ Other

# 03

What does this mean for ports?



# Ports as infrastructure assets



## Long-dated assets

- Pension funds & life insurance companies like to match their liability profiles
- Suited to Asia's graying population

## Generally inflation protected

- Revenue linked to inflation through tariff structures that adjust revenue to the annual consumer or retail price index
- Variable operating expenses generally a small percentage of revenue

## Returns have low correlations with other asset classes

- Essential services
- Users generally price inelastic
- React differently to changing markets











## Stable and growing earnings and cashflow

- Strong barriers to entry
- Immune to technological change or deterioration
- Minimal maintenance capex



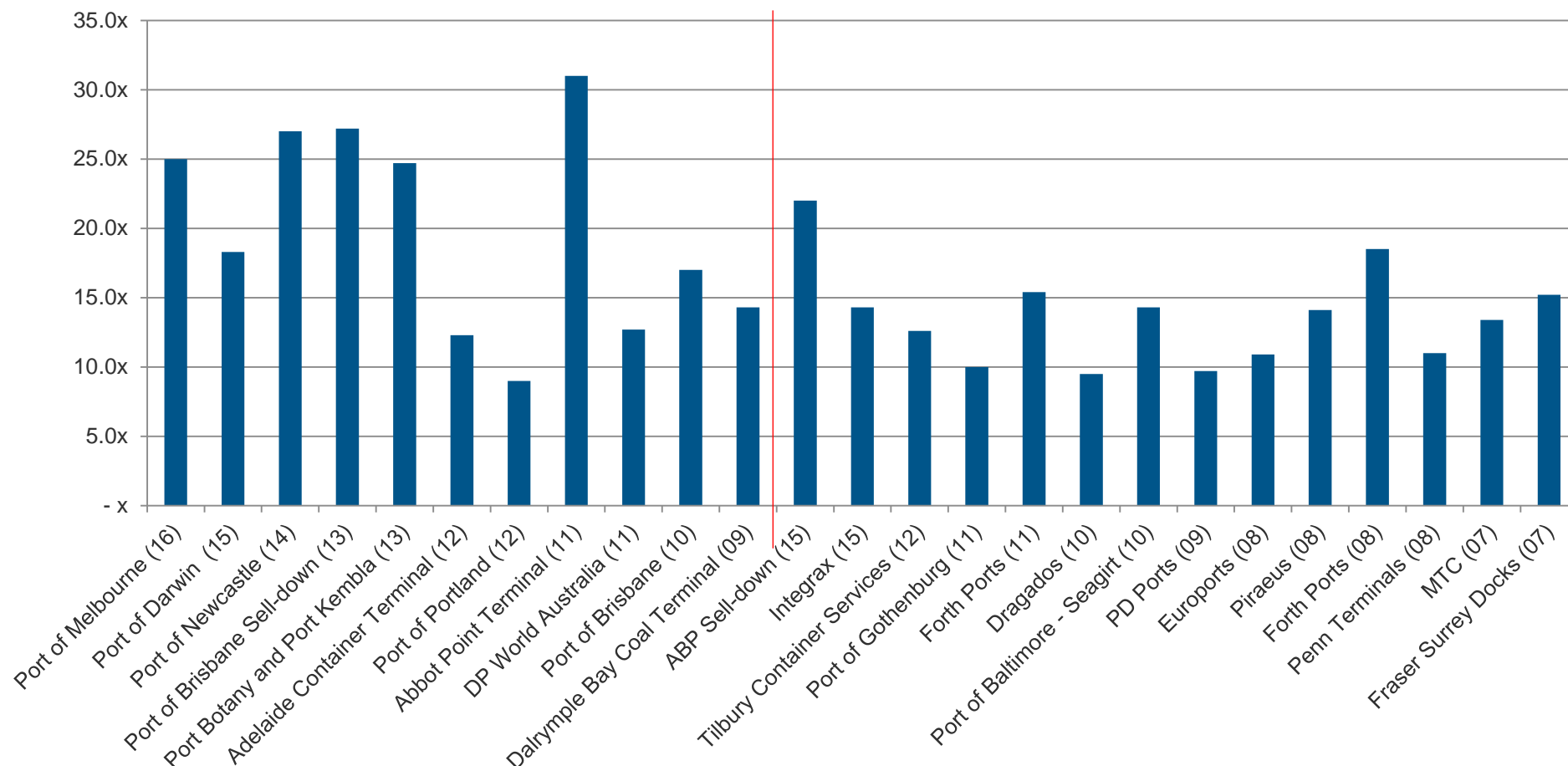
# Illustrative return profiles

Indicative expected returns of infrastructure sub-sectors

										
	Toll roads – mature	Regulated assets	Long term contracted power generation	Toll roads – greenfield	Airports	Midstream	Telecom infra	Ports/marine terminals	Waste mgmt	PFIs/PPPs
Average equity IRR (leveraged, post-tax)	7-11%	8-12%	8-12%	10-14%	11-14%	11-17%	12-17%	14-19%	14-18%	8-12%
Cash Yield	4-9%	4-9%	4-12%	5-10%	4-9%	5-10%	3-5%	4-6%	3-5%	6-12%

Yield and IRR estimates are illustrative only and subject to change. Long-term contracted power generation includes renewable energy generation assets. Indicative cash yield from greenfield toll roads reflects expected yield following construction completion and initial traffic ramp-up.

# Transaction Multiples



# Ports as investment assets



## Characteristics favoured by investors

1

Attractiveness reflects underlying “story”

- During resource booms, bulk/commodity terminals traded at high multiples
- Long term O/D story, real estate development are critical

2

“Infratisation” of revenues

- Making as much of the cashflows to be “infra-like” increases the attractiveness of the port

3

Commercial structuring is important

- Infrastructure investors are not keen on certain assets – e.g. stevedoring
- Landlord ports (e.g. Australian privatisation) are well valued

# Contact details



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