

European Infrastructure Markets: The Emergence of an Alternative Asset Class

VOGON Symposium, Amsterdam 9th of November 2007

Lonneke Löwik, RREEF Research, +44 (0)20 7545 6328, lonneke.lowik@rreef.com

Disclaimer

No further distribution is allowed without prior written consent of the Issuer.

RREEF is the brand name of the real estate and infrastructure, private equity and hedge fund division for the asset management activities of Deutsche Bank AG. In the US this relates to the asset management activities of RREEF America L.L.C.; in Germany: RREEF Investment GmbH, RREEF Management GmbH, and RREEF Spezial Invest GmbH; in Australia: Deutsche Asset Management Australia Limited (ABN 63 116 232 154) Australian financial services license holder; in Hong Kong: Deutsche Asset Management (Hong Kong) Limited ("DeAMHK"); in Japan: Deutsche Securities Inc.; in Singapore, Deutsche Asset Management (Asia) Limited (Company Reg. No. 198701485N) and in the United Kingdom: RREEF Limited, RREEF Global Advisers Limited, Deutsche Asset Management (UK) Limited, and Deutsche Private Asset Management Limited; in addition to other regional entities in the Deutsche Bank Group.

Key RREEF research personnel, including Asieh Mansour, Chief Economist and Strategist and Peter Hobbs, Head of Real Estate Research are voting members of the investment committee of certain of the RREEF Alternative Investment Funds. Members of the investment committees vote with respect to underlying investments and/or transactions and certain other matters subjected to a vote of such investment committee. Additionally, research personnel receive, and may in the future receive incentive compensation based on the performance of a certain investment accounts and investment vehicles managed by RREEF and its affiliates.

This material is intended for informational purposes only and it is not intended that it be relied on to make any investment decision. It does not constitute investment advice or a recommendation or an offer or solicitation and is not the basis for any contract to purchase or sell any security or other instrument, or for Deutsche Bank AG and its affiliates to enter into or arrange any type of transaction as a consequence of any information contained herein. Neither Deutsche Bank AG nor any of its affiliates, gives any warranty as to the accuracy, reliability or completeness of information which is contained in this document. Except insofar as liability under any statute cannot be excluded, no member of the Deutsche Bank Group, the Issuer or any officer, employee or associate of them accepts any liability (whether arising in contract, in tort or negligence or otherwise) for any error or omission in this document or for any resulting loss or damage whether direct, indirect, consequential or otherwise suffered by the recipient of this document or any other person.

The views expressed in this document constitute Deutsche Bank AG or its affiliates' judgment at the time of issue and are subject to change. This document is only for professional investors. This document was prepared without regard to the specific objectives, financial situation or needs of any particular person who may receive it. An investment in real estate involves a high degree of risk and is suitable only for sophisticated investors who can bear substantial investment losses. The value of shares/units and their derived income may fall as well as rise. Past performance or any prediction or forecast is not indicative of future results. The forecasts provided are based upon our opinion of the market as at this date and are subject to change, dependent on future changes in the market. Any prediction, projection or forecast on the economy, stock market, bond market or the economic trends of the markets is not necessarily indicative of the future or likely performance and not suitable for private investors

Disclaimer

For Investors in the United Kingdom:

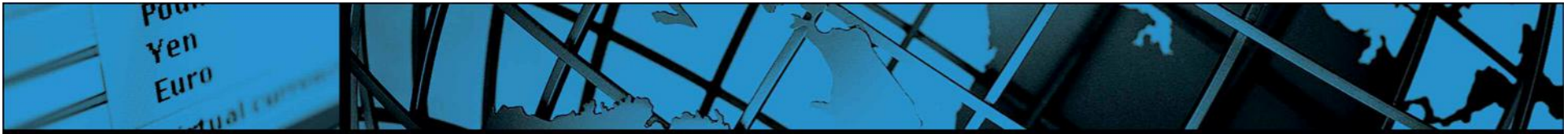
Issued in the United Kingdom by RREEF Limited. Authorised and regulated by the Financial Services Authority. This document is directed only at persons falling within the following exemptions from s.21 of the United Kingdom Financial Services and Markets Act 2000 ("FSMA"): (i) authorized firms under FSMA and certain other investment professionals falling within article 19 of the FSMA (Financial Promotion) Order, (the "FPO"); (ii) high net worth entities (not individuals) falling within article 49 FPO; and (iii) persons who receive this document outside the United Kingdom. The distribution of this document in the United Kingdom to anyone not falling within the foregoing categories is not permitted by the Issuer and may contravene FSMA. No one in the United Kingdom who is not either a high net worth entity or person with professional experience in matters relating to investments as referred to in the foregoing should treat this document as constituting a promotion to him, or act on it for any purpose whatsoever.

For Investors in Australia and Hong Kong:

In Australia, Issued by Deutsche Asset Management (Australia) Limited, holder of an Australian Financial Services License. An investment with Deutsche Asset Management is not a deposit with or any other type of liability of Deutsche Bank AG ARBN 064 165 162, Deutsche Asset Management (Australia) Limited or Deutsche Asset Management (Hong Kong) Limited or any other member of the Deutsche Bank AG Group. The capital value of and performance of an investment with Deutsche Asset Management is not guaranteed by Deutsche Bank AG, Deutsche Asset Management (Australia) Limited or Deutsche Asset Management (Hong Kong) Limited or any other member of the Deutsche Bank Group. Investments are subject to investment risk, including possible delays in repayment and loss of income and principal invested.

Contents

- I. What is Infrastructure Investing?
- II. Why the interest in Infrastructure Investing?
- III. Characteristics of Investment Returns
- IV. Infrastructure Investing: expanding set of opportunities
- V. Conclusions



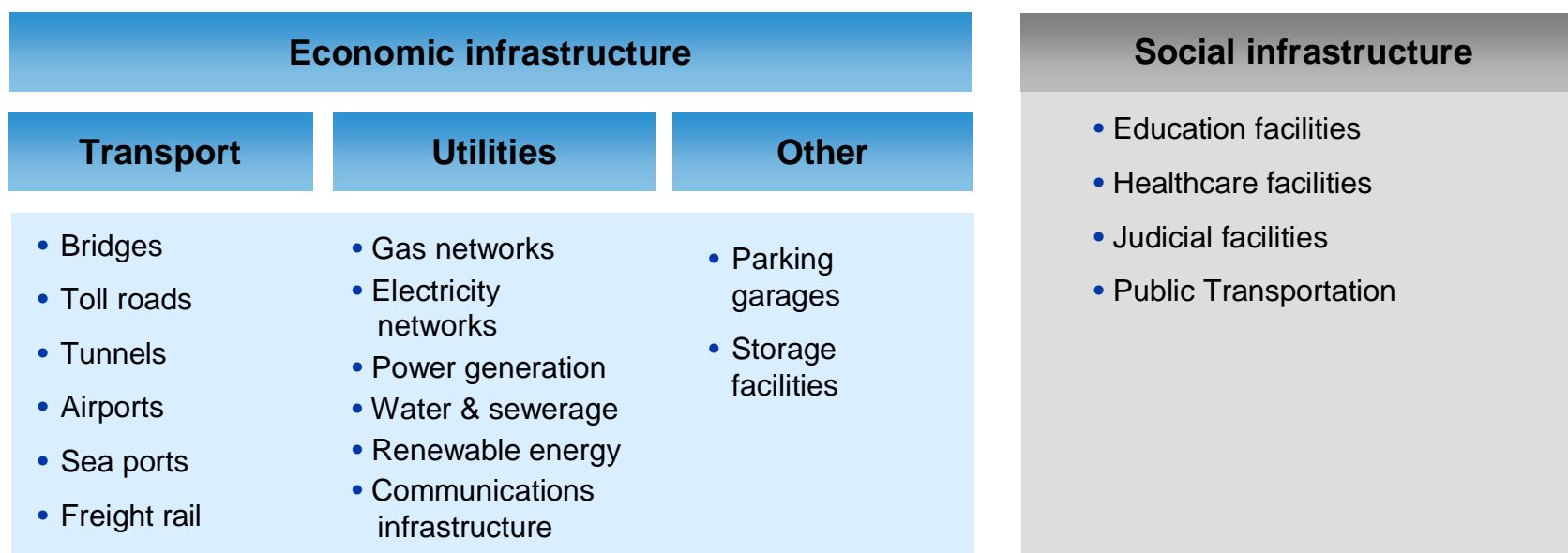
Section I

What is Infrastructure Investing?



What is Infrastructure?

Essential real assets and services capable of generating a strong and stable cash return



Focus on: "User-pays" assets that provide essential services capable of generating a strong and stable cash return



Infrastructure: A Unique Asset Class

Compelling Investment Characteristics for Investors:

- § High barriers to entry: “quasi-monopolies”
 - Regulatory, permitting constraints
 - Physical, property constraints
 - High initial capital expenditure
- § Stable cash flow, typically with inflation hedge
 - Inelastic demand, given scarcity of resource
 - Long useful life of assets
- § Hybrid nature of both fixed income and capital gains
 - Best opportunity for capital gains from investments involving development risk, or some monopoly businesses
- § Variety of risk and return profiles
 - Range from low-risk regulated assets to high-risk Greenfield projects



Infrastructure Has Similar Characteristics to Other Asset Classes

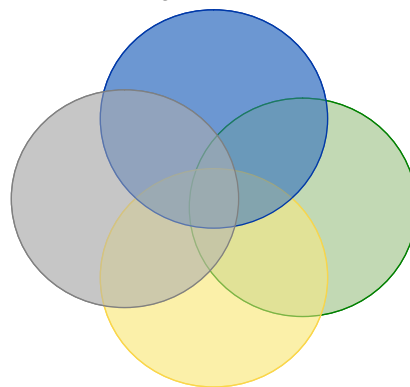
Comparison of Infrastructure and Other Relevant Asset Classes

Infrastructure

- Stable, often monopolistic
- High entrance barriers
- High Income return

Fixed Income

- Regular return component
- Inflation hedge
- Emphasis on cash-flow
- Low risk profile



Private Equity

- Capital intensive
- Due diligence process
- Active operative management

Real Estate

- Tangible asset / right of use
- Long duration
- Good diversification potential

Source: Gothaer Asset Management; RREEF

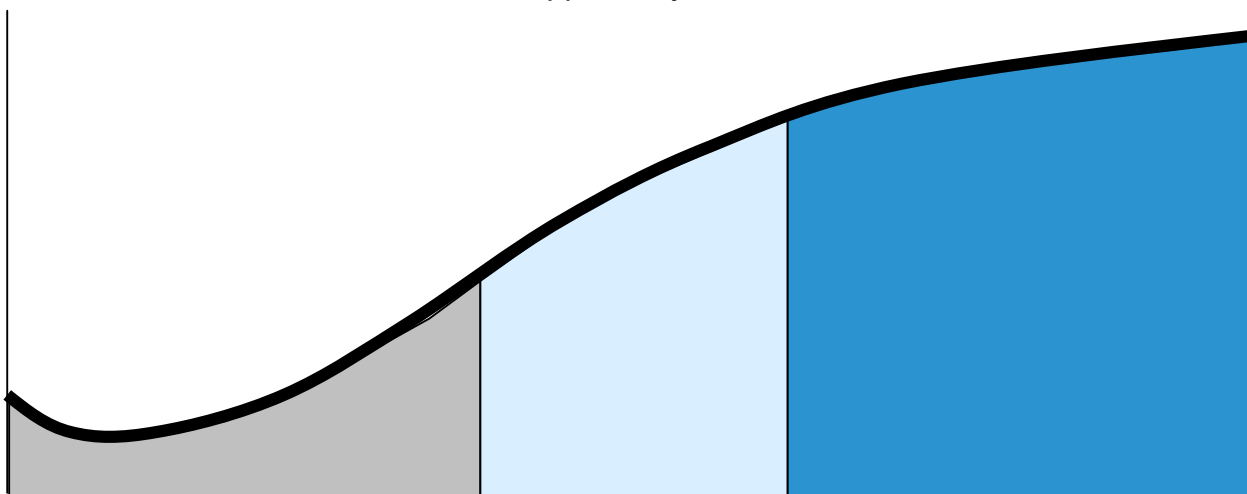
Lifecycle of Infrastructure Assets

Examples:

§ Greenfield toll-roads
 § New energy sources
 § Infrastructure in emerging economies

§ Expansion projects
 § New privatizations with potential development opportunity

§ Established airports, toll roads, utilities
 § Regulated assets (privatized)



Development:

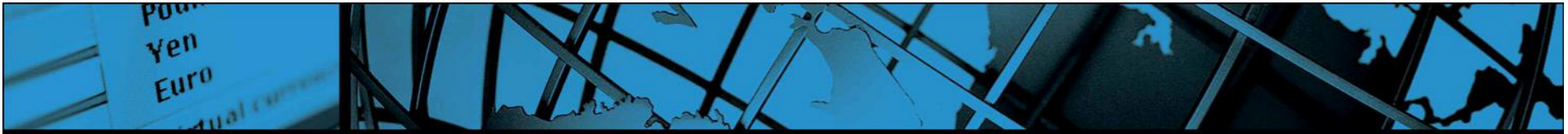
Brand new infrastructure built with unproven demand

Growth:

"Ramp up" from early demand

Mature:

Stable, income oriented returns driven by established usage



Section II

Why the interest in Infrastructure Investing?



Infrastructure as an Asset Class continues to Grow due to Increased Supply and...

Drivers of Transaction Opportunities

Private to Private

- q Portfolio rationalisation by utility, transport & communications companies
- q Refinancing
- q Secondary and tertiary sales
- q Development and expansion

Public to Private

- q Economic & Demographic developments: creates demand
- q Historical under-spending: makes demand/provision imbalance more acute
- q Budget deficits: Governments unable to fund infrastructure demand from traditional sources

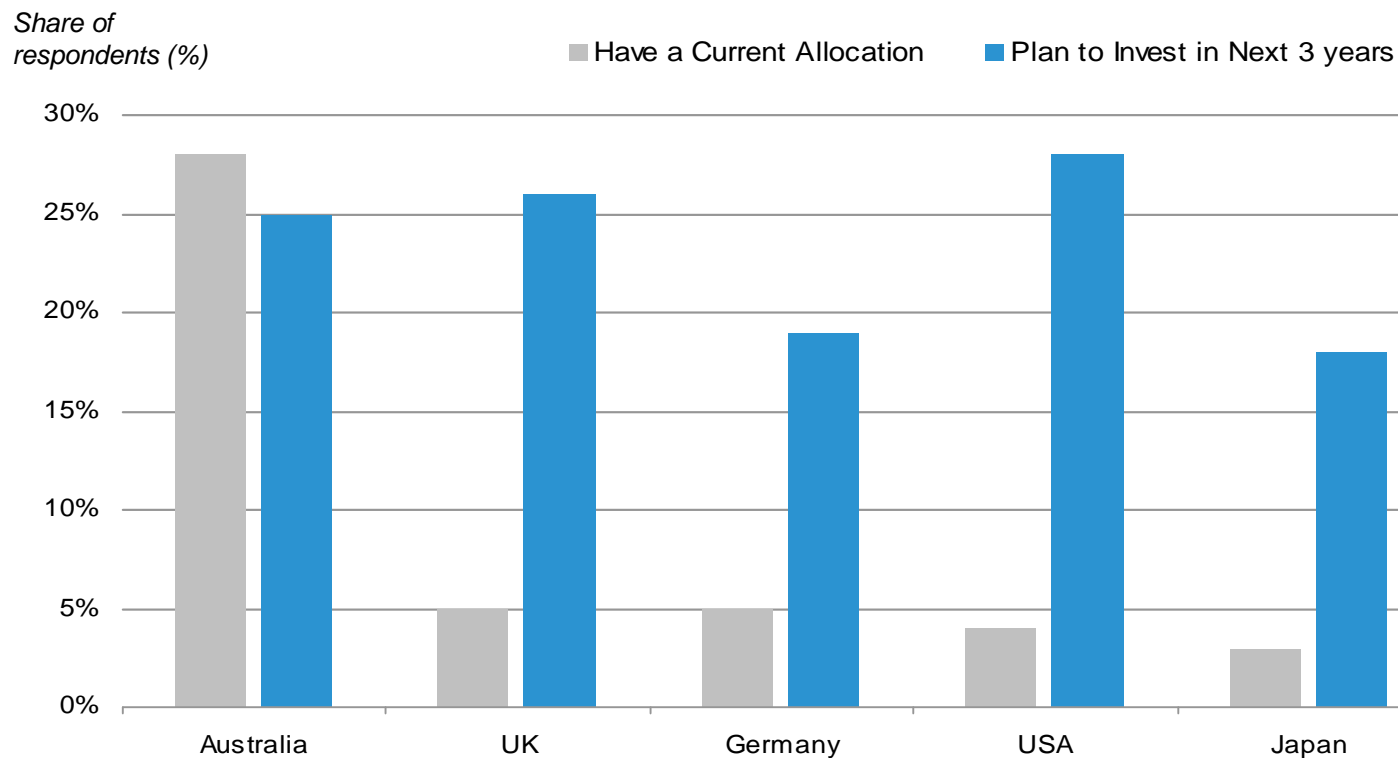
.... Demand

Surge of capital entering the infrastructure market

- § Continuing growing global investment capital looking for secure assets
- § Growth in the European retirement market will continue to drive demand for steady, predictable and inflation protected, income-oriented investments, such as Infrastructure
- § Increasing number of global financial institutions, private equity firms and public companies are entering the infrastructure space
- § Emergence of publicly listed infrastructure funds is a new trend; IPOs of generalist, managed infrastructure funds

Significant rise in institutional demand for infrastructure investment opportunities

Current Allocation to Infrastructure and Plans to Invest



Note: Based on Survey of 330 institutional investors, Summer 2006

Source: Greenwich Associates; RREEF

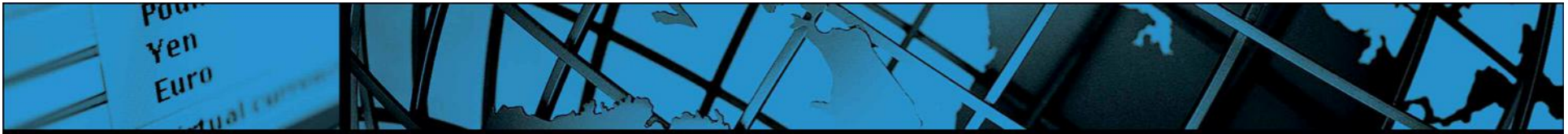
The Rationale for Infrastructure Investing

§ Market fundamentals:

- Strong user demand and constrained supply
- Shift away from the use of public funds to provide infrastructure assets
- Investment gap

§ Investment characteristics compared to bond and equity markets

- Historically strong absolute and relative performance
- High and stable income yield
- Low volatility
- Long duration and liability matching
- Diversification potential



Section III

Characteristics of Investment Returns



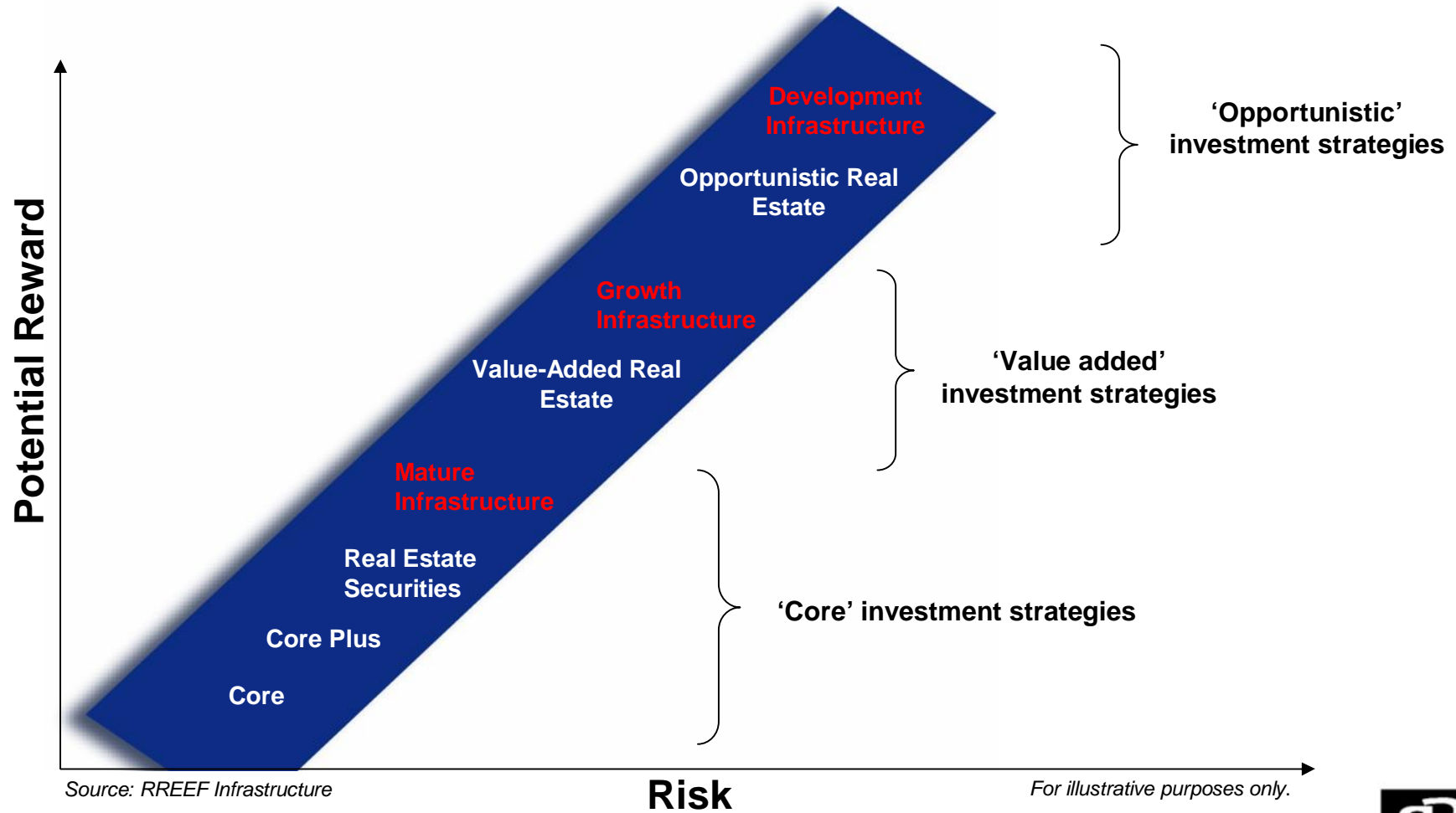
Measuring Market Behavior

- § Significant difficulties exist
- § The large scale and unique characteristics of infrastructure assets
- § Limited number of transactions
- § Significant variations in behaviour according to:
 - Maturity – development stage and developed infrastructure
 - Asset type – utilities, toll-roads, airports, etc.
- § The maturation of the asset class



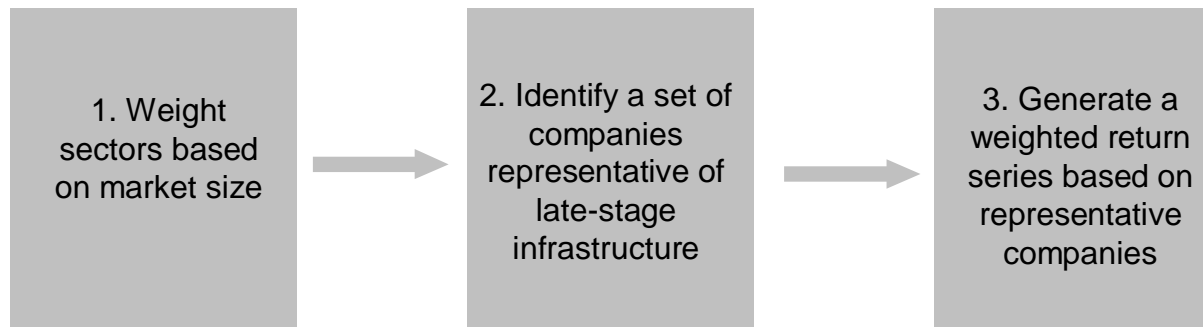
For illustration purpose only

Infrastructure along the Risk/Reward Spectrum



Approach to Calculating Market Behaviour: Hypothetical Index

§ Develop a hypothetical “late stage” infrastructure index by examining the performance of a representative group of listed infrastructure companies. Three key stages:



§ Limitations in the approach mean the hypothetical series is likely to differ to the actual performance of actual infrastructure classes

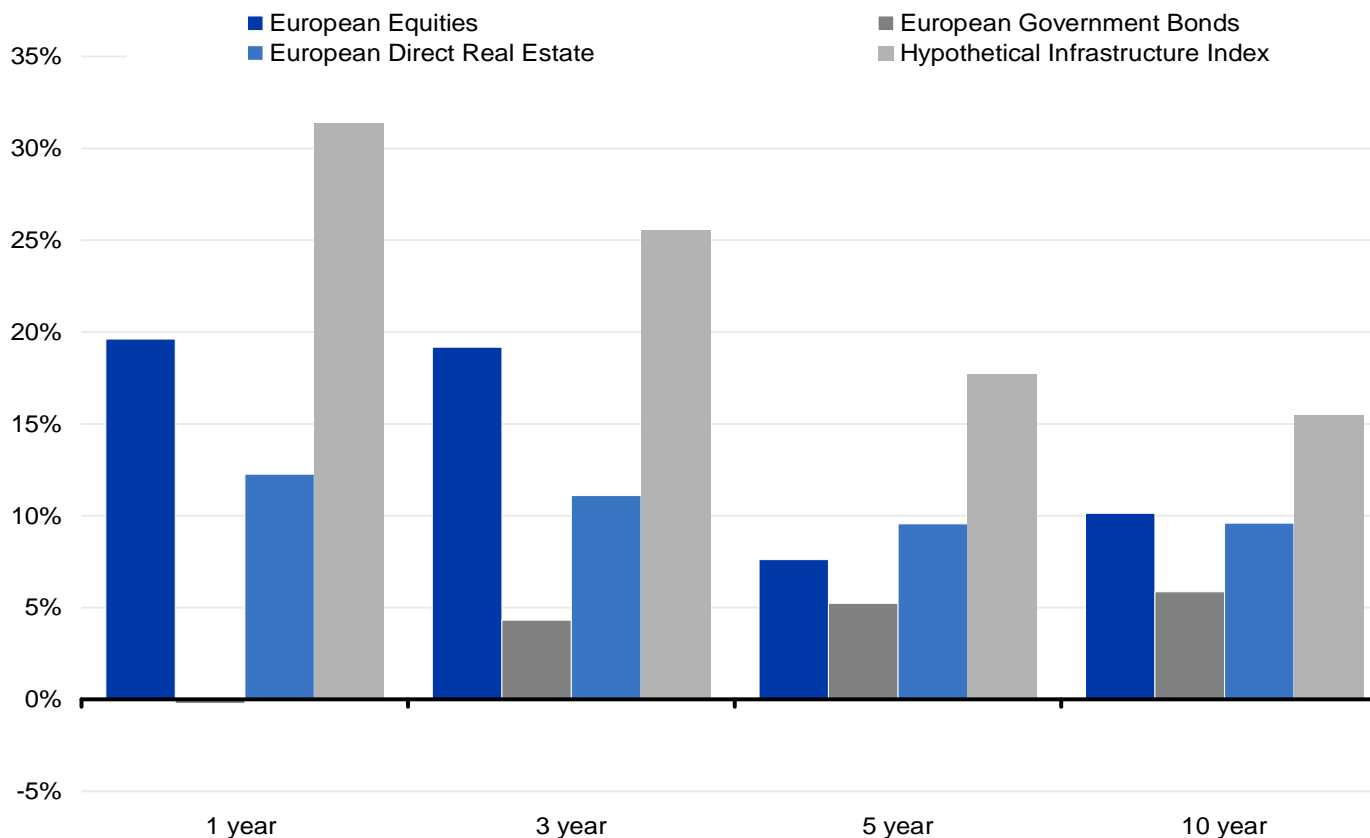
- The use of listed companies rather than underlying infrastructure assets
- The use of some companies with relatively short time series

§ The approach should be seen as an attempt to contribute to the understanding of the asset class and should not be relied on as an indicator of future performance nor in making investment decisions.



Historic Performance: The Case of Europe

Annual Average Returns for Major European Asset Classes to End 2006



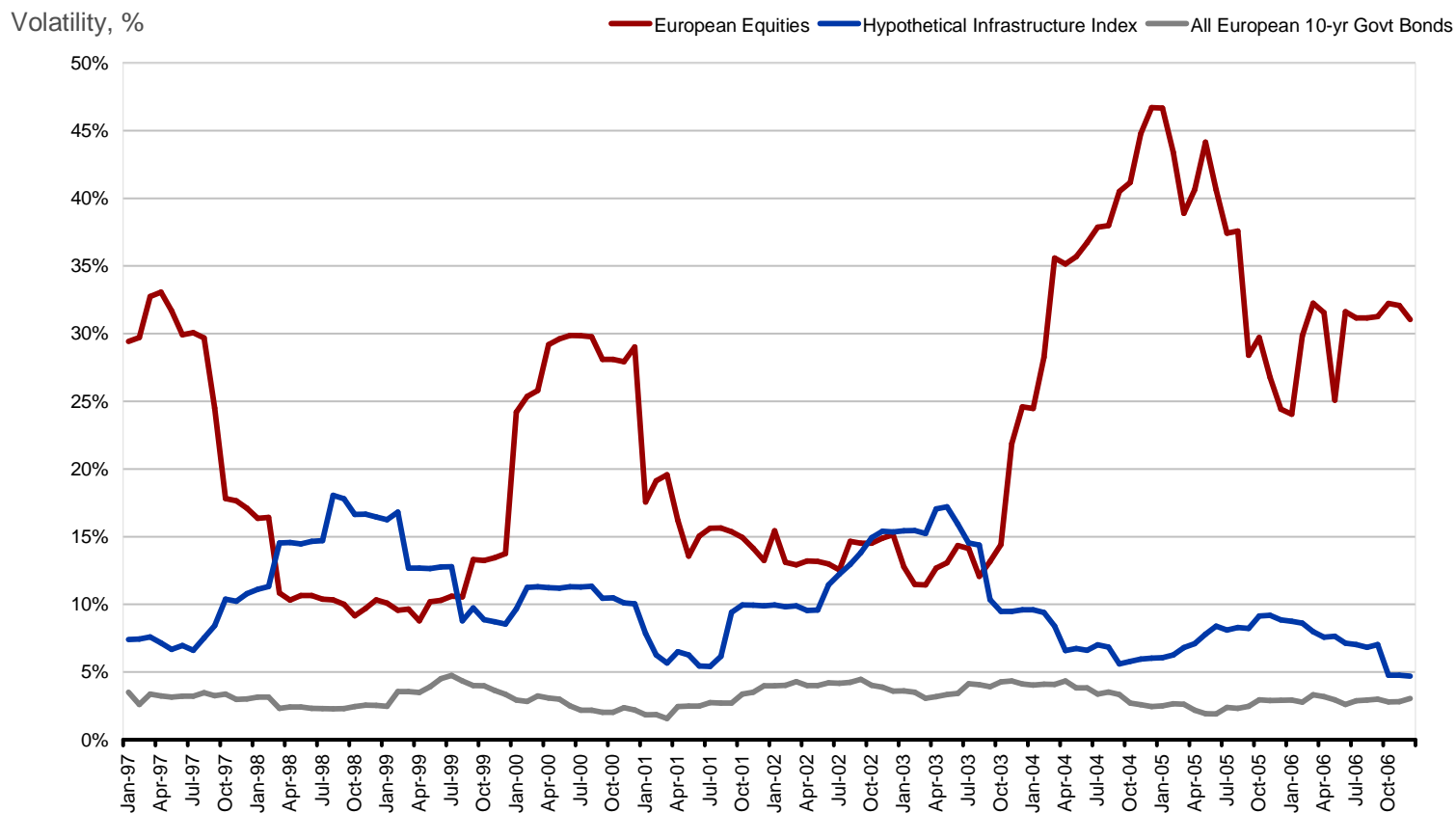
Note: For illustrative purposes only

Source: MSCI European Equity Index, SB European Government Bond Index, PMA/IPD and RREEF Research



Volatility Has Tended to Fall Between Equities and Bonds

Volatility of Major European Asset Classes, based on Rolling 12 month Standard Deviations

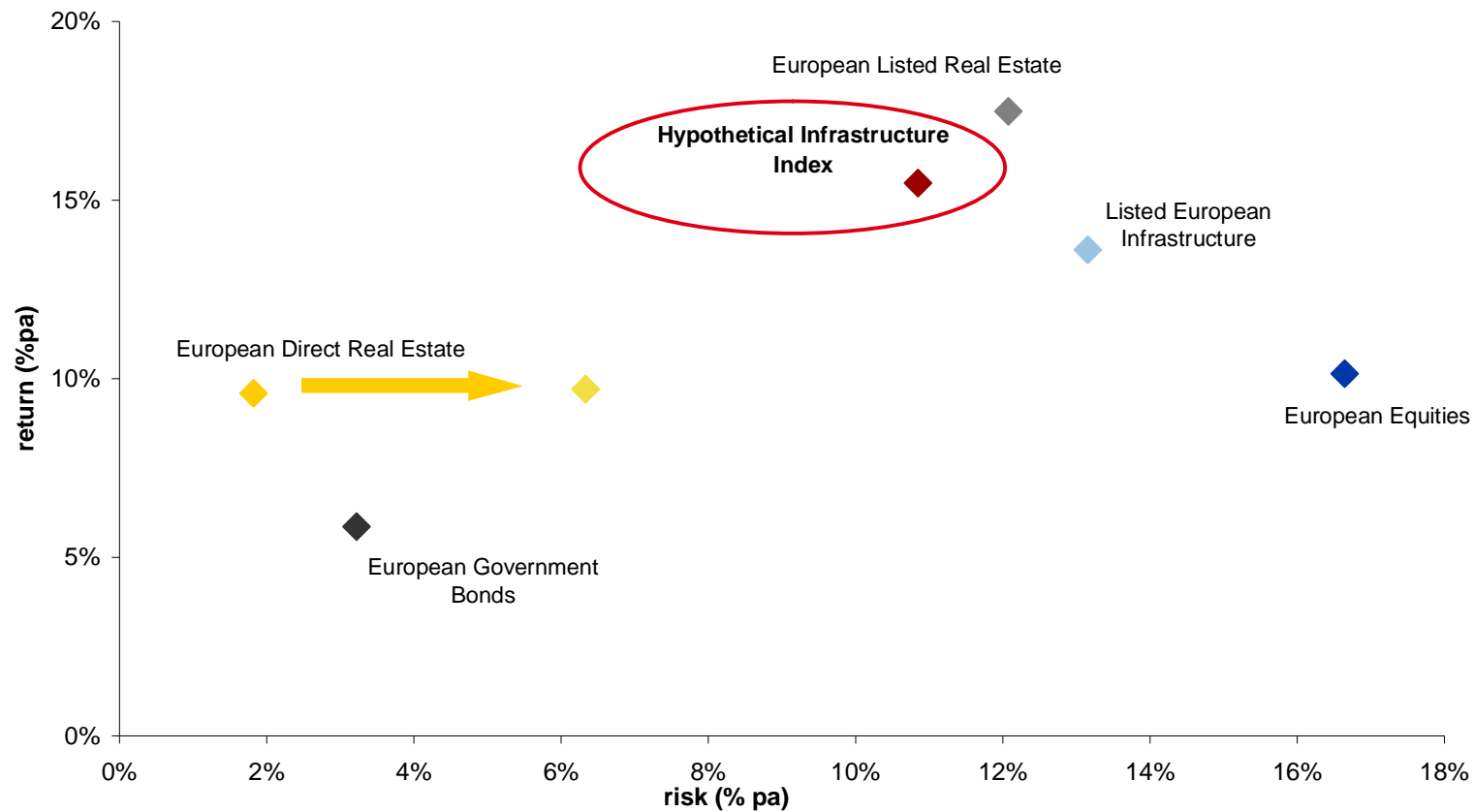


Source: RREEF Research; MSCI



Giving Infrastructure an Attractive Risk/Return Profile

European Asset Class Risk Return Profiles, 10 years to end 2006



Note: For illustrative purposes only

Source: MSCI European Equity Index, EPRA, SB European Government Bond Index, MSCI 7-10yr Bond Index, MSCI Transport & MSCI Utility Index, PMA/IPD and RREEF Research

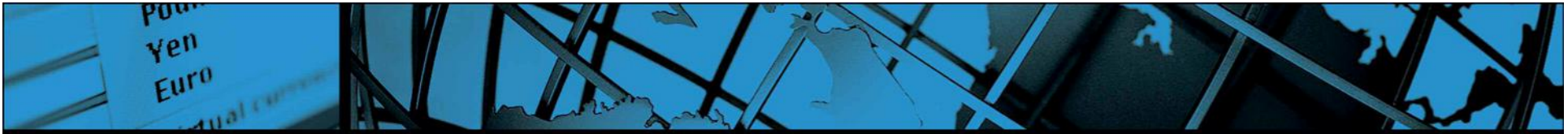


Expected Returns Vary by Sector

Expected Returns, mature assets	
q Rail	6-10%+
q Roads	10-13%
q Airports	11-13%
q Water/Wastewater	10-14%
q Distribution/Transmission	12-14%
q Seaports	15%+
Average expected return	6-15%+



Source: Booz Allen Hamilton, *Infrastructure Market, Interview Input, July 17, 2006*



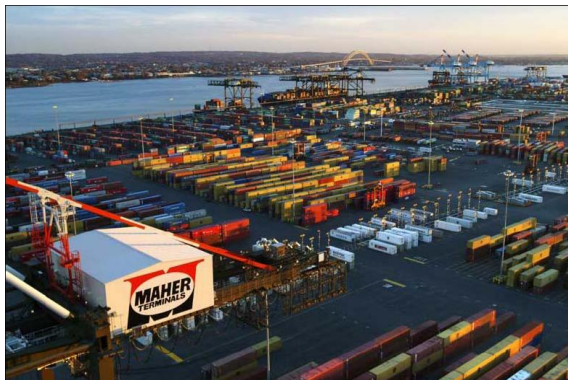
Section IV

Infrastructure Investment opportunities: a set of opportunities



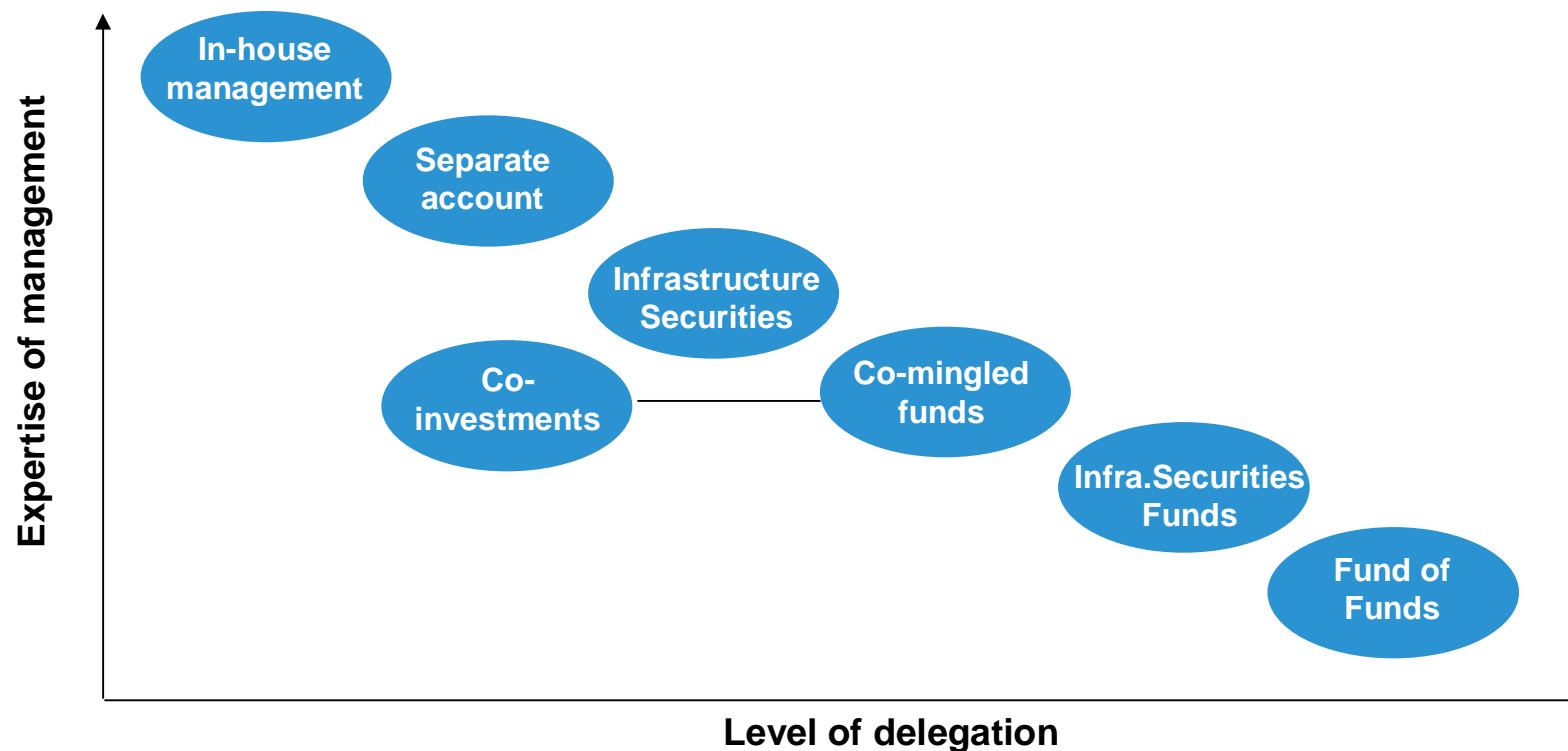
Access to Infrastructure Assets

- § Different ways to gain equity exposure to infrastructure
- § Direct investments in infrastructure assets/projects
- § Unlisted Infrastructure Fund
- § Listed Infrastructure Fund
- § Listed Infrastructure Company e.g. United Utilities
- § Infrastructure Securities Fund



Expertise and Willingness to delegate as a determinant of product selection

Alternative Options for Infrastructure Investing



Source: RREEF Research

Direct versus Indirect

Relative Strength of different models for investing in Infrastructure

Dimension	Direct Infrastructure	Private Infrastructure Funds	Infrastructure Securities
Access to Direct Infrastructure	üü	ü	ü
Access to Good Infrastructure Managers	ü	üü	üü
Scope for Portfolio Diversification	ü	ü	üü
Liquidity	ü	ü	üü
Costs of Trading	ü	ü	üü
Costs of Asset Management	ü	ü	üü
Performance volatility	ü	üü	ü

Source: RREEF Research

Note: üü Significant Strength ü Some Advantages ü Neutral



Section V

Conclusion



Summary

- § Infrastructure investment involves investing **equity in businesses that own/operate the physical structures and networks** used to provide essential services to society
- § Infrastructure as an asset class is evolving quickly due to **favourable supply and demand**
 - Growing global investment capital looking for secure assets and with tightening Real Estate markets institutional investors are looking with increased interests at alternatives
 - Global economic & demographic developments drive increasing opportunities for private sector participation in the sector
- § Infrastructure has investment characteristics of **long-duration assets** with stable, yield-dominated returns, which makes them compatible with requirements of pension and insurance portfolios
- § Infrastructure offers a **range of risk and return profiles** due to differences in performance from the different stages as well as specific sectors
- § **Gaining access to infrastructure** can be achieved through direct investment, listed infrastructure funds as well as unlisted, listed and securities funds
- § With the asset class maturing we expect to see **more products** coming to the markets, offering a wider range of opportunities suitable for different investment profiles