

## Incorporating Listed Infrastructure in Your Client's Portfolio



# What is infrastructure as an asset class?

**Infrastructure assets represent a broad mix of businesses that provide essential services to society.**

\* S & P Listed Infrastructure Assets - A Primer, March 2009



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## Infrastructure: A Differentiated Asset Class

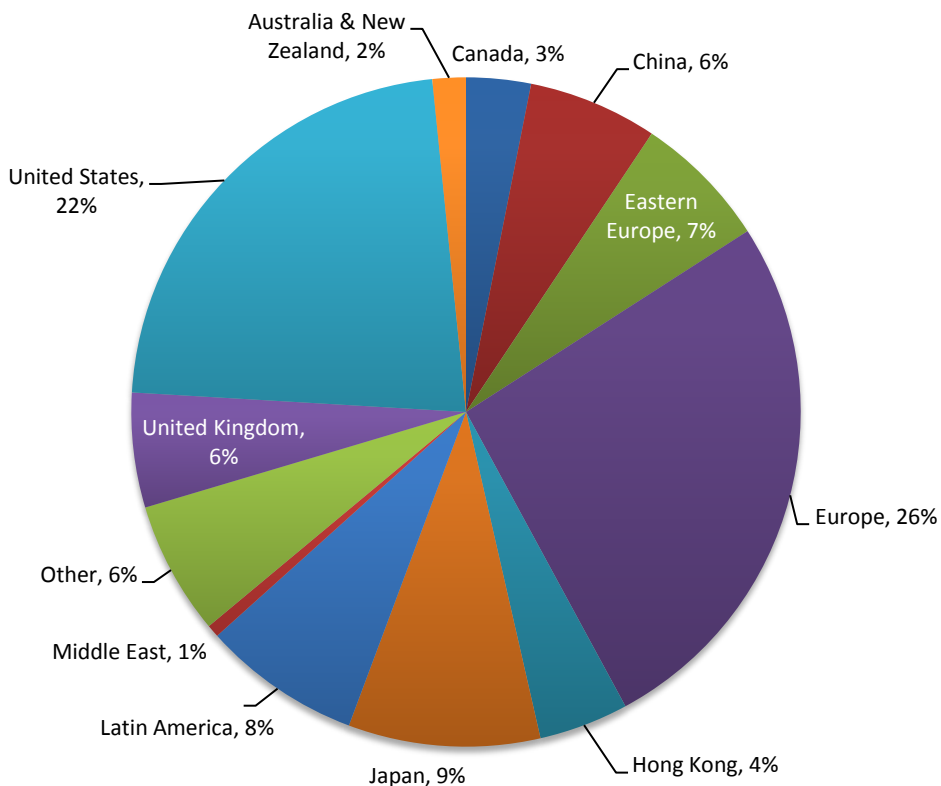
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### Unique investment characteristics:

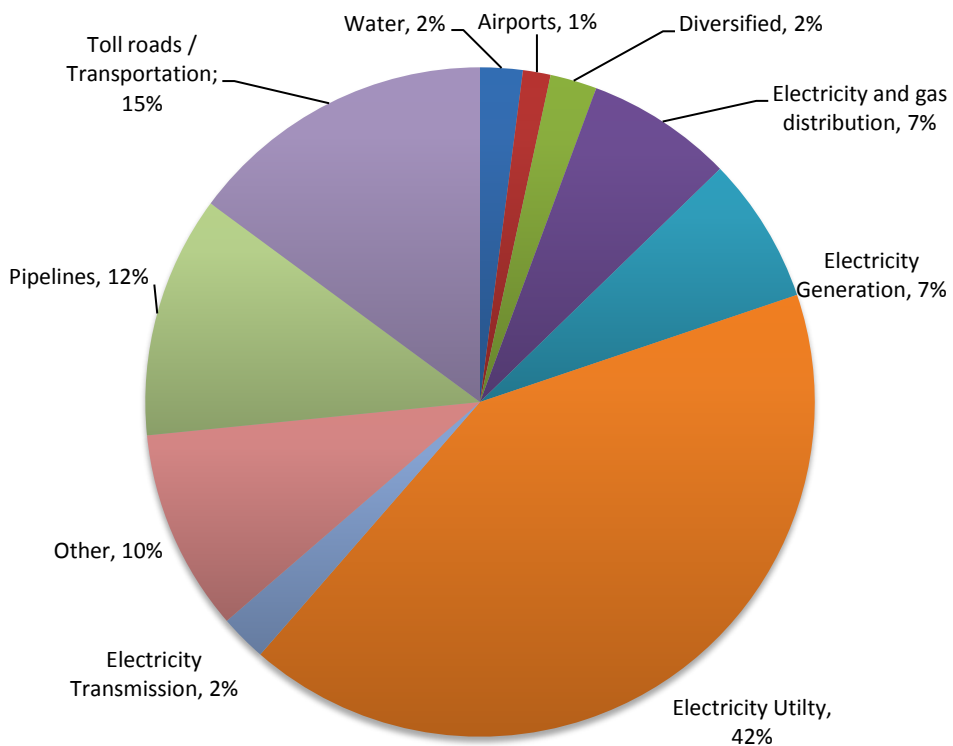
- ▶ Stable cash flows, potential for inflation hedging
  - Inelastic Demand, given scarcity of resource
  - Long useful life of asset
- ▶ Hybrid nature of both fixed income and capital gains
  - Best opportunity for capital gains from investments involving development risk, or some monopoly businesses
- ▶ Variety of risk and return profiles
  - Range from low-risk regulated assets to moderate-risk energy projects
  - Inflation linked assets
  - Less vulnerable to economic cycles

# What does the investable universe look like? - 800 Stock Universe

## Geographic exposure



## Subsector exposure



## Defensive characteristics of Infrastructure Investments

### Essential Services

- ▶ Daily usage, high volume
- ▶ Large customer base households
- ▶ Low risk of technological obsolescence
- ▶ Community focus

### Strong strategic position

- ▶ Long life, high value physical assets
- ▶ Significant capital requirements for competitor development
- ▶ Long term contracts / concessions
- ▶ High barriers to entry
- ▶ Planning and approval requirements

### Stable and predictable Cash flows

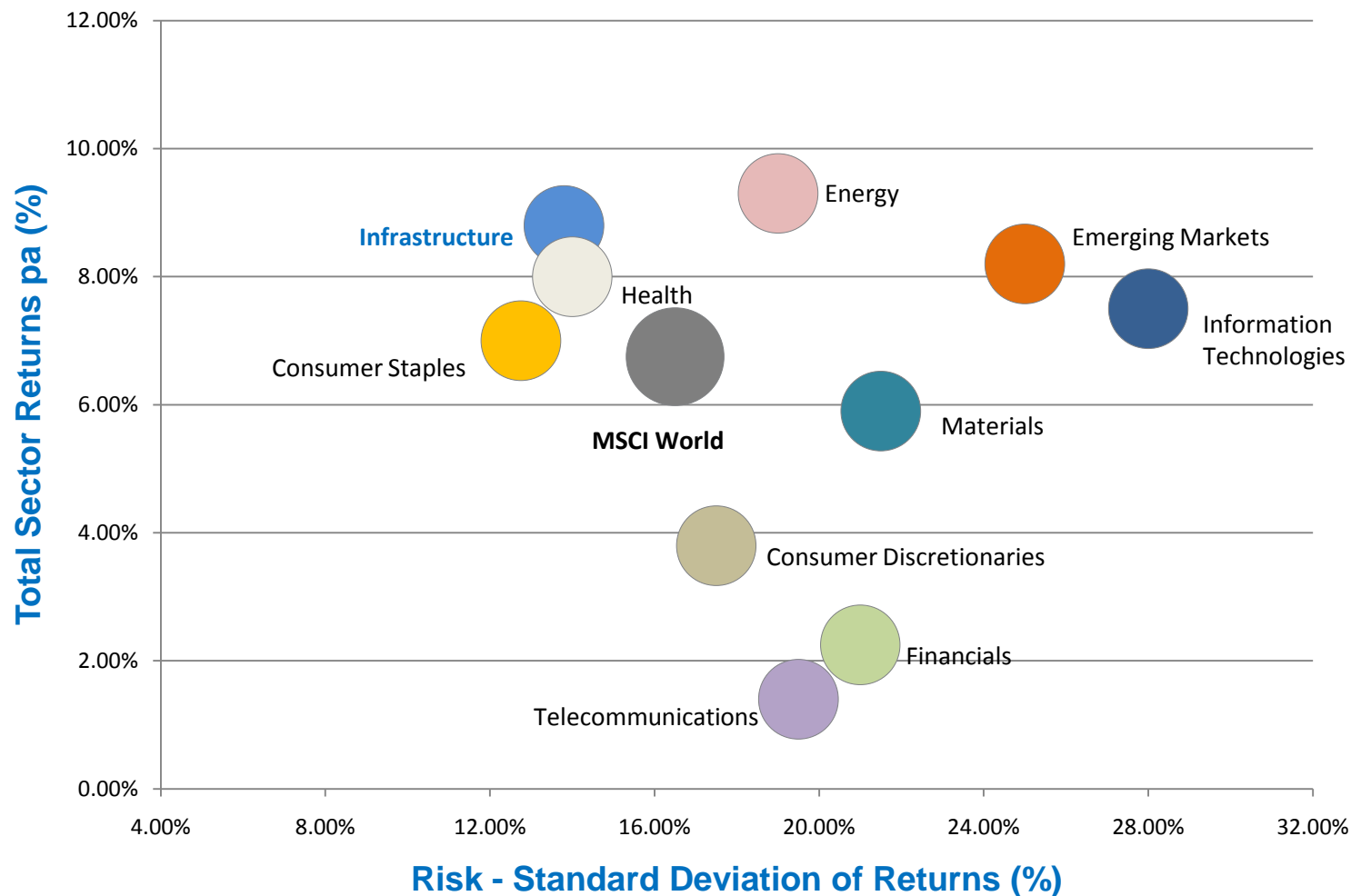
- ▶ Concessions arrangements
- ▶ Long term contracts.
- ▶ Captive markets
- ▶ Pricing power, inelastic demand.
- ▶ Low operating costs
- ▶ Prices and revenues often set by regulation
- ▶ Operating track record and history

### Consistent growth

- ▶ Long term growth correlated with GDP
- ▶ Inflation linked

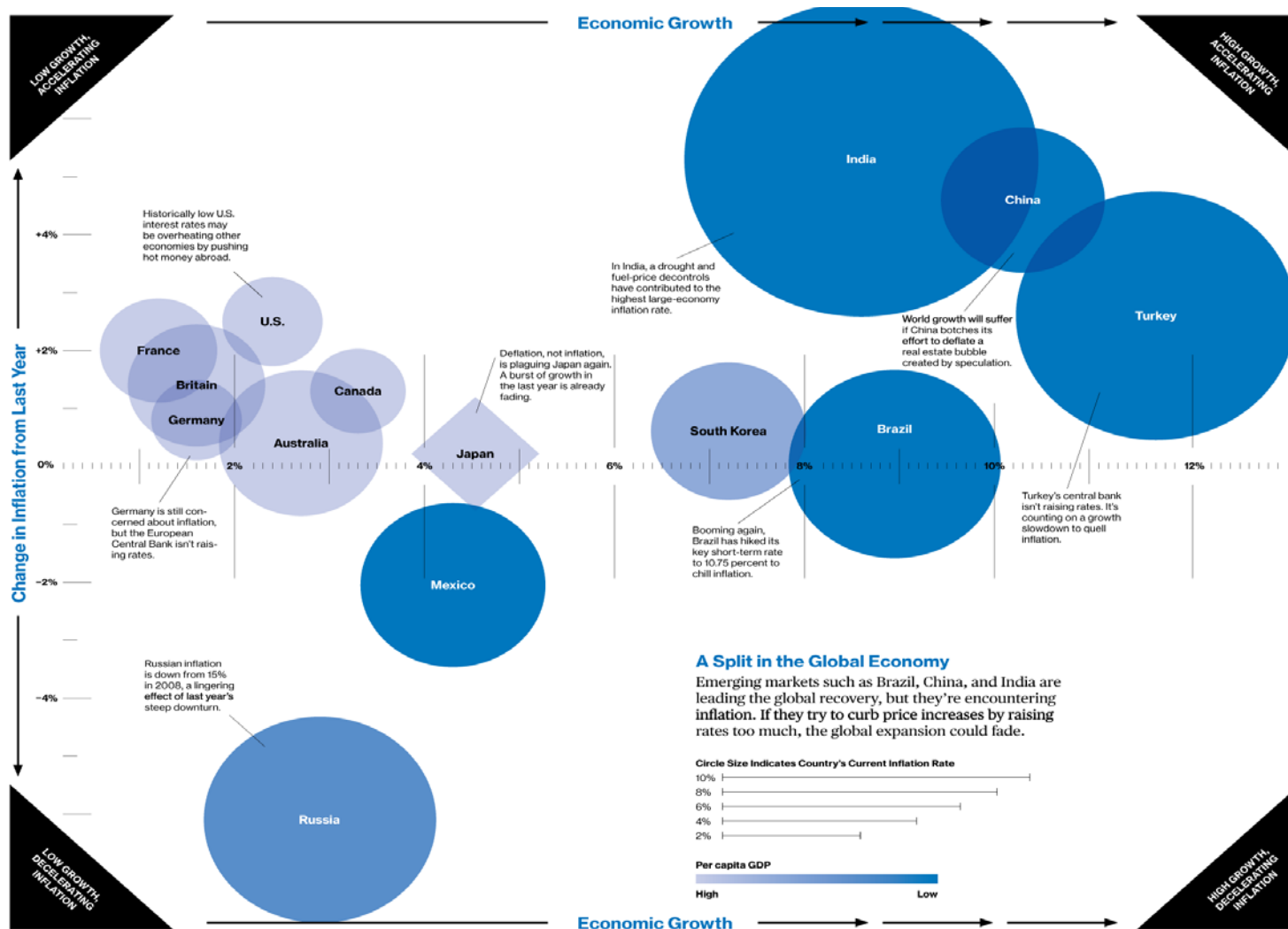
## Global Listed Infrastructure Relative Risk & Return

Source: Capital Innovations, LLC, UBS Global, MSCI World, Bloomberg, January 2004-March 2010 USD



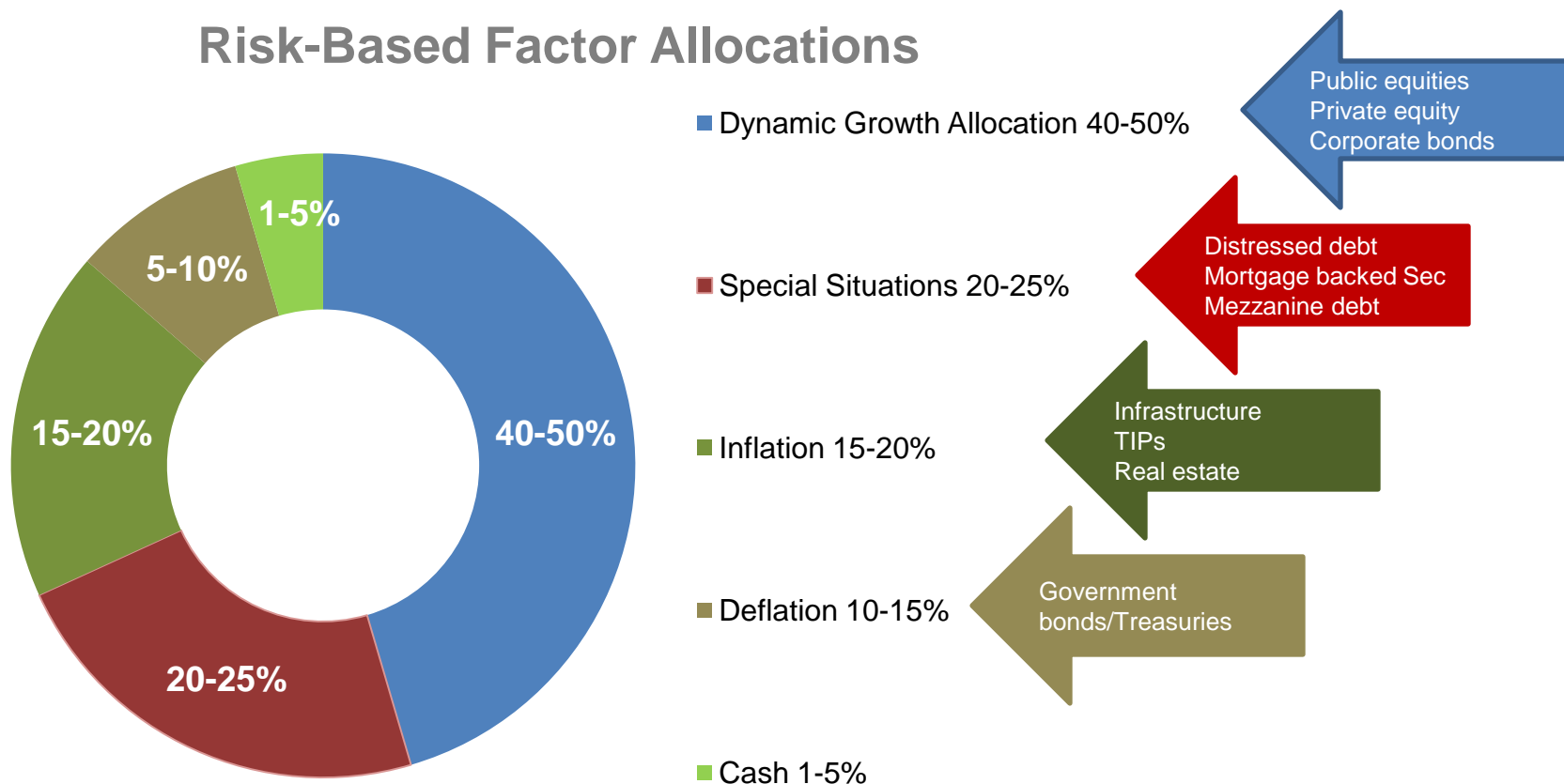
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# A split in the global economy poses challenges



# Liability Driven Investment Structure for Private Clients

## Risk-Based Factor Allocations



Portfolio Characteristics, holdings, sector weightings and country allocations are subject to change with market conditions. It should not be assumed that an investment in the sectors listed was or will be profitable. An investment in these "proposed" portfolio allocations is subject to certain risks including equity risk, market risk, and price volatility risk. Portfolio allocations change with market conditions. The investment performance of each allocations portfolio is affected by investment performance of each underlying allocation fund in which the model invests. The ability of the Asset Allocations Model to achieve its investment objective depends upon the ability of the underlying funds to meet their investment objectives and on the Advisor's decisions regarding the allocation of the portfolio's assets among the underlying funds. There can be no assurance that the investment objective of the Model Portfolio or any underlying fund will be achieved. Through its investments in underlying funds, the Model Portfolios are subject to the risks of the underlying portfolio investments.

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## Two Methods of Investing in Infrastructure

Risk/Return Profile, Liquidity and Beta Risk differ based on strategy:

	Unlisted Infrastructure Fund	Listed Infrastructure Fund
Nature of investments	10-15 investments in specific funds/projects	Exposure to broad market
Expenses	1% management fee and 10% performance fee	Low - .5%- .6%
Liquidity	Low – 10 year lock up period	High – Investments trade on an exchange and can be liquidates
Access	Low – Funds usually open only to qualified or institutional investors	High – securities bought on open market
Diversification	Customizable	Customizable
Beta Risk	Low	High

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# Inflation Pass Through: Contractual or Market Forces?

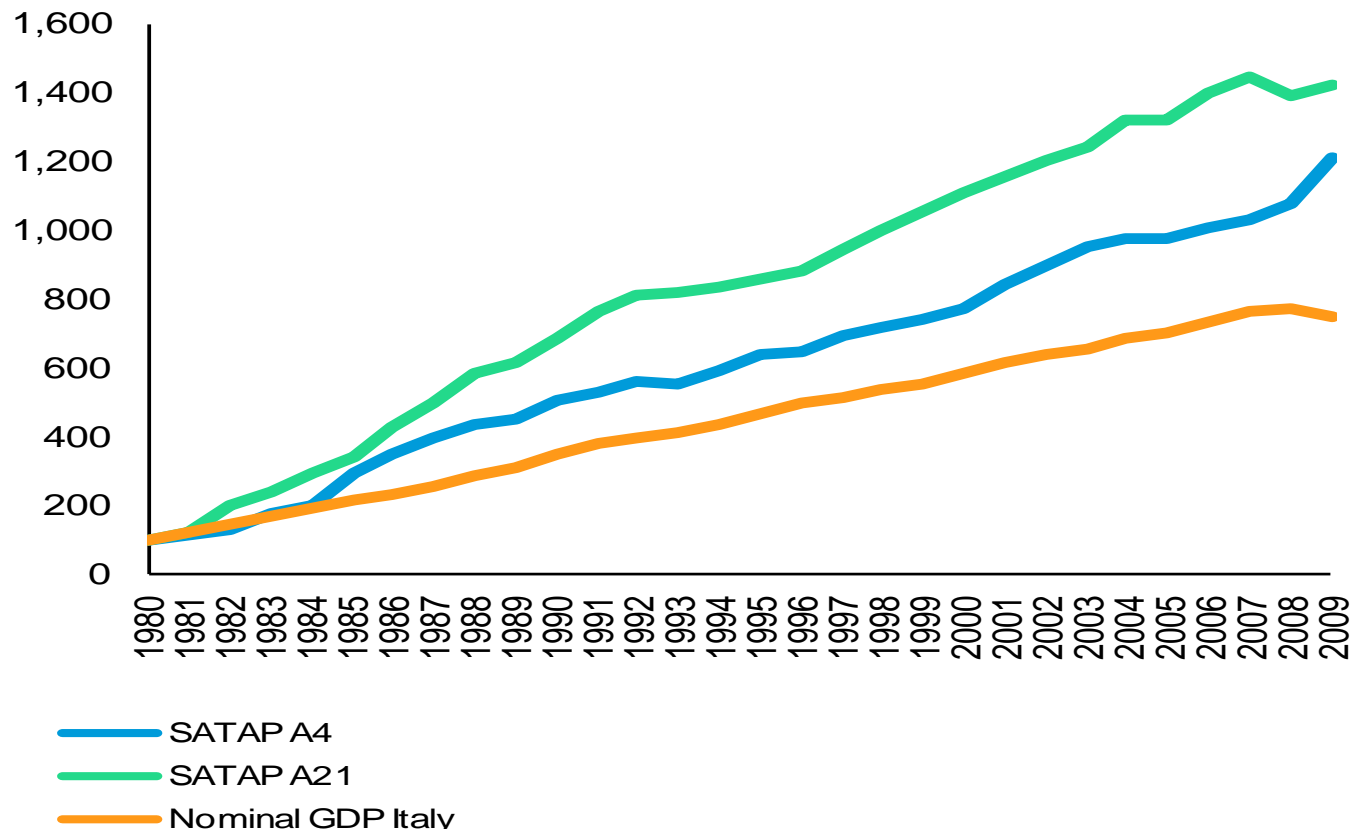
- As regulated monopolies, Preferred Infrastructure assets always have either **explicit or implicit inflation pass through** in their revenues
- In comparison, most other real asset types must rely on market forces, or supply & demand, to pass through inflation

Asset Type	Contractual		Market Forces		
	TIPS	Preferred Infrastructure	Real Estate	Timber	Commodities
Pricing Mechanism	Contractual (CPI)	Contractual or Regulated (Tariffs/Rates)	Supply & Demand (Rents)	Supply & Demand (Marginal Cost)	Supply & Demand (Marginal Cost)
Market Structure	NA	Monopoly	Competitive	Competitive	Competitive
Demand Volatility	NA	Low	Moderate	Moderate	High
Risk of Capital Loss	Low	Low	Moderate	Moderate	Moderate/High

# Preferred Infrastructure: Contractual Inflation Linkage in Toll Roads

CPI-linked Tolls + Real Traffic Growth = Revenues > Nominal GDP

Italian Toll Roads Nominal Revenue vs. Nominal GDP (1980=100)

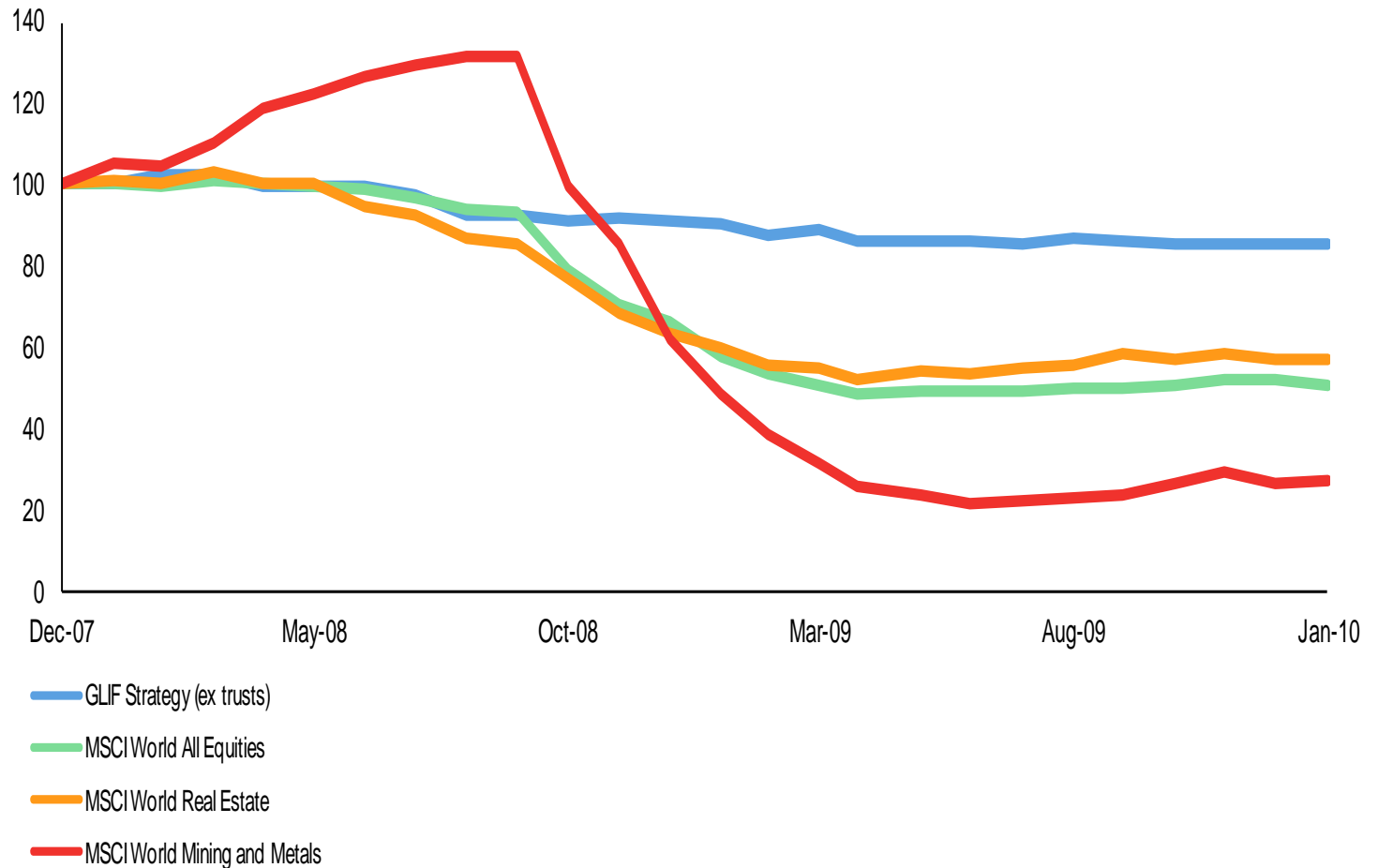


Source: SIAS

# Real Assets: Risk Profiles

The “Great Recession” has provided a stress test for real assets

FY09 Consensus EPS: Lazard’s GLI Strategy vs. Global Equities, Real Estate and Metals/Mining Companies



Information based on a representative account of Lazard Global Listed Infrastructure (AUD).

# Real Assets: Risk Profiles

Introducing Preferred Infrastructure to a Real Assets portfolio may help lower risk significantly while also providing attractive returns

- Infrastructure has performed with risk between equities and bonds

Annualized Returns and Volatility over 5, 10 & 15 years (31 December 2010)

Description*	5 Years		10 Years		15 Years	
	Return	Volatility	Return	Volatility	Return	Volatility
U.S. Inflation (CPI)	1.8	0.3	1.9	0.3	2.1	0.3
<b>Real Assets</b>						
U.S. TIPS	5.3	7.3	7.1	6.8	NA	NA
<b>Infrastructure</b>	<b>5.8</b>	<b>18.3</b>	<b>7.6</b>	<b>16.3</b>	<b>7.4</b>	<b>14.1</b>
Commodities	-5.7	27.5	1.8	25.0	5.2	23.0
REITS	3.0	32.3	10.8	24.9	10.8	21.1

As of 31 December 2010

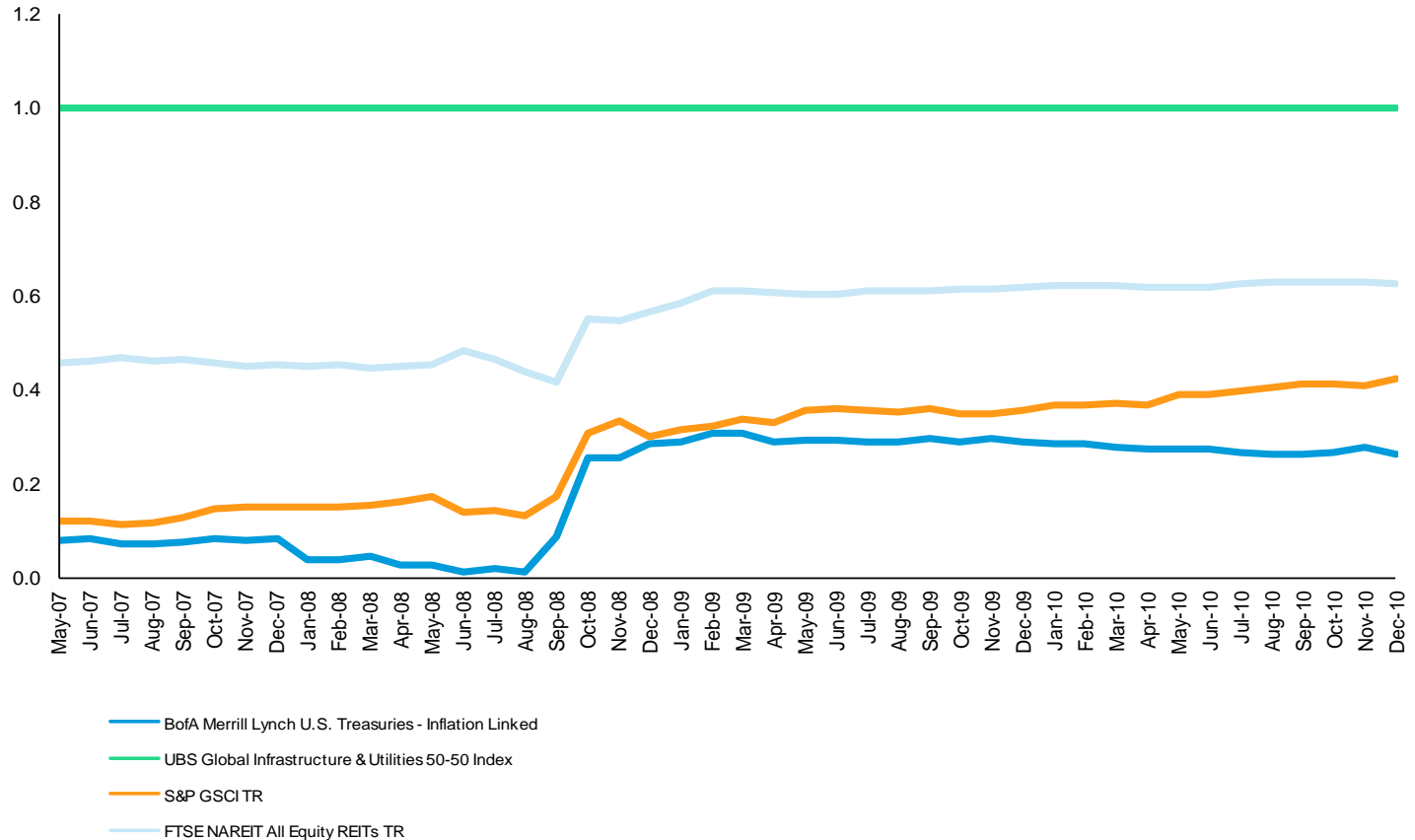
Index data represented by monthly returns derived from the following indexes:  
 CPI-U All Items Less Food And Energy U.S. City Average SA, Barclays Capital  
 US Govt Inflation-Linked, UBS Global Infrastructure & Utilities 50-50 Index,  
 S&P GSCII, FTSE NAREIT All Equity REITs, S&P 500, MSCI The World  
 Index, MSCI EMF

Source: Factset

# Real Assets: Correlations

Historical correlations suggest diversification benefits from adding infrastructure to a Real Assets Portfolio

Correlation between Infrastructure and REITs, Commodities and TIPS have been attractively low

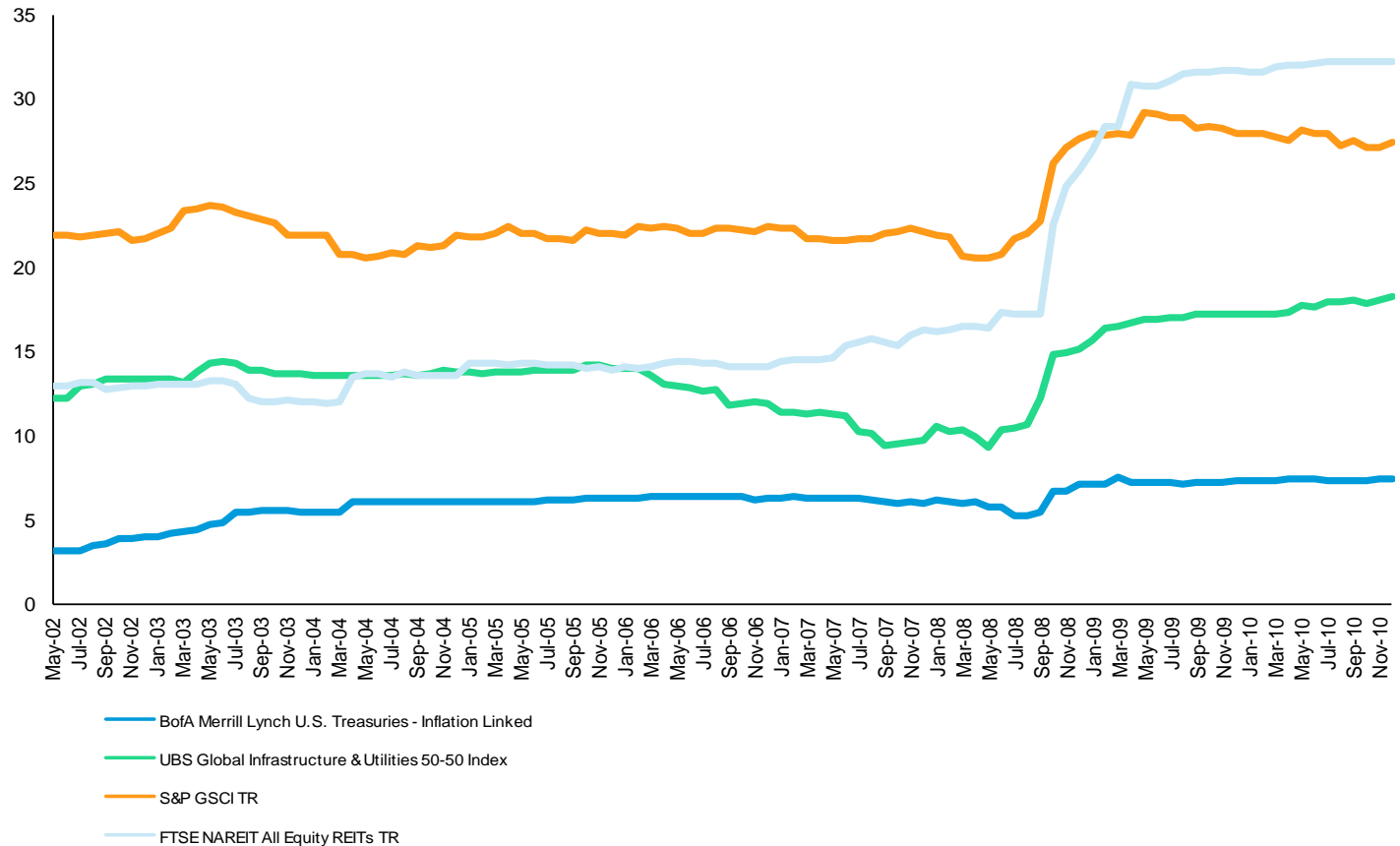


Data is rolling 10-year correlations  
Source: Factset

# Real Assets: Historical Volatility

Volatility of Commodities and REITs have increased dramatically, while Infrastructure volatility has remained far more consistent

Rolling 5-Year Standard Deviation (31 December 2010)



Source: Factset

# Efficient Frontier: 1995 – 2010

## Allocation to Infrastructure has had a meaningful impact

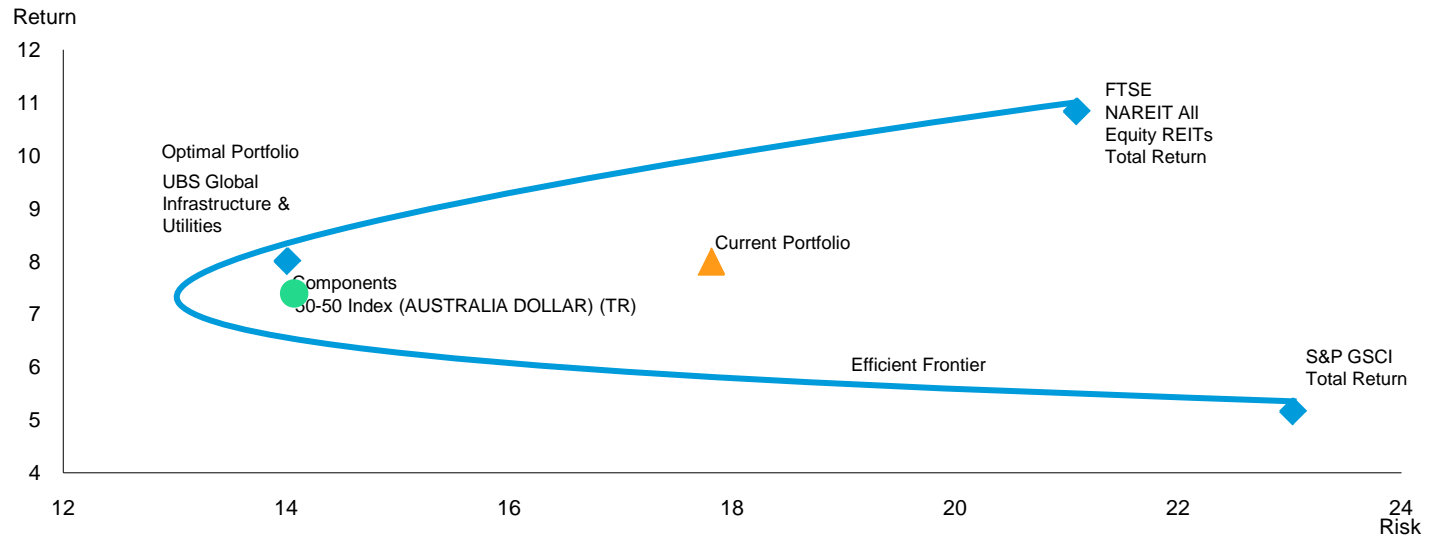
Equal weighting Real Estate and Commodities has produced good returns, but has taken on too much risk

Adding Infrastructure to this allocation would have substantially lowered risk, and achieved the same return

### Efficient Frontier: 1995 - 2010

Scenario: RA Scenario 1

Scenario Goal: 8.00



Portfolio	Risk (%)	Return (%)	Allocation		
			Real Estate (%)	Commodities (%)	Infrastructure (%)
Current	17.8	8.0	50.0	50.0	0.0
Optimal	14.0	8.0	23.8	9.6	66.6

Components		
Real Estate	21.1	10.8
Commodities	23.0	5.2
Infrastructure	14.1	7.4

Source: FactSet Research Systems

# Preferred Infrastructure as a Real Asset

## Allocating to Preferred Infrastructure

Investors seeking increased inflation protection, lower risk and attractive returns are increasingly allocating to Infrastructure

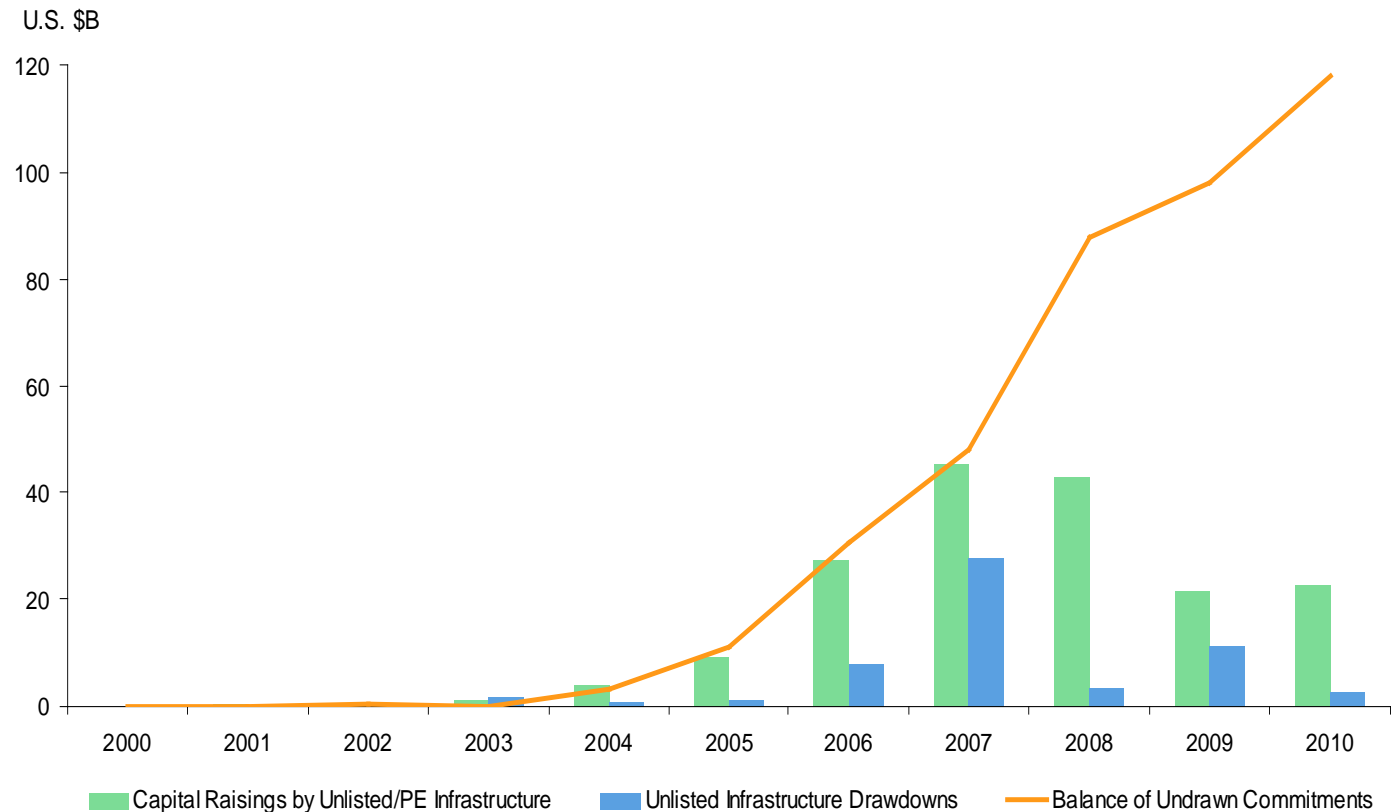
Existing Allocation	Rationale for Preferred Infrastructure
TIPS	<b>Increased return</b> Tips offer a negative real yield and debt market return expectations are muted; Lazard's portfolio has a 4.7% dividend yield
Commodities	<b>Increased inflation protection</b> Commodities have provided negative real returns over the long run and recently have been very volatile
REITS	<b>Lower risk profile</b> REITS have been one of the most volatile global asset classes

# Unlisted/PE Infrastructure Markets

## Raisings, Deals and Undrawn Commitments

### Unlisted Infrastructure Market:

- Since 2000, more than \$175bn has been raised for Unlisted/PE Infrastructure investment.
- Unlisted has participated in a total of \$115bn of M&A deals since 2000.
- Assuming 50% debt funding for these M&A deals would require total equity drawdowns of \$57bn.
- This results in a balance of undrawn commitments of \$118bn today.



As of 31 December 2010  
 Source: Preqin Ltd, Macquarie Group and Lazard estimates.  
 Shown for illustrative purposes only.