Is Infrastructure the Ultimate Inflation Proof Asset Class?

Presentation to PortfolioConstruction Conference 2008

Agenda

- Desirable investment characteristics in inflationary times
- The infrastructure market
- Characteristics of infrastructure assets
- The role of infrastructure in a portfolio

Inflationary protection

Very few companies can fully, and in a timely manner, recover the full impact of an increase in inflation. However, businesses that exhibit the following characteristics are relatively attractive in times of inflation

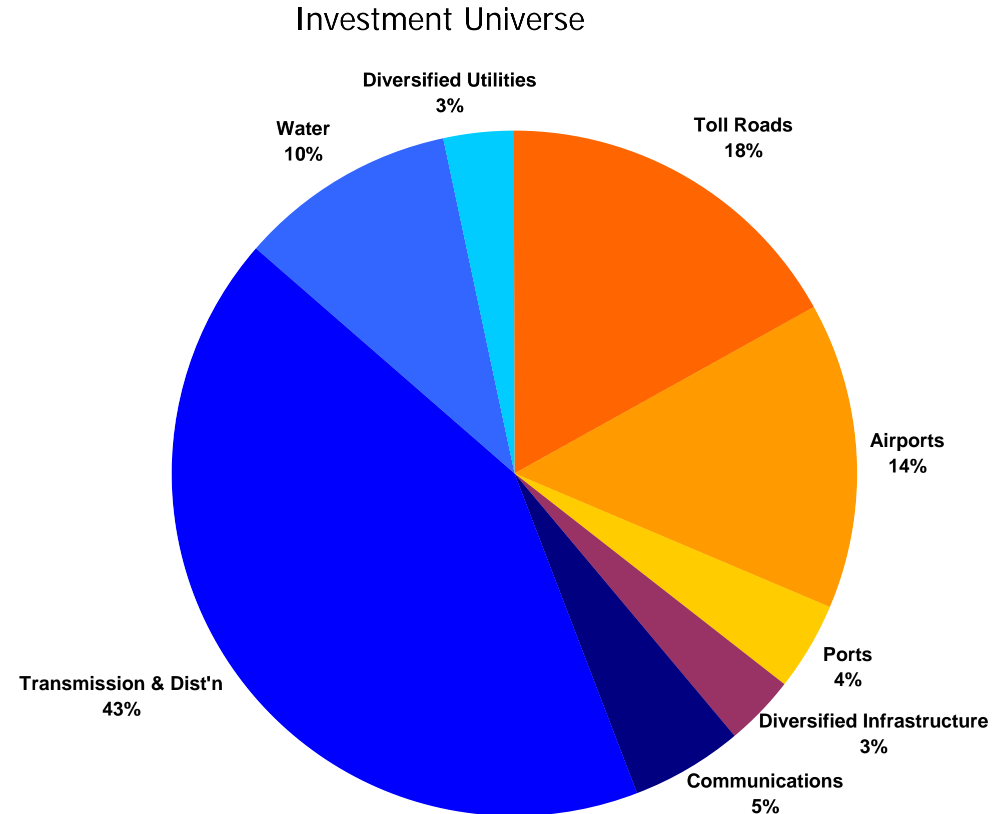
- Robust revenue profile:
  - Low threat of competition
  - Low elasticity of demand
    - Combined, these provide pricing power to pass through cost increases
  - The 'holy grail' is a CPI-linked revenue stream
- Contained expense growth:
  - Fixed costs are preferable to variable costs
    - Low sensitivity to wage claims and increases in other input costs
    - Increased earnings over time (increased revenues, cost pressures subdued)
- Capital structure:
  - Debt is desirable due to a reduced real value of principal, providing interest rates are fixed (or hedged)

The Infrastructure Market

Listed infrastructure is dominated by energy transmission & distribution, toll roads and airports.

- The universe of infrastructure securities that meets Magellan's definition of "infrastructure" is approximately 200 companies with a market capitalisation of more than US$1,400bn.

- Over the long term, we expect the listed market to grow substantially as a result of;
  - governments choosing to sell assets though an IPO rather than trade sale;
  - further assets being acquired by existing listed entities;
  - assets being listed to comply with liquidity events in unlisted funds; and
  - integrated conglomerates spinning off pure infrastructure vehicles.



Utilities

Utilities are generally monopolies providing society with essential services. Earnings are therefore normally regulated.

- Regulation provides a return on a Regulated Asset Base (RAB) – in other words the regulator determines an appropriate return for the assets owned by the entity.

- The allowed return on RAB is generally more than the entities true Weighted Average Cost of Capital (WACC). This occurs because:
  - The regulator will always err on the side of being generous; and
  - Regulated entities work hard to game the regulator.

- The allowed returns are generally set for a defined number of years.

- Consequently, investors are prepared to pay a multiple of the RAB depending on their view of **what margins over WACC will be allowed and for how long.**

- It is difficult to find a regulated utility whose share price differs significantly from its true value.

Utilities

Regulated utilities, particularly those in the US, offer very high levels of protection against the impact of a spike in inflation.

- Generally, the regulator is required to adjust charge out rates to provide the utility with an appropriate return on invested capital. This process therefore requires the regulator to take into account the impact of:
  - higher nominal bond rates on their weighted average cost of capital (WACC);
  - higher inflation on their operating costs;
  - higher interest rates on their debt costs;
  - higher construction costs on new assets being built;
  - inflation on the value of the assets they own.

- Consequently, with one proviso, regulated utilities enjoy very high levels of protection from a spike in inflation. Note that demand elasticity for energy and water is very low and there are few substitutes.

- The key proviso is regulatory lag. In US markets this is generally minimal. In the UK and Australia, the delay can be up to 5 years.

- Beware of "utilities" in competitive markets!

Toll Roads

Provided they use high levels of interest rate hedging, most toll roads also provide high levels of protection from a spike in inflation.

- The typical toll road concession is a binding legal contract that:
  - Entitles the concession company to collect tolls on the road for a defined number of years;
  - Entitles the concession company to increase tolls in a way defined in the concession deed;
  - Requires the concession company to adequately maintain and operate the road/network and to hand it back to government at the end of the concession period in such a state that major maintenance is not required for a number of years.
- Because of the toll increase mechanisms in most concession deeds, toll road revenues increase with inflation.
- Toll roads, and particularly urban toll roads, generally have high EBITDA margins.
- Other than road widenings, the ongoing capex on a toll road is typically less than 5% of revenues.
- Beware of toll roads in non-OECD countries where the right to increase tolls is not fully protected at law.

Typical Toll Road Pricing Mechanisms

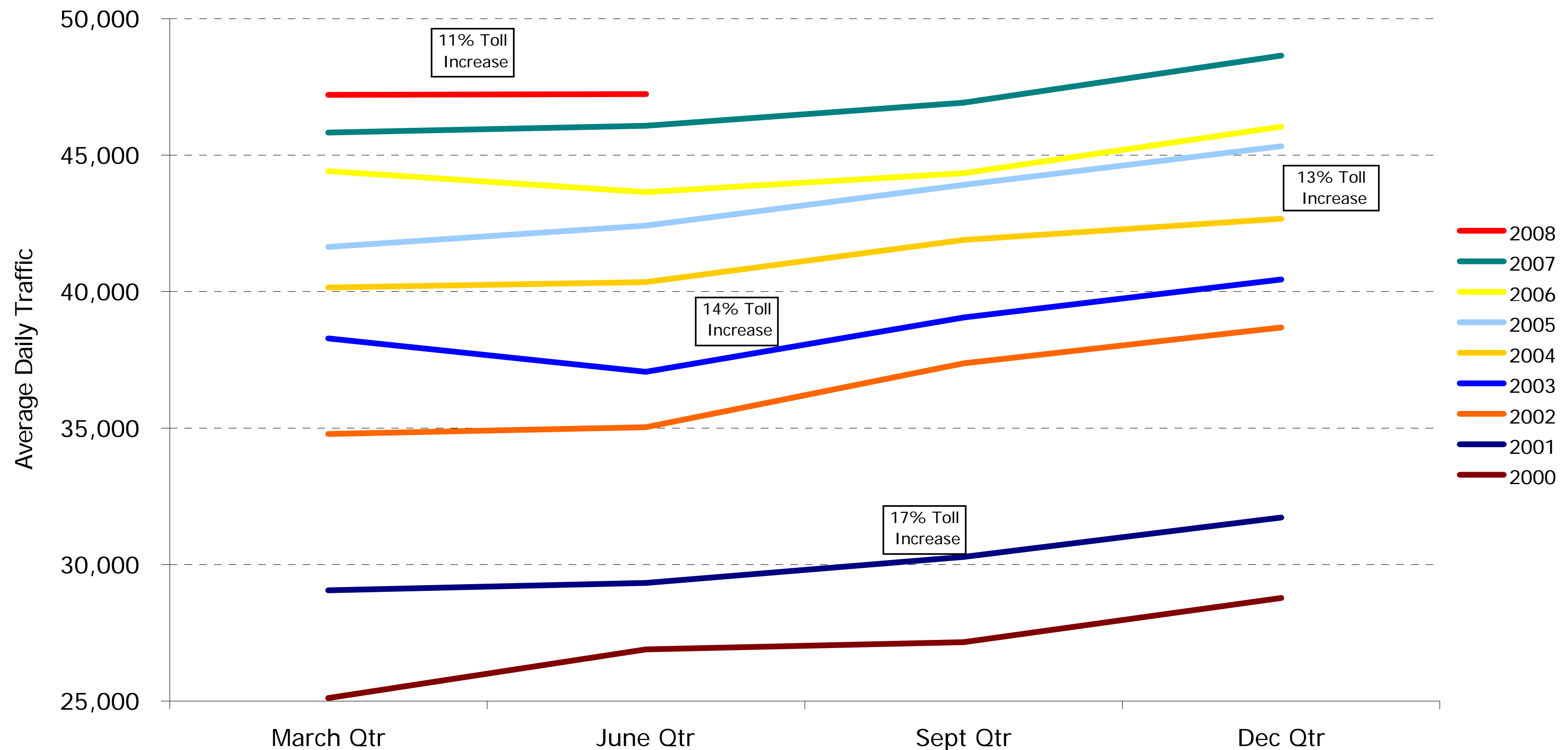
The most attractive toll roads have the ability to increase tolls by at least the rate of inflation.

Asset	Location	Basis of Toll Increases	Frequency
407ETR	Canada	At Owners Discretion	At Least Annually
APRR	France	85% of CPI	Annually
Atlantia	Italy	70% of CPI	Annually
Brisa	Portugal	90% of CPI	Annually
Chicago Skyway	USA	Greater of 2%, CPI or Nominal GDP per Capita	Annually
CityLink	Australia	Greater of 4.5% or CPI to 2015 then CPI	Quarterly
Eastern Distributor	Australia	Greater of 4.1% or basket of 67% AWE & 33% CPI	In 50 cent increments
M6Toll	UK	At Owners Discretion	Annually
Western Harbour Tunnel	Hong Kong	CPI	Annually

Source: Magellan Asset Management, underlying asset operators

Toll Roads – Elasticity Impacts

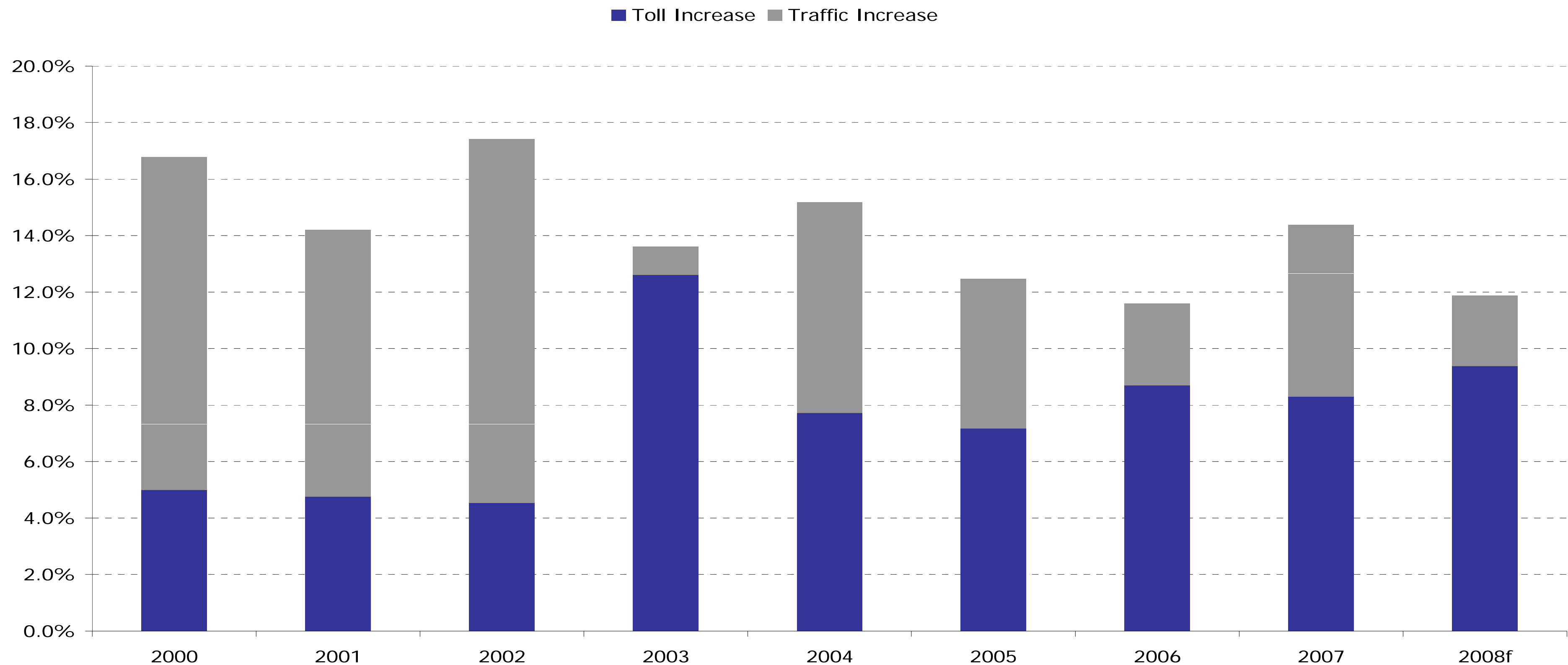
Tolls on the Eastern Distributor have been increased 4 times since it opened with no measurable impact on traffic numbers. This is increasingly common for urban toll roads.



Source: Transurban Group

Toll Roads – Elasticity Impacts

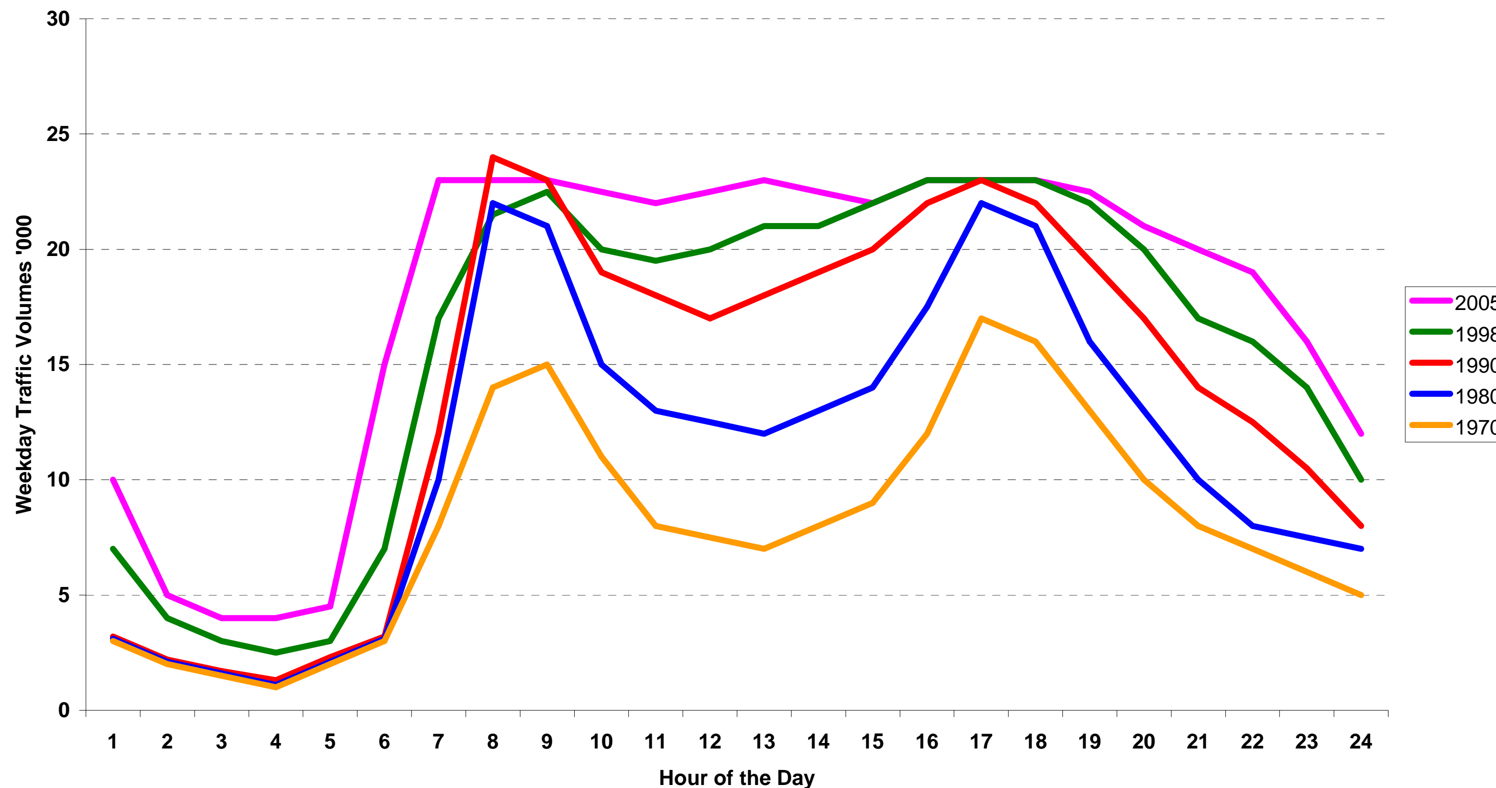
The 407ETR in Toronto Canada has increased tolls by an average of 8% pa while traffic has grown at an average of 7% pa.



Source: 407ETR International

The 401 – the Primary Competing Route

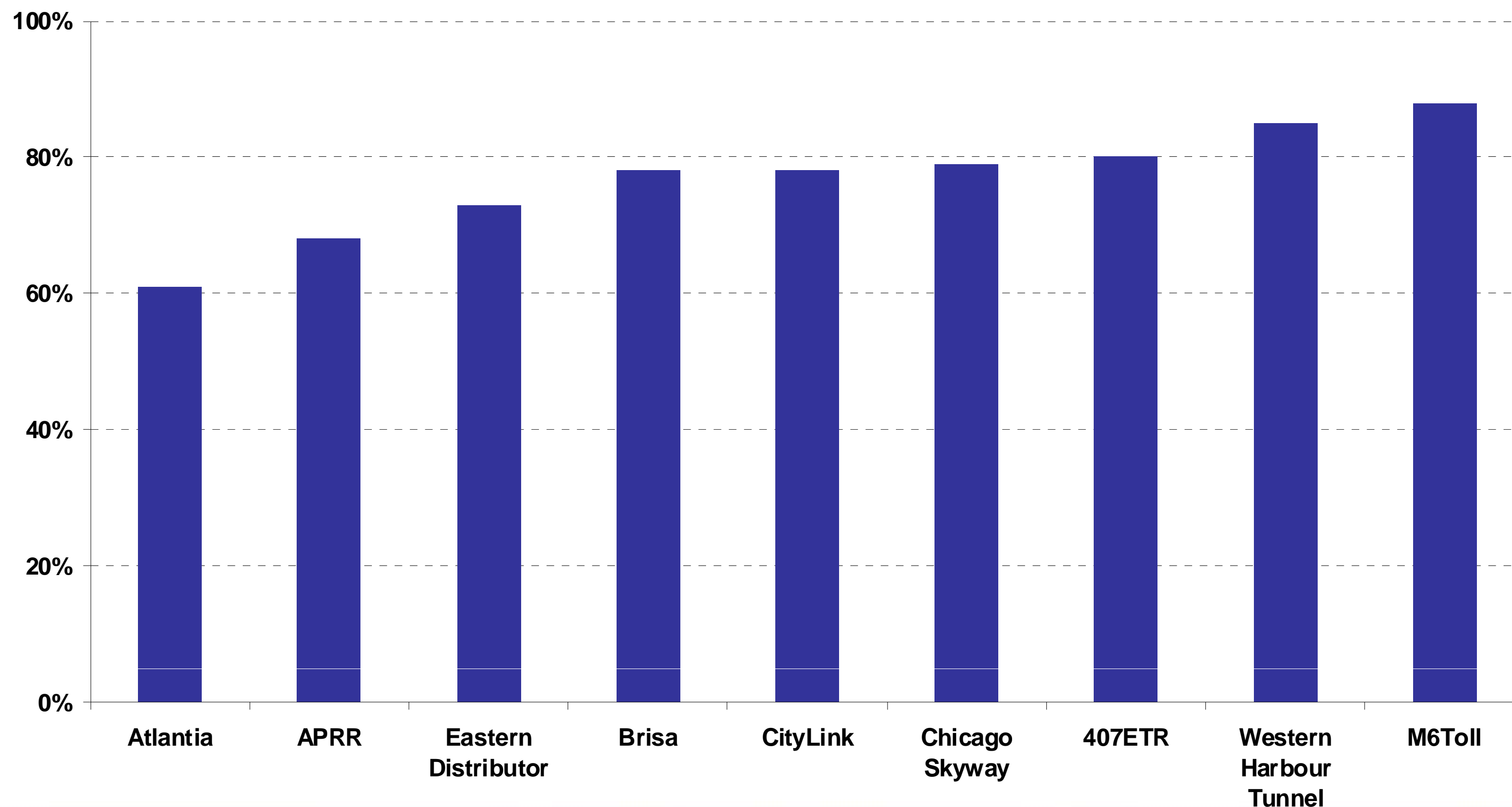
The elasticity of any increase in toll rates will depend on the viability of the alternative route (i.e. substitute product). The 407ETR's key competitive route shows why elasticity levels trend towards zero over time on most toll roads.



Source: Ontario Province Ministry of Transportation

Typical Toll Road EBITDA Margins

High and increasing EBITDA Margins mean that increases in tolls flow through immediately as higher operating cash flow.



Source: Magellan Asset Management, underlying asset operators
The average industrial company exhibits EBITDA margins of 14.6% (Merrill Lynch, 2008)

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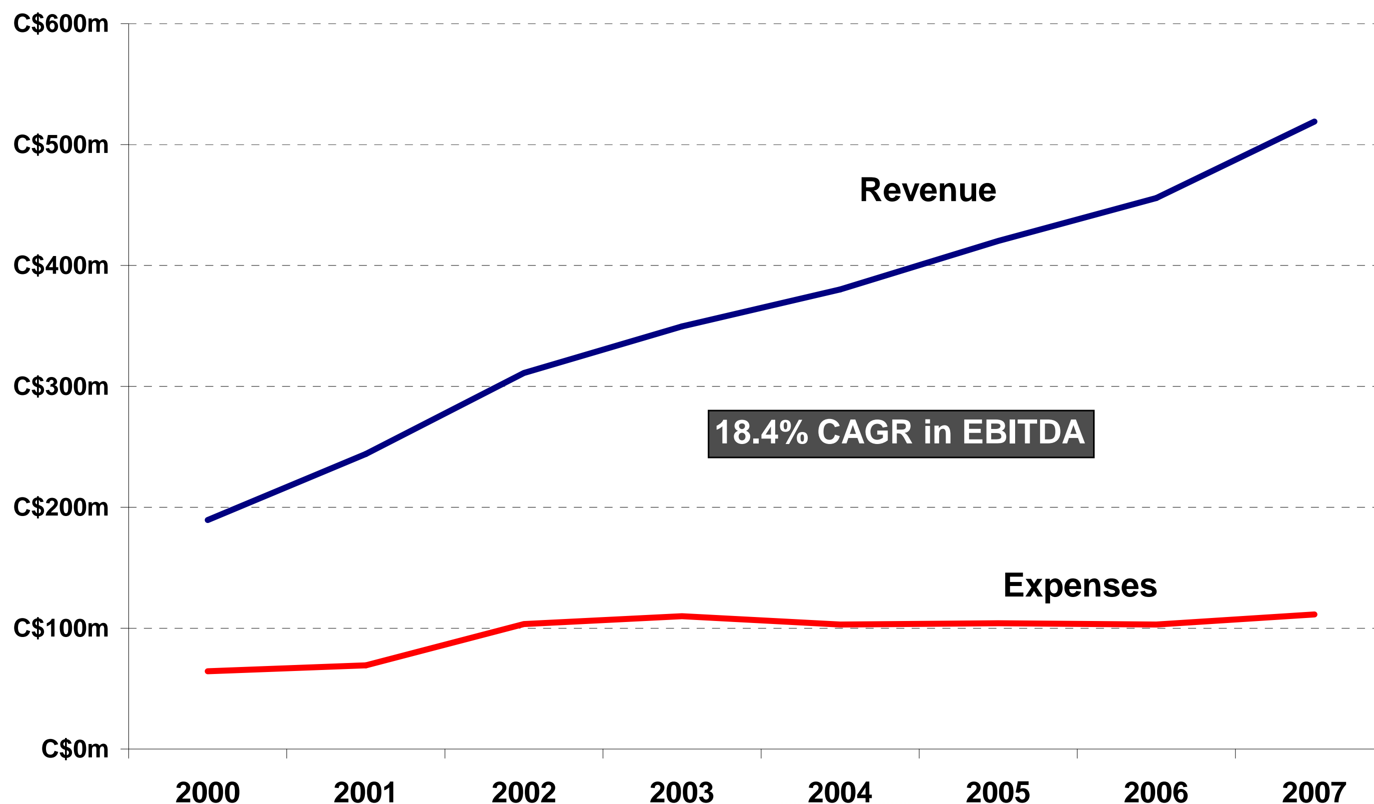
Toll Roads – Operating Cash Flow

A high EBITDA margin means that the inflationary impact on operating costs has only a marginal impact on free cash flow.



Source: 407ETR International

Airports

Airports have a lower level of inflation protection because a substantial component of their revenues is reliant on consumer spending.

- Airports fall into two primary categories:
  - Single Till, e.g. BAA
  - Dual Till, e.g. Sydney, Auckland, Frankfurt, Copenhagen and Zurich.

- Revenues fall into two primary categories:
  - "aeronautical" operations are either regulated or there is the threat of regulation if the airport and airlines can't agree on appropriate landing charges
  - "non-aeronautical" operations are unregulated.

- Note that airports generally operate within less formalised arrangements than toll roads, e.g. government often retains the right to regulate all aspects of their operations.

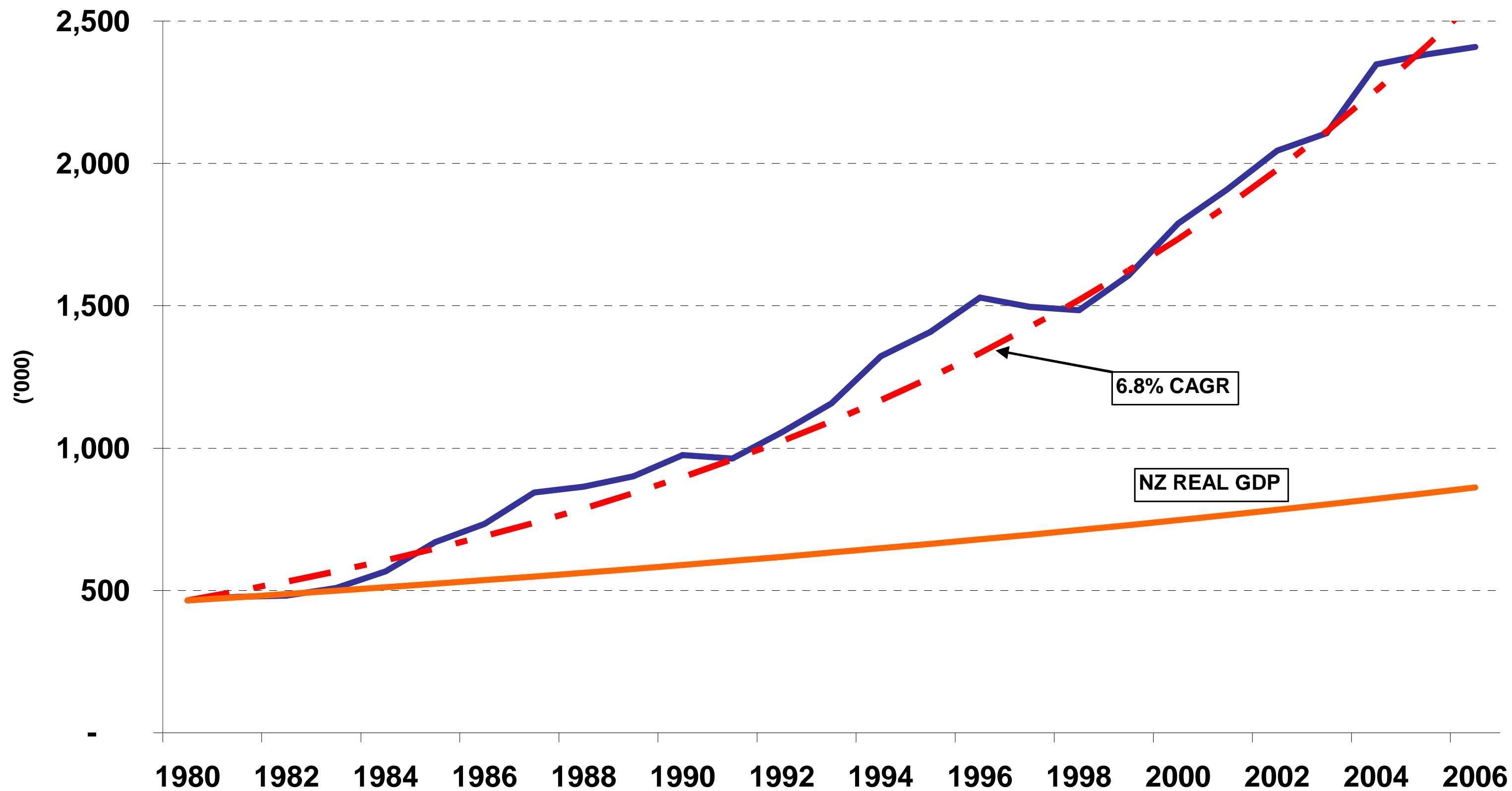
- Airports generally do not directly operate the retail outlets but instead act as head lessor taking a share of turnover with minimum guaranteed rents. Car parking is generally run directly by the airport.

- Airports, such as Sydney and Auckland, with a large "origin & destination" proportion of passengers are robust franchises that have many monopoly like features. Airports, like Vienna and (until the demise of Swiss Air) Zurich, are used as a hub and a more prone to competition from other potential hubs.

Source: Magellan Asset Management, underlying asset operators
The average industrial company exhibits EBITDA margins of 14.6% (Merrill Lynch, 2008)

Resilience Through the Cycle

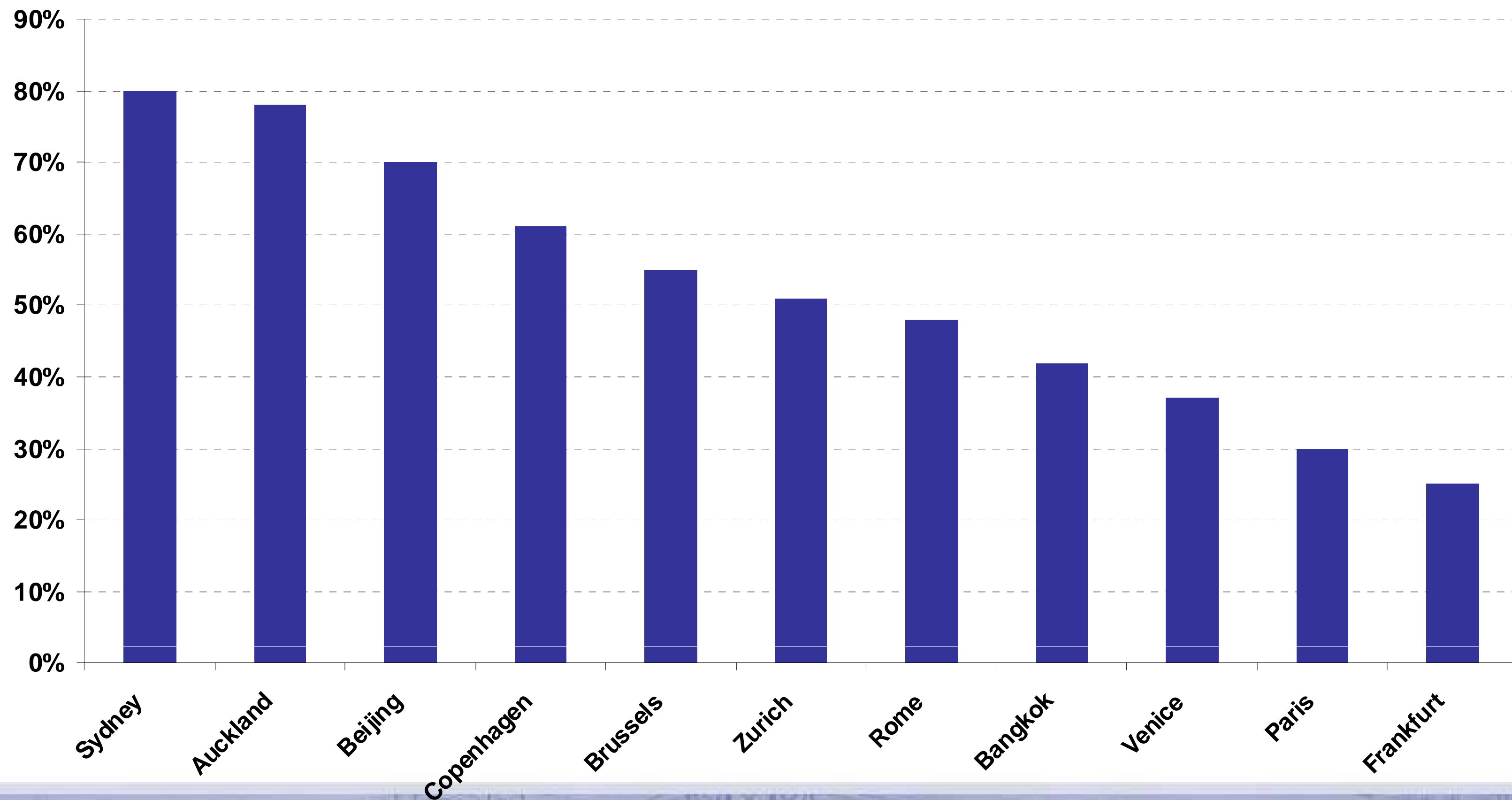
Airport passenger growth has been more than double GDP growth.



Source: Statistics New Zealand

Airport EBITDA Margins

Airport EBITDA Margins vary considerably depending on the extent to which baggage handling is outsourced.



Source: Magellan Asset Management, underlying asset operators
The average industrial company exhibits EBITDA margins of 14.6% (Merrill Lynch, 2008)

Debt Hedging is Important

Infrastructure stocks will high levels of interest rate hedging provide the best inflation protection.

- The average ungeared infrastructure asset has very effective inflation protection.
- Once substantial levels of gearing is added (that is prone to interest rate increases) that protection falls away.
- The better managed infrastructure vehicles recognise this and hold substantial levels of interest rate hedging.

Debt Levels & Hedging of Infrastructure Subsectors

Sector	Gearing[1]	% Hedged[2]
Toll Roads	44%	83%
Airports	34%	84%
Ports	8%	85%
Utilities	47%	93%
Communications	68%	95%
Diversified	51%	83%

1 Proportionate Debt / (Proportionate Debt + Equity Value)
2 Proportion of debt interest rate hedged for next 2 years
Magellan Infrastructure Fund portfolio as at 30 June 2008

Source: Magellan Asset Management, underlying operators

Summary

Infrastructure as an asset class is well insulated from the negative impacts of a rise in inflation.

- Infrastructure assets, and particularly regulated utilities and toll roads, enjoy operating characteristics that provide very high inherent protection from the effect of a spike in inflation.

- However, the high levels of gearing commonly used in this sector can reduce that level of protection quite significantly.

- Investors concerned about the prospects of a re-emergence of high levels of inflation should look for infrastructure companies that use high levels of interest rate hedging on at least a three to five year rolling basis.

Portfolio Construction

Infrastructure is increasingly becoming a core component of investor portfolios

- Global infrastructure is a very significant part of the global investment universe. The total market capitalisation of the benchmark is $US 1.8 trillion whilst the global REIT universe is approximately $US 600 billion.*
- Many institutional investors around the world are increasing allocations to infrastructure, often as a part of their inflation-linked asset pool
- Some commentary has suggested that an infrastructure allocation should be funded from property; however:
  - The inflation linkages of infrastructure do not hold true for property; and
  - Income streams from property display a higher correlation to economic activity than infrastructure

  Thus the risk/reward outcomes are different, and infrastructure should be considered a separate asset class.

* As at 30 June 2008. Source: UBS

Q&A

* As at 30 June 2008. Source: UBS

Magellan Infrastructure Fund

Product Characteristics

Universe	Listed infrastructure securities with a focus on OECD countries.
Eligible Securities	Listed infrastructure securities, converting securities (including debt), preferred securities and unlisted securities with an expressed intention to list within 12 months of acquisition.
Number of Securities	Target 15 - 25 investments
Dual Performance Benchmark	A Performance Fee is only payable when the fund outperforms both the: • UBS Global Infrastructure & Utilities Net Total Return Index ($A Hedged); and • Australian 10 year bond yield
Currency	Fully hedged
Management Fee	1.06%
Performance Fee	10.1% of out-performance (subject to a high water mark & payable 6 monthly)
Minimum Investment	A$20,000 or wrap minimum
Mandate Restrictions	• 10 – 35 securities • Limit of 20% toward an individual security (OECD) • Limit of 10% in an individual security (non-OECD) • Limit of 20% in non-OECD countries
Platform Availability	BT Wrap, Macquarie Wrap, Summit, Avanteos

Let's start thinking about…

This session was:

1. awful
2. mediocre
3. good
4. excellent

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