Queensland Motorways

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Stanford Global Projects Center

The Global Projects Center (GPC) is an interdisciplinary research center at Stanford University that seeks to facilitate understanding of the financing, developing and governance of strategic infrastructure assets.

We conduct research on infrastructure **finance**, **development**, and **investment**



Background on Concession Financing of Brownfield Assets



Concession Financing – U.S. Example

Chicago Skyway

- 2004: RFQ
- 10x respondents
- 5x selected to compete
- 99 year concession to collect tolls
- Fixed tolling schedule



What is the value of the Chicago Skyway?

Complete Responses

- Abertis Infrastructure: \$505mm
- Vinci: ~\$700mm
- Cintra/Macquarie: \$1.83bn

Hurdles for Concession Financing

Chicago Skyway Ex-Post Re-valuation

Figure 3

Chicago Skyway Transaction Projected Increased Revenues (Net Present Value) Revenues Available to repay Franchise Fee of **\$1.80 Billion**

Annual Traffic Growth	With 2% Floor	With 3% CPI	With 4% GDP	With 5.5% GDP	With 7% GDP	
Gross Revenue Increase in Billions						
No Growth	\$ 1.47	\$ 1.92	\$ 2.60	\$ 4.48	\$ 8.62	_
Historic Growth (3.78%)	\$ 8.37	\$ 13.08	\$ 21.59	\$ 49.89	\$ 124.72	- 🥒 \$322bn lost Gross Revenue!
Moderate Growth (2%)	\$ 3.48	\$ 4.93	\$ 7.36	\$ 14.85	\$ 33.26	
Aggressive Growth (5%)	\$ 16.63	\$ 27.85	\$ 48.90	\$ 121.97	\$ 322.38	

Source: Enright, The Chicago Skyway Sale: An Analytical Review

- Cost of Equity (Corporate Profit v. Public Funding)
 - Includes Risk
- Ex-post project re-valuation
 - Does not include Risk

The Costs and Benefits of Concession Financing

Drivers of Value Creation in Concession Financing

- Risk Transfer
- Governance Change
 - Long Term Management
 - Stranded Assets
 - Opportunity for Innovation / Practice Changes

Impediments to Concession Financing

- Valuation
- Transaction Costs an impediment to competition
- Value Capture
 - Corporate Profit v. Public Funding



Queensland Motorway Transaction

State Financial Situation

- Deteriorating Balance Sheet post-GFC
- Ratings Downgrade
- Unfunded Pension Liability

2009 Proposal to Sell Concession

- Proceeds for Pension Liability Payment
- Significant Public Response
- Question of Correct Valuation

Concession Proposal Public Responses

It is possible that the private sector could attempt to extract excess returns for taking on the ownership or management of public assets. This would be an income transfer from taxpayers to the private sector equity holders and therefore not in the general interests of taxpayers.

Table 1. NPV calculations								
	Revenue growth (real)	Discount rate (real)	Projection period	NPV (\$ billion)				
Baseline	3.70%	3.50%	40 years	4.6				
Low revenue growth (2.5%)	2.50%	3.50%	40 years	4.1				
High revenue growth (5%)	5.00%	3.50%	40 years	5.1				
High discount (5%)	3.70%	5.00%	40 years	3.6				
Low discount (2%)	3.70%	2.00%	40 years	6.0				
Short period (n=30)	3.70%	3.50%	30 years	3.8				
Long period (n=50	3.70%	3.50%	50 years	5.2				

Source: Guest, RACQ

QML Transfer to State Defined-Benefit Pension

2010: Queensland government begins negotiations for in-kind contribution of QML to defined-benefit pension

Queensland Investment Corporation (QIC): government-owned corporation that manages defined-benefit pension

- Independent board of directors
- Infrastructure allocation includes direct investment team staff with capability to assess and manage investments

Transfer Process

- Arms-length negotiation
- Valuations commissioned by government and QIC independently
- Additional 3rd party valuation commissioned by pension board to verify negotiated valuation
- Transfer completed in May 2011 with \$3.088bn valuation, 40 year concession

QML Operations Post-Transfer

Four Year Operating Changes

- Senior Management Changes incentives tied to performance
- New tolling technologies installed
- Maintenance Management Plan developed
- Financial reporting systems overhauled
- Acquisitions: CLEM7 Tunnel, Legacy Way, Go Between Bridge

Timeline: Acquisition of Legacy Way and Go Between Bridge from Brisbane City



QML 2016 Sale by QIC

- Portfolio balancing problem as QML valuation increased
 - System size and revenue increased
 - EBITDA Margins increased 8%
- QIC decision to divest to rebalance portfolio
 - Winning Tender: \$7.4bn (Transurban, AusSuper, ADIA)



QML Value Realization 2011-2016

Key Takeaways and Requirements

Requirements

- Government capability to manage concession infrastructure procurement – Value for Money
- Independent Pension Decision Making (Arm's Length Transaction)
 - Governance: Independent Board, Fiduciary Responsibility
 - Capability: Internal or Sourced capability to assess and manage investment
- Complete Process Transparency

Value Drivers

- Governance Transition
 - Tied to pension capability / incentives to manage effectively
- Public Value Capture: Overcoming valuation difficulty in infrastructure market

Questions?

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