

Reducing Regulatory Risk by Contract: Evidence From Asian Toll Road Concessions

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September 26, 2008

Overview

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 - B. When Will the Parties Allow Regulatory Discretion?
- III. Plan of Research
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Why Study Ways to Reduce Political & Regulatory Risk?



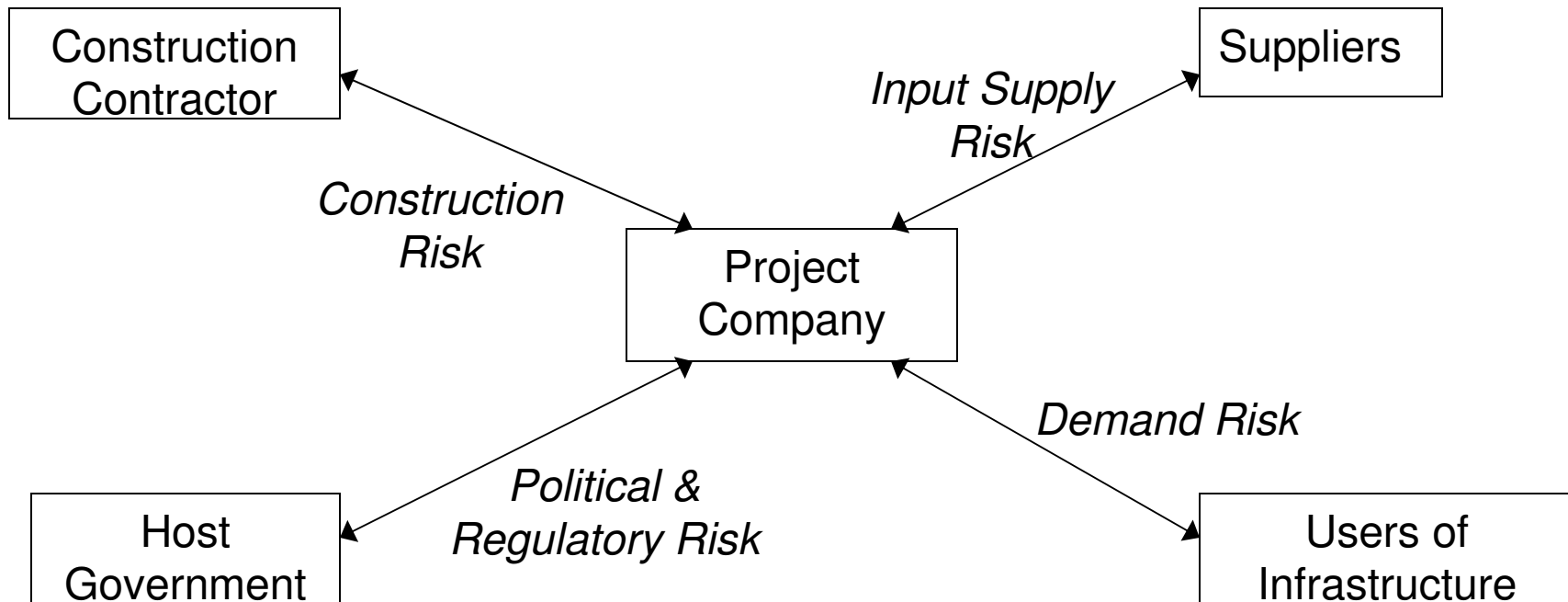
Source: New York Times, 11/4/05

Protecting Private Investment by Limiting Regulatory Discretion

- Infrastructure vulnerable to political & regulatory risk.
- One common way to reduce regulatory risk: contracts.
- One common type of contractual protection: limits on regulatory discretion over pricing. Examples:
 - Adjust prices according to formula.
 - Only let regulator review prices every X years.
 - Limit scope of review (e.g. only adjust parameters of formula).
- Questions:
 - How do pricing rules affect cost of financing infrastructure?
 - How do characteristics of host country and project affect parties' choice of pricing rules?

Debt Pricing and Default Risk

- Infrastructure concessions highly leveraged.
- Interest spread increases with risk of default on debt.
- Some sources of default risk:



Regulatory Discretion and Cost of Debt

- Default risk may increase with regulatory discretion.
 - Regulatory discretion increases risk that government will set unprofitably low prices.
 - Willingness to limit discretion may credibly signal low desire or ability to expropriate.
- So, all else equal, less discretion for regulators in setting prices → lower interest spread.

When Will Parties Allow Regulatory Discretion?

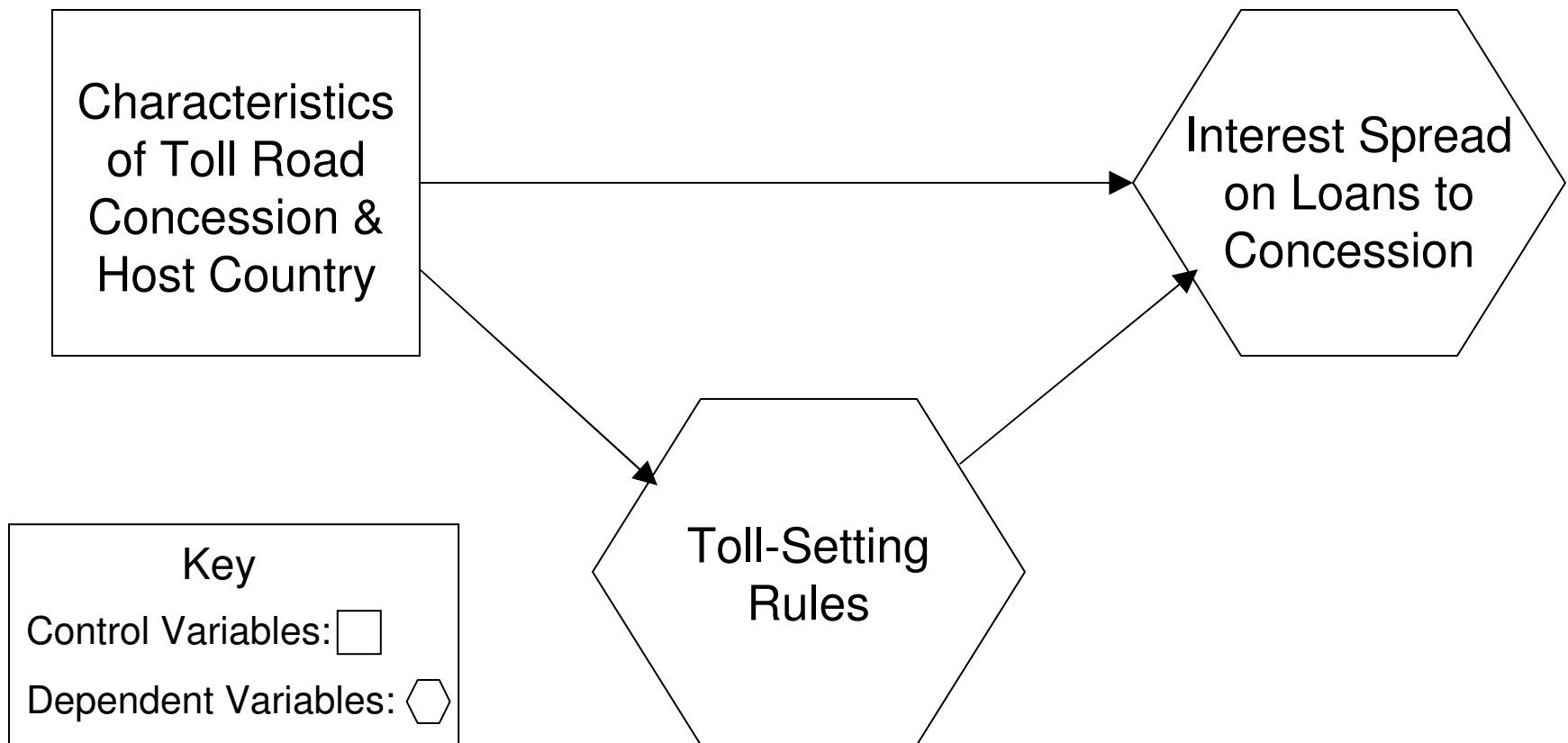
- Parties to concession agreement balance costs & benefits of discretion.
 - Key cost: Discretion may raise cost of capital.
 - Key benefit: Discretion can help adapt contract to changed conditions.
- Parties may allow more regulatory discretion when risk of losses from misuse of discretion is low.
 - Project requires low up-front capital investment.
 - Other political or legal institutions constrain government, e.g.:
 - mutual independence of courts, regulator, legislature, & executive;
 - administrative procedures; or
 - rules restricting “takings.”
 - Host government is very stable.

Bridge and Road Concessions Reaching Financial Closure: 1990-2007

Country	# Concessions	Capital Committed (\$m)
China	104	17,190
India	133	9,862
Indonesia	26	3,693
Malaysia	29	7,992
Philippines	4	1,509
Thailand	1	150
Vietnam	1	133

Source: World Bank PPIAF Database

Econometric Model of Loan Pricing (The Intuition Behind the Math)



Plan of Research

- Step 1: Estimate probability of choosing particular toll-setting rule as function of characteristics of project & host, e.g.:
 - project's financial structure;
 - host's macroeconomic environment; and
 - host's political & regulatory institutions.
- Step 2: Estimate impact of toll-setting rules on interest spread.
 - Strip out other influences on spread.
 - Use results of Step 1 to correct for selection bias due to influence of project characteristics on choice of toll-setting rule.
- Sources of data
 - interest spreads: Thomson, Dealogic
 - toll-setting rules: host governments + multilaterals?

Significance for Regulation & Finance of Infrastructure

- Estimate value – in reduced costs of borrowing – of different pricing rules.
 - Choose among different pricing rules → design better concession agreements.
 - Suggest reforms to non-contractual systems of regulation.
 - Help predict effects of different pricing rules on “bankability” of project.
- Measure impact of project’s economic & political environment on choice of pricing rule.
 - Determine whether strong institutions render contractual limits on discretion unnecessary.
 - Uniform “best practices” or adaptation to local conditions?

Questions or Comments?

Feel free to contact me.

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