Contract? What is a contract?

Federico Sturzenegger
Harvard University

Harvard Electricity Policy Group

Laguna Beach

March 15-16, 2007

December 19th decisions of the U.S. Court of Appeals for the Ninth Circuit

- Suggests moving from the "public interest" standard to the "just and reasonable standard"
- Concern that the new standard may make contracts effectively unenforceable
- What happens when you can't write an enforceable contract?

- Still open the question as to whether it applies here
  - "Even if a particular rate exceeds marginal cost, … it will still be within this reasonable range if that higher than cost based price results from normal market forces and is part of a general trend toward rates that do reflect cost." [p.19610]

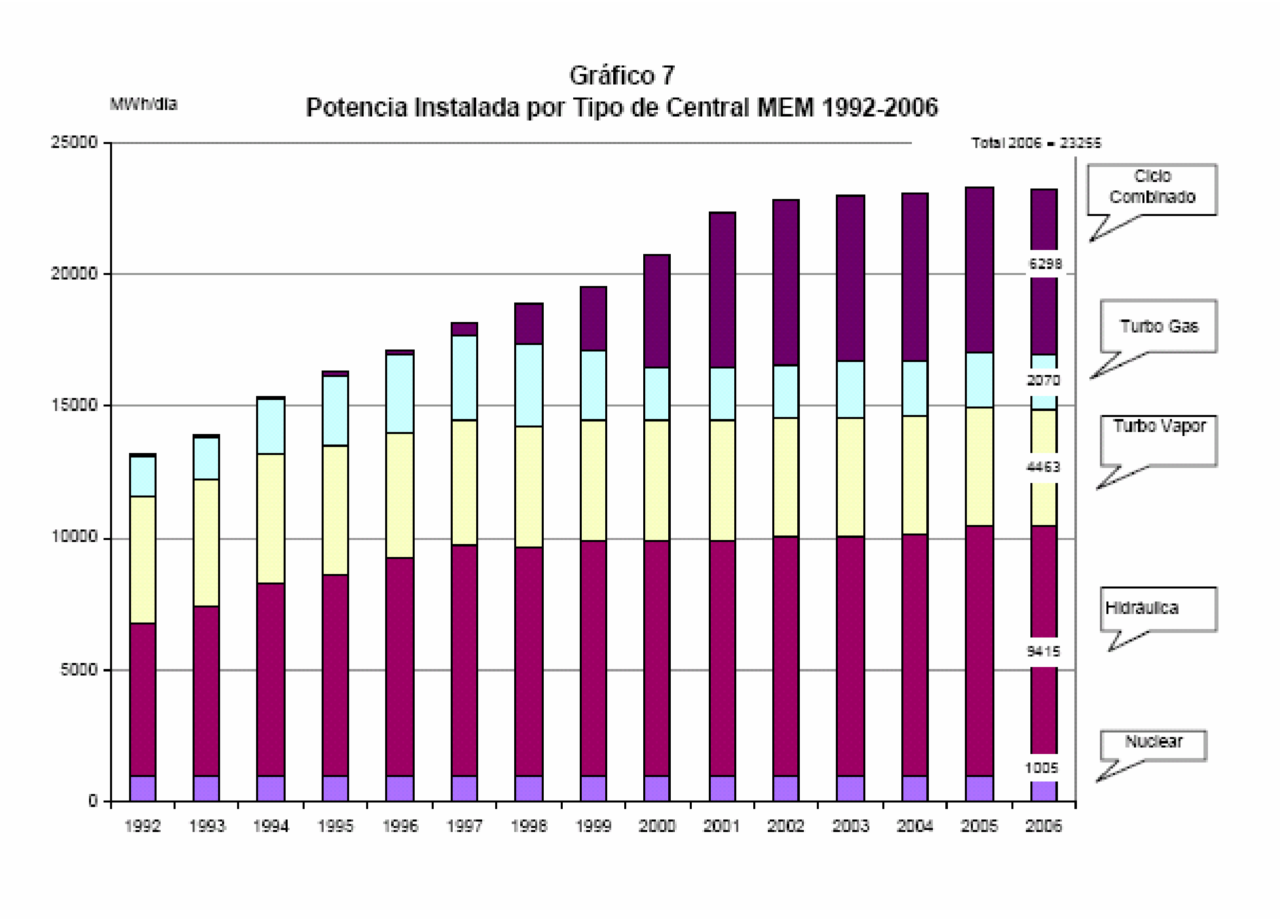
How do people react to the lack of security in contracts?

- Lessons from experience with sovereign debt
  - No assets external to the country
  - No legal structure to constrain government action
- The existence of sovereign debt is a puzzle in its own right
- It is an extreme benchmark but one that allows to see clearly the effects of contractual uncertainty

What happens in sovereign debt markets?

- Typically four things:
  - Higher risk premiums (higher price)
  - Volumes shrink
  - Debt shortens
  - Debt becomes more “clumsy”

An example from unpredictable Argentina



Why does this happen?

- When a contract can be enforced a contract is a contract
- When it is not you play a "strategic game"
- Let's review two reasons why this matters:
  - The lemons problem
  - The time inconsistency problem
- This last channel is worrisome because it is self reinforcing

Adjusting to uncertainty

- The structure of the contracts change
  - Risk aversion on the side of producer (lender)
    - Long term debt will be riskier, making it expensive
    - Lending is voluntary and must be compensated ex ante
  - Commitment problem by the consumer (borrowers)
    - This could be a moral hazard problem (promise to customers of low rates)
    - Short term contracts allow the producer to walk away and act as a disciplining device
    - Limits the types of contracts that can be written

How much foreign currency debt?

Country	Share of Foreign Currency Debt: Total	External	Domestic
Argentina	0.76	1.00	0.39
Bahamas	0.14	1.00	0.00
Barbados	0.32	1.00	0.00
Bolivia	0.91	1.00	0.70
Brazil	0.35	1.00	0.05
Chile	0.24	1.00	0.14
Colombia	0.58	1.00	0.26
Costa Rica	0.53	1.00	0.27
Honduras	0.82	1.00	0.06
Jamaica	0.51	1.00	0.17
Mexico	0.31	1.00	0.01
Nicaragua	0.68	0.99	0.00
Peru	0.85	1.00	0.26
Uruguay	0.90	0.96	0.74
Venezuela	0.66	1.00	0.04
Average Sample (weighted)	**0.46**	**1.00**	**0.13**
Average	**0.56**	**1.00**	**0.22**

Is it a good deal for the buyer?

Table 1.2
Emerging markets: Realized excess returns on sovereign debt, 1850–2000 (in percentage points)

	Bonds[a]				Bonds and long-term bank loans[b]		
	1850–1914	1915–1945	1946–1983	1850–1983	1970–1992	1992–2001	1970–2001
Argentina	1.71	1.95	4.70	1.96	−2.09	−17.01	−6.82
Brazil	0.89	0.70	...	0.83	−3.42	16.23	−0.51
Chile	1.48	−1.90	...	−0.22	−0.17	3.51	0.06
Mexico	−2.72	...	2.31	−1.92	−0.51	5.96	0.64
Australia	1.01	1.21	0.72	1.03	...	...	...
Canada	1.27	0.65	2.25	1.56	...	...	...
Egypt	2.92	−0.73	...	2.53	...	...	...
Japan	1.25	2.26	2.25	1.58	...	...	...
Russia	−1.63	...	...	−1.63	...	...	...
Turkey	−1.56	−0.88	−0.34	−1.29	0.89	0.44	0.58

Note: Difference between the realized return on sovereign debt of the respective periphery country and the return on sovereign debt of the investor's home country (for bond returns 1850–1983) or the United States (for all private external lending, 1970–2001).
[a] From Lindert and Morton (1989). Dates refer to issue dates.
[b] Adapted from Klingen, Weder, and Zettelmeyer (2004); uses their "indirect approach."

Contractual clauses to the rescue

- In the sovereign debt market contracts are modified to account for the lack of enforcement. For example:
  - *Cost sharing clauses*
    - Pari Passu
  - *Ex ante punishment*
    - Cross default clauses and acceleration clauses
  - *Negative covenants*
    - Negative pledge clause in sovereign debt
- I can easily envision equivalent developments in future electricity contracts

Conclusions

- The lack of enforcement will:
  - Reduce the size of the market
  - Probably not reduce the cost of electricity to the buyer
  - Will lead to shorter contracts
  - Will lead to a myriad of new contractual covenants that will protect the seller
- It seems to be a lose-lose proposition