REGULATION, COMPETITION AND GROWTH

Brazilian Electricity System

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Overview

- Economic Reform
- Electricity System Reform
- Results (so far)
- Current Issues
1. Motivation

- Economic Crisis (1980’s)
  - Inflation out of control
  - Inability of the Government to finance new investments
  - Protection for domestic producers
1. New Economic Policy

- Fiscal austerity
- Real (stable currency)
- Capitalist shock (competition)

- Less State
2. Reform of the Electricity System

- Privatisation
- Competition
- Regulator
2. Objectives

- Better resources allocation (efficiency)
- Attract private capital
2. Electricity System

- Old Structure
  - 23 provincial DISCOS
  - 4 federal GENCOS + TRANSCOS
  - 4 provincial vertically integrated companies
  - Itaipu
2. Electricity System

- Old Structure
  - Regional differences
  - 95% hydro
  - Tariffs substantially below long term marginal cost
  - Expected expansion: thermal
2. Electricity System

- New Structure
  - Independent regulator
  - System operator
  - Open access
  - Wholesale power market (Power Exchange)
2. Electricity System

- New Structure
  - Central planning for transmission
  - Coordinated hydropower dispatching
  - Spot price fixed using models (marginal cost)
  - Price cap for contracting power (captive consumers)
2. Electricity System

- Privatisated
  - DISCOS
  - Few GENCOS
  - New transmission lines
  - System operator
3. Results (so far)

- No competition
  - Initial contracts prices are too low
  - Spot prices are not trusted
  - Hydrological risk are passed over
  - No thermal power plants

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3. Results (so far)

- **Investment**
  - Timing incorrect
  - Composition unsatisfactory
  - Private investors risk perception is too much high
  - State companies are called in
3. Results (so far)

- **Regulator**
  - Unable to achieve its goals
  - Everybody unhappy with its performance
  - Government intervention
3. Results (so far)

- Private utilities
  - Poor financial performance
  - Substantial tariffs increase
  - Consumption below expected figures
4. Current Issues

- Competition
  - Is vertical integration a risk management need?
  - Can competition provide the right choice of power generation technologies?
  - Is there a need for competition to ensure timely investment to keep supply and demand in balance?
  - What sort of competition is possible to introduce for the water in the reservoirs?
4. Current Issues

State Role

– Should government take some risks? Which?
– Should government provide financing? To which sort of project?
– How should lower income consumers be charged?
– Is there any room for regional policy?
4. Current Issues

- Regulator
  - How far can it actually be from government?
  - How can its decisions be articulated to other regulators decisions?
  - How to move from low cost initial contracts to much higher marginal costs?
  - How to insure reasonable rate of return in foreign currency?