State of Competition in the Indian Manufacturing Sector

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Outline of the Presentation

- Theoretical Base
- Existing Empirical Works
- Basic Concepts Underlying Current Study
- Indian Industry: Pre-Reforms
- Indian Industry: Post-Reforms
- Plan of the Study
- Data Base
Theoretical Base

- **SCP Paradigm** (Mason and Bain Works 1940-60)
- **Structure** → **Conduct** → **Performance**
- **Structure**: No. of Firms, Size of Firms, Cost Conditions, Entry Conditions
- **Conduct**: Collusion, Product Differentiation, R&D, Advertisement
- **Performance**: Profitability
- **Criticism**: Unidirectional Relation, Lacks analytical rigor, Industry-level focus
Theoretical Base

- New Industrial Organisation Theories
- Structure $\leftrightarrow$ Conduct
- Performance: Market Power = Price-Cost Margins
- Focus on Market Structure Analysis
- Seller Concentration: Herfindahl Index $= \sum s_i^2$
- $H = f (EOS, MES, KR, RD, ADV)$
  

- Importance of Firm-level Characteristics
- Limitations: Lack Generality
Theoretical Base

- Contestable Market Hypothesis
  (Baumol et al 1959 and Baumol 1982)
- Potential Competition Disciplines Market as much as Actual Competition
- Easy Entry and Exit generates Potential Competition
Existing Empirical Works

Manufacturing Sector-Level:


NCAER (2001): 80-1 - 96-7, RBI data, PCMs

Goldar and Aggarwal (2004): 80-1–97-8, ASI, trade lib. PCMs

Pandey (2004): 80s & 90s, ASI, Trade lib. PCMs & Profitability

Ramaswamy (2006): 1993-4 & 2002-3, CMIE, H-Index,


Individual Industries

Sen (1992): Tyre Industry, 1974-83, PCMs, CRs


Gokarn & Vaidya (2004): AutoComponents, 91-2 – 96-7, Mkt. share
Basic Concepts Underlying Current Study

- Competition is a Process
- Process of Competition and Contestability
  - Lower Prices & superior Products
    (Consumer Welfare)
- Technology and Scale
- Right Degree of Competition (No. Suppliers)
- Structure Evolves Over Time
- Market Structure is based on Supply Side Structure and Conduct of Industry
Indian Industry: Pre-Reform Period

- Smaller Size, Not Much Technological Change
- High Cost & Low Quality Products
- Highly Diversified
- High Market Concentration
- Market Shortages and Segmented Markets
- Organised Private Industry Focused on
  Upper-end Urban Markets → Super Normal Profits
  Diversified into Unrelated Areas
- Industry Neither had Freedom Nor Incentive to Improve Its Performance on the Supply Side i.t.o productivity, costs, etc
- Slow Growth and Persistent Market Shortages
Indian Industry: Post-Reform Period

- Restructuring of Industry:
  - focus on Core Competencies → Mergers & Acquisitions
  - New Technologies, New Products → Scale of Operation
  - Marketing, Advertisement & Sales Promotional Activities
Plan of the Study

- **Objective:** Analysis of Market Structure
- **Potential Competition:** Ease of Entry & Exit Conditions (Policy Barriers and Others)
- **Actual Concentration:** Market Concentration:
  - Measurement of Herfindahl Index
  - Changes in the first 5 or 10 Market Players Over Time
  - Growth of Market Size over Time
  - Import Penetration Over Time
Plan of the Study

- Analysis of Changes in the H – Index Across Industries (use-based or other groups)

- Analysis of Market Concentration
  \[ H = f \left( EOS, MES, KR, Ownership, RD, ADV \right) \]
  Where EOS, MES and KR will be obtained by estimating cost function

- Estimation of Cost function: \( TC = f \left( P_k, P_l, P_m, Y \right) \)
Data Base

- **CMIE**: Market Shares, Market Size and Imports

- **Capital Line Data**: Variables Required for the Estimation of Cost Function