Corporate Networks and Peer Effects in Firm Policies: Evidence from India

Manasa Patnam

Discussion

Jayati Sarkar

Emerging Markets Finance Conference, 20-21 December, 2011

IGIDR, Mumbai

Contribution of the Paper I

- Analyses effect of corporate network peer groups on firm policies related to investment, executive compensation and R&D.

- Peer group effects channeled through interlocking directorships.

- Case study of Indian firms based on firm level data between 1998-2010.

- Key findings:
  - Existence of positive peer group effects
  - Stronger network ties lead to higher likelihood of mimicking peer group.
  - Heterogeneity in peer group effects - Type of network peers matter

Contribution of the Paper II

- Novelty in focusing on interlocking directorates as a source of peer group impact.
- Empirical contribution – Identification of endogenous peer effects through natural breaks in network.
- Breaks occurring from death/retirement of shared directors (external event).
- Evidence of peer group impact in the context of a developing country, India.
- Results similar to that in developed country settings.
- Policy relevance :
  - Desirability of network effects.
  - Formulation of CG regulations (presumably regulating multiple directorships, inter-industry interlocks)

Comments

- Positioning the paper
- Empirical Analysis

Comments : Positioning the Paper

- Estimating firm-level social interactions in a developing country setting.

- However, the questions asked as well as the analysis not distinct from developed country studies.
  - Leary and Roberts (2010) analyse peer firm effects on financial policy
  - Fracassi and Tate : External Networking and Internal Firm Governance, *forthcoming in Journal of Finance*

- A developing country/emerging economy setting can be used to product differentiate and raise more interesting questions.

Comments : Positioning the Paper

- Developing/Emerging economy context :
  - Phenomenon of multiple directorships and therefore the possibility of interlocking directorates much more prevalent in developing countries like India.
  - In uncertain environments endemic in emerging economies, more use of directorial interlocks to obtain better coordination with other organizations to reduce uncertainty.
  - Social ties more in the nature of family ties given the pre-dominance of business groups….Implications?
  - More variation in data especially w.r.t nature of peer group interaction.
  - The effect of emerging market based institutions and evolving regulations on firm level social interactions.

- Indian data allows one to examine these issues in detail ….potential not fully exploited.

Comments : Positioning the Paper

- Specific questions with Indian data
  - Heterogeneity of peer effects
    - Peer effects disaggregated by peers in the same industry and those who are not.
    - Disaggregate peers by those in other group affiliated firms and those that are not…more goal congruence and group synergy? Stronger spillovers?
    - Evidence of Inner Circle: Multiple directorships of inside and independent directors of a group firm originate in other group firms.
    - Evidence of a 'great divide' between the directors associated with group-affiliates and non-affiliates.
      - Large majority of inside and independent directors are interlocked within the network of group-affiliates. Same for directors of non-affiliates.

Comments : Positioning the Paper

- Policy changes and peer effects.
  - In Figure 1 stability comes in mostly after 2004 when CG regulations with respect to board composition stabilised.
  - In Figure 2, spike in new appointments around 2003 and new links in 2005.
  - Change in extent and nature of connectedness following reforms…does importance of peer effects change?

Figure 1: Network Topology Summary

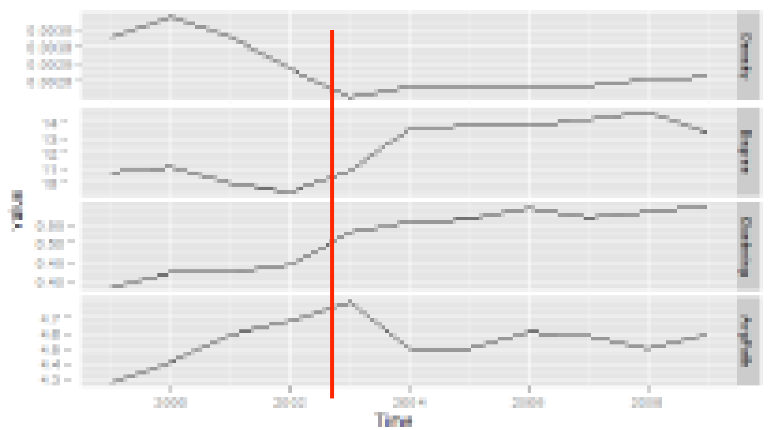
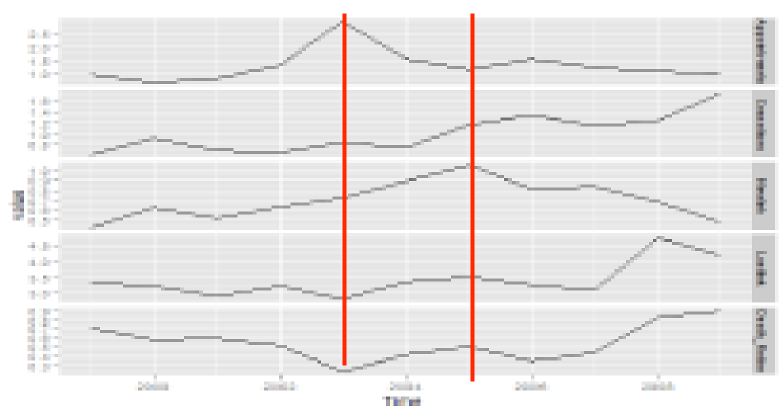


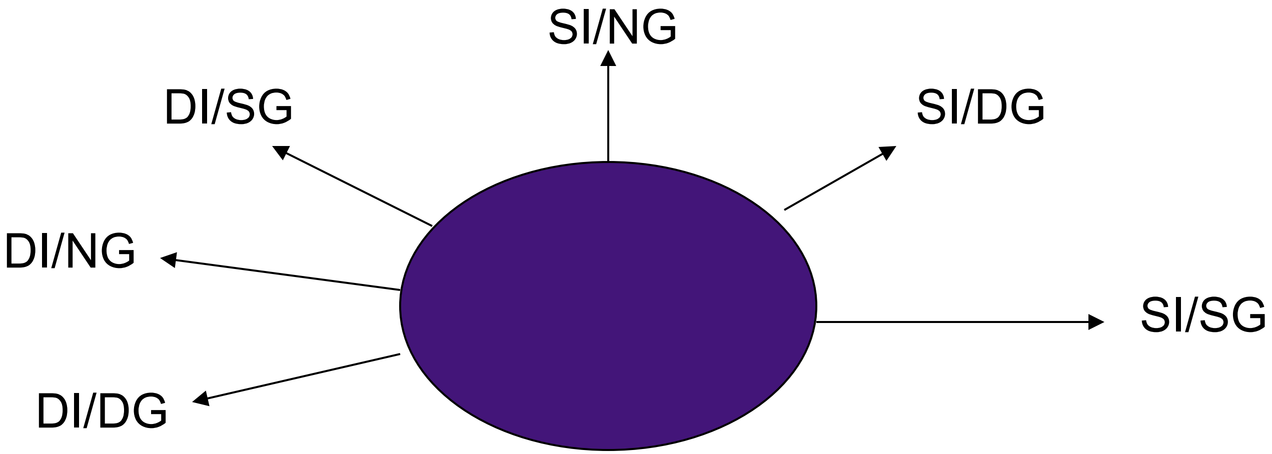
Figure 2: Network Dynamics



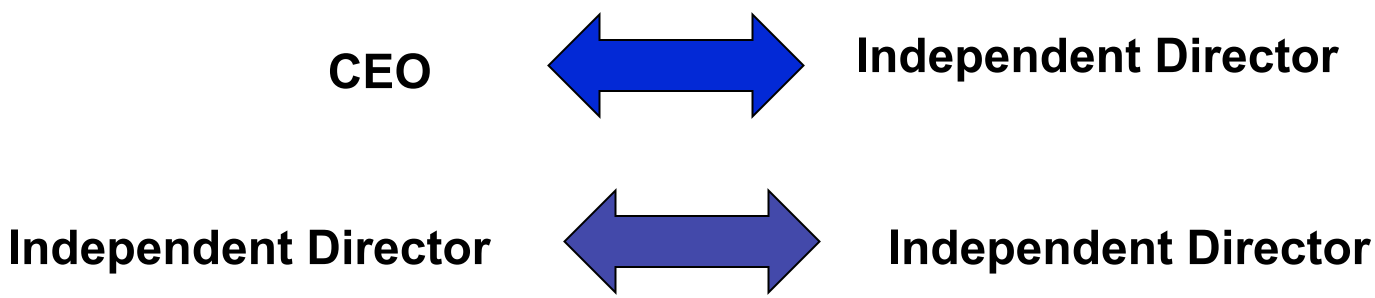
Empirical Analysis I

- Sense of the raw data for the period 1997-2010 thru splicing:
  - Year-wise number of firms/observations (Prowess/Prime database)
  - Total number of connected and unconnected firms year-wise, by ownership groups and industry groups.
  - Type of connectedness by nature of director.
  - Total number of deaths and retirements in sample including deaths/ retirements of connected and unconnected firms.
  - Summary statistics on director death/retirement for connected and unconnected firms
    - By type of director (CEO/independent director/non-executive director)
    - Average age at death/retirement
    - Duration of connectedness.
- Some comparable estimates of phenomenon of shared directorships (corporate network ties) for US/UK and India.

Connectedness by Type of Firm



Connectedness by Type of Director



Empirical Analysis II

- Use of death/retirement of connected directors to identify endogenous peer group effect.

- Similar approach in Fracassi and Tate.

- Use the average outcome of those peers lost due to death/retirement as instruments for the average peer outcome of the next period.

- This should be uncorrelated with the error term.

Empirical Analysis III

- What does the error term include?
  - Unobserved firm-specific factors that impact investment policy/ compensation policy. Firm specific factors controlled for are PBDITA, Assets and Sales.
  - Corporate governance variables such as board size, board structure, director characteristics, does affect outcomes but not controlled for…are part of the error term.
  - Consider director characteristics like age and experience which can systematically impact choice of investment policy.

Empirical Analysis IV

- If age/experience is an explanatory variable and older directors are more likely to die/retire, then the validity of the instrument comes into question.
- Peer effect not distinguishable from director characteristics effect.
- In a dynamic network setting, director characteristics cannot be differenced out in firm fixed effects.
- One approach is to include accidental death…sparse data.
- Can control for director characteristics to identify network peer effects.

Empirical Analysis IV

- Differentiating between the death/retirement of CEO and independent director.
- CEO and independent director perform different functions.
- CEO focuses on operational and strategic matters and independent directors on advising CEO on strategic matters.
- Average outcomes may be differentially affected with death/ retirement of CEO as CEO looks at operational matters that can affect investment along with the effect of lost ties.
- May bias estimates.
- Approach is to exclude CEO deaths/retirements from total.
- Can re-estimate to see whether such exclusion affects results.

Concluding Comments

- Technical content high.
- Stronger motivation/positioning needed.
- Additional insights from developing country study. Do institutions matter in peer effects?
- It would be good to focus on peer effects with respect to one outcome variable and undertake a more detailed analysis.
- Check the ultimate question : do peer effects add value in the context of a developing country?

Thank You