Ownership structure and export performance: firm-level evidence from Korea

Sangho Kim and Donghyun Park

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Introduction

- A firm's ownership structure affects a firm's performance
  - Seminal paper by Berle and Means (1932)
  - Manager pursues own self-interest rather than owner interest in the absence of monitoring
  - With widely dispersed ownership, there is no incentive for monitoring
  - This implies that firms with more concentrated ownership will be more closely monitored
  - On the other hand, there are also theoretical bases for a negative relationship --- i.e. predatory owners

Introduction

- Whether ownership concentration has a positive or negative impact on performance is ultimately an empirical question.
  - This is because there are theoretical grounds for both a positive and negative relationship
  - A large and growing empirical literature examines the issue.
    - Demsetz and Lehn (1985), Himmelberg, Hubbard and Palia (1999)
  - Overall evidence is mixed and inconclusive.

Introduction

- The central objective of our paper is to empirically examine the relationship between ownership structure and export performance.
- Export performance is an important determinant of overall corporate performance.
- But there are very few empirical studies which investigate the ownership structure-exports link.
  - Surprising and unfortunate
- The main contribution of our paper is to help fill this gap in the literature using firm-level data from Korea.

Introduction

- Korea's export success is driven by firms which vary widely in size and other structural characteristics
- Therefore, it is interesting to examine whether ownership concentration has a significant effect on Korean firms' export performance.
  - Our study informs us about Korean firms' exports.
  - In addition, the study marks a first step toward filling a major gap in the literature.

Conceptual basis

- Entering the foreign market is a high-risk activity
  - Sunk costs
  - Revenue volatility due to exchange rate fluctuations
  - Limited knowledge of local market conditions
  - Often tougher competition
- Manager's attitude toward risk influences a firm's export decision-making.
- Ownership structure influences manager's risk preference.
- Therefore, a firm's ownership structure influences its export decision-making.

Conceptual basis

- The key link is the relationship ownership structure and risk preference.
  - In a firm with dispersed ownership, manager maximizes his own expected utility rather than shareholders' expected profits.
  - In contrast, in a firm with concentrated ownership, manager represents dominant shareholder's interest and thus maximizes firm's expected profits.
    - Therefore, manager bears the risk of entering foreign markets.
  - Bottom line: firms with concentrated ownership are more likely to export than firms with dispersed ownership

Literature review

- There is a large empirical literature which looks at ownership structure-overall performance but…..
- ….. only a very limited literature on ownership structure and export performance.
- Most of the existing studies examine the link between foreign ownership and export performance.
  - Cole et al (2010) use Thai manufacturing survey data.
  - Other studies include Ngoc and Ramsetter (2009), Filatotchev et al (2008), and Wignaraja (2008).
- None of the studies look at other dimensions of ownership structure.
  - In particular, they do not look at the impact of ownership concentration.

Data and empirical framework

- The data set consists of:
  - Unbalanced panel of annual time-series for 463 Korean manufacturing firms during 1994-2005
  - All manufacturing firms whose stocks are listed on Korea Stock Exchange
- Listed firms are required to report their financial status, and all our firm-level data are from the financial reports.
- Out of a total of 5,557 observations, exports are observed for 1,640 observations, or 29.5% of total
- We first build a binary variable of exporter/non-exporter
- We use the widely used logit model to regress the binary variable on a number of explanatory variables.

Data and empirical framework

- In the logit model, coefficient estimates indicate impact of explanatory variables on probability of being an exporter.
- In addition, we use tobit model to study firm's export propensity, which is ratio of exports to total sales.
- Our key variable is the ownership concentration rate (CR), which is the ratio of dominant shareholder's shares to total shares.
- We also control for other firm-specific factors widely used in the literature.
- These include wage rate, capital intensity, R&D stock, firm size, productivity, and firm age.

Data and empirical framework

- Wage rate = total labor costs/number of employees (L)
- Capital stock (K) = real amount of tangible fixed assets
- Capital intensity = capital/labor ratio = K/L
- Labor productivity = VA/L = per worker value added
- R&D stock = estimated by perpetual inventory methods based on R&D investment, depreciation rate = 10%
- Firm age is calculated from the founding year.
- All variables are converted into constant 2000 prices.

Empirical results: logit

- Table 3 reports the results.
- Most significantly, our estimation results show that higher ownership concentration rate increases the probability of a firm's exporting.
- This suggests that firms with concentrated ownership venture into risky export markets to maximize expected profits.
- On the other hand, firms with dispersed ownership tend to avoid risk and have a shorter term horizon.
- Our results imply the presence of an agency problem.

Empirical results: logit

- Table 3 results also indicate that firms are more likely to be exporters as wage rate, capital intensity, R&D stock, productivity and sales increase.
- Korean manufacturing exporters are larger, more capital-intensive, more R&D-intensive, and pay higher wages than Korean manufacturing non-exporters.
- Our evidence is consistent with existing studies.
  - Bernard and Jensen (1997), Aitken et al (1997), Clerides et al (1997), and others
  - More efficient and larger firms with more resources are better able to cope with large sunk costs required for exporting.

Empirical results: tobit

- Export propensity, or ratio of export revenues to total sales, is the dependent variable.
  - Export propensity is defined on [0, 1]
- Table 4 shows the coefficient estimates of the tobit estimation.
- To avoid biased estimates from applying OLS, we use a tobit model censored at both ends.
- As was the case for logit, our key variable of interest is ownership concentration ratio, and we also include the standard control variables.
- In estimation, we use a semi-log model to transform all explanatory variables into logarithms to control for heteroscedasticity. Dependent variable is in original form

Empirical results: tobit

- Most significantly, Table 4 results indicate that an increase in the ownership concentration ratio boosts a firm's export performance.
- Firms with concentrated ownership are willing to bear the high level of risk required to enter a large number of markets.
  - Exporting to distant, unfamiliar markets may boost profits and thus benefit shareholders.
- In contrast, firms with dispersed ownership may export only to fast-growing, geographically close markets.
  - For example, Korean firms find China to be an attractive regardless of market structure.
- Our results imply the presence of an agency problem.

Empirical results: tobit

- The results for control variables are more or similar to the logit results.
- Firms with higher capital intensity, R&D stock and productivity have higher export propensity.
- One departure from logit results is that firms which pay lower wages have higher export propensity than firms which pay higher wages.

Concluding observations

- The central objective of our study was to empirically examine the relationship between the ownership structure of firms and their export performance.
  - To do so, we use firm-level data from Korean manufacturing sector
- It is intuitively plausible that ownership structure of firms has an effect on their export performance.
  - Managers of firms with concentrated ownership have higher risk preference.
- We empirically test the ownership structure-export performance nexus using logit and tobit models.
  - We find that firms with concentrated ownership export more than firms with dispersed ownership.

Concluding observations

- The main policy implication from our results is that policymakers need to take into account export performance in policies on ownership concentration.
  - In Korea, our results suggest the need for caution in policies which seek to regulate and control *chaebols*.
- There are a number of promising areas for future research.
  - Examine ownership structure-exports nexus in other countries, especially in East Asia and advanced economies.
  - Examine ownership structure-outward FDI nexus.