# Discussion on "Optimal Ownership and Firm Performance: Theory and Evidence from China's FDI Liberalization

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NBER East Asian Seminar on Economics Bank of Thailand June 6-7, 2019

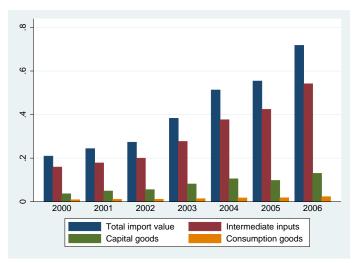
#### Overview

- A nice paper that examines the relationship relates firm ownership with capital-labor ratio and firm-level gains.
- It quantifies the gains from optimal ownership by exploiting a FDI liberalization policy change on foreign ownership in China.
  - Can quantify the inefficiencies related to "sub-optimal" firm ownership.
- Theory: The paper extends the property-rights theory (Antras 2003) to illustrate the theoretical foundation for an optimal foreign ownership and develops three propositions.
- Empirics: The paper tests three propositions using data from the Chinese Annual Surveys of Industrial Production (ASIP).

### Model Setup

- The model setup examines a world of two countries: China and Foreign (e.g., USA).
- It assumes final goods producer *F* reside in Foreign and all intermediate input suppliers (manufactures) *M* locate in China.
- This setup might differ from the public impression on Chinese foreign affiliates situation. So providing some justification based on Chinese data would be better.
- Public impression: China imports more intermediate inputs from developed countries and then exports more final goods (e.g., apparel, iPhone) to developed countries.
  - In particular, the majority of foreign affiliates in China are conducting processing trade, so they usually export final goods rather than intermediate goods to global market.
  - The majority of Chinese imports between 2000-2006 are intermediate (74%) and capital goods (19%).

Discussions/Comments Theory Figure: China's Import Values 2000–2006 (Aggregated by Category, in Trillion U.S. Dollars)



How about China's export (to the U.S.)?

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# Suggestion

- Would it be possible to relax this assumption by allowing both producers in each country? Does it alter the current theoretical prediction?
- Alternative: when mapping to the data, perhaps show some breakdown of intermediate goods producers and final goods producers by different industries. Or show some evidence that China satisfies this assumption by serving as a major intermediate inputs supplier through foreign affiliated firms to export to developed countries.

#### Model Assumption

- One of the assumptions is that Foreign firms provide capital while local Chinese firms provide labor.
- This assumption follows Antras (2003), who cites evidence from several countries.
- It would be nice if the authors can also provide some evidence (even anecdotal) in China's case.

# Testing Effects of Ownership Restructuring on Firm Performance

- The test uses FDI policy regulation reform based on the government catalog as exogenous shock to Chinese firms.
  - The potential endogeneity issue associated with the FDI catalog change? Chinese government may endogenously choose to relax the FDI regulation in some specific industries that are believed to benefit firms' performance. Reversed causality?
  - When using the propensity score matching, do foreign-acquired firms vs. domestic-acquired firms concentrate in different industries? Can the authors provide more evidence on the industry distribution of those different types of firms?

## Alternative Mechanism for Firm's Output Increase

- The FDI policy reform period (2001-2003) also overlaps with trade liberalization period (pre- and post-WTO accession).
- Those FDI de-regulated industry may be also the industries that receive a great input trade liberalization after China joined WTO.
- The current results already control for input tariff and output tariff change, but trade liberalization may go beyond the effect of industry specific tariff change.
- Conventional IV method is useful, though a valid IV for this (potentially endogenous) policy change is not easy.

# Processing Trade and Foreign Affiliates

- During the sample period, processing trade is prevalent among foreign affiliates in China.
- Those processing trade firms generally import intermediate goods and export final products.
- To what extent do processing trade activities affect current results?
- If we believe that processing foreign affiliates usually produce and export more final goods than ordinary foreign affiliates, then excluding firms that conduct processing trade should enhance the current results. Is this supported by the data?

### Source of FDI May Matter

- The current measure of foreign ownership is the share of foreign investors, including investors from Hong Kong, Macao, or Taiwan, in the firms paid-in capital.
- The literature shows that FDI from HKMT could be very different comparing with those from OECD: again, HKMT affiliates more likely conduct processing trade.
- Within the OECD countries, the FDI from USA and Japan/Korea may also show very different patterns.
- The current data from ASIP allows to check the robustness at least by differentiating HKMT and OECD.
- Other data opportunity: FDI survey data from NBSC can provide more detailed source country information.

# Specification: FO share regression (equation (14))

- This examines how the factors predicted to shape optimal ownership according to the model correlated with foreign ownership shares in unrestricted industries.
- Regional fixed effects are at province level.
- Special economic zones (providing special favorable treatment to foreign invested firms) are important and many of them are at sub-province level.
- Better to control for special economic zones at more disaggregated geographic level.

## Robustness: Measurement of Foreign Ownership

- The current measure of foreign ownership is continuous, or dummy variable based on the paid-in-capital.
- The registration type data to identify firm ownership structure may serve as a useful robustness.

### Summary

- This is a nice paper that extends a property-right model and explores the optimal foreign ownership structure and its relation to firm performance.
- It provides a quantification of the gains from optimal ownership by exploiting China's FDI regulation change.