Discussion of Liquidity-Driven FDI

Alquist-Mukherjee-Tesar

by

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- Linda may be reluctant to self-cite, but I am not.
- I’d like to draw attention to a couple of papers to motivate my discussion.

Chari, Ouimet & Tesar (2004) “Acquiring Control in Emerging Markets: Evidence from the Stock Market” NBER WP 10872.

Chari, Ouimet & Tesar (2010) "The Value of Control in Emerging Markets" Review of Financial Studies, vol. 23, No. 4, pp. 1741-1770.

In these papers…

- Foreign acquisitions of publicly-traded emerging-market firms offer a unique opportunity to estimate the market-capitalized returns (surplus value creation) via FDI flows from developed to emerging economies.

Stylized Facts… and Questions

- Between 1986-2006, developed-market acquirers experience positive and when emerging-market M&A is announced.
- Acquirer returns triple when majority control of an emerging market target is acquired.
- Why are positive developed-acquirer returns linked to acquisition of control in emerging market transactions?
- What drives the *anomalous* magnitude of the dollar value gains for acquiring firm shareholders?

Property Rights Theory of the Firm & The Acquisition of Control

- Control can resolve problems associated with incomplete contracting
  – (Grossman and Hart, 1986; Hart and Moore, 1990; Hart, 1995)

- Acquirers more likely to share proprietary technologies & intangible assets especially in settings with:
  (i) non-verifiable monitoring
  (ii) weak contracting environments
  – (Holmstrom and Tirole, 1991)

Property Rights Theory of the Firm & The Acquisition of Control

- Emerging markets present settings where problems of incomplete contracting and non-verifiable monitoring are likely to be especially severe.

- Hypothesis: Acquiring majority control will be associated with surplus value creation (positive returns) in developed-market acquisitions of emerging-market targets.

A Simple Example

- We assume that the announcement occurs at date t and that the transfer of ownership is successfully completed immediately following the announcement.

- Following standard asset-pricing theory, the market valuation of any firm *i*'s project is given by:

$$P_s^i = E_t \sum_{s=\tau}^{\infty} m_s \delta_s^i$$

Incomplete Property Rights: A Tax

- Define γ as an index of institutions conditional on development

  where $0 < \gamma < 1$

  and the higher γ is the weaker the set of institutions

γ^E (emerging markets) –

γ^A (developed markets)

where $\gamma^E > \gamma^A$

Developed-Market Technology

- The technology is an intangible asset.
- Assume the payoff, ψ, to the technology is decreasing in γ

→ the better the property rights protection, the lower is γ and the higher the payoff to the firm from the technology.

$$\psi(\gamma) < 0$$

Target Under Emerging-Market Operation

- The value of the target firm's project to local investors, operating under the institutions in the target's country, is given by:

$$P_\tau^T = \sum_{s=\tau}^{\infty} m_s^T \delta_s (1-\gamma^E)$$

If capital markets are segmented:

$$m_s^A / (1+CC) = m_s^T$$

Developed Market Firm Acquires Control

- Implement its technology operates the project under its own management. The value of the project would be:

$$P_{\tau}^{T''} = \sum_{s=\tau}^{\infty} m_s^A \delta_s (1+\psi(\gamma^A))(1-\gamma^A)$$

- If acquirer bids:

$$P_{\tau}^{B} = \sum_{s=\tau}^{\infty} m_{s}^{T} \delta_{s} (1-\gamma^{E})(1+\theta)$$

- Return to acquirer is:

$$R^{A} = P^{T''} - P^{B} = \sum_{s=\tau}^{\infty} m_{s}^{T} \delta_{s} \left[(1+\psi(\gamma^{A}))(1-\gamma^{A})(1+CC) - (1-\gamma^{E})(1+\theta) \right]$$

$$R^{A} = P^{T''} - P^{B} = \sum_{s=\tau}^{\infty} m_{s}^{T} \delta_{s} \left[(1+\psi(\gamma^{A}))(1-\gamma^{A})(1+CC) - (1-\gamma^{E})(1+\theta) \right]$$

- The acquirer return will be larger:

(1) the larger the value of technology transfer $\psi > 0$.

(2) the larger the gap in institutions between the two countries, $\gamma^{E} > \gamma^{A}$

(3) the greater the complementarity between technology & institutional protection $\psi(\gamma) < 0$ & $\gamma^{E} > \gamma^{A}$.

(4) the weaker the bargaining power of the target, θ.

(5) the larger the liquidity effect as reflected in discount factors (1+CC).

Majority Control is a key threshold. Why?

- Empirically, payoff to an asset can differ across countries given differences in:

(i) the know-how, brand value and other intangibles (industry effect).

(ii) the institutional setting that protects property rights (country effect).

When are **Acquirer Returns** the Largest? Chari, Ouimet & Tesar (2010)

- Control is acquired AND

  (i) large intangibles– i.e. in industries with high R&D and brand intensity.

  (ii) in countries with high risks of expropriation, contract repudiation and weak rules of law.

  (iii) Complementarity between asset intangibility and institutions.

  (iv) an increase in the cost of capital in emerging markets.

When is **Probability of Acquisition** highest? Alquist, Mukherjee & Tesar (2014)

- Probability of foreign acquisitions higher in external finance dependent sectors: **YES**
- Probability of foreign acquisitions higher in intangible sectors: **YES**
- Size of foreign stakes higher in external finance dependent sectors: **YES**
- Size of foreign stakes higher in intangible sectors:

  CORRECT SIGN ONLY
- Effect on stakes in domestic acquisitions: **NO**

Questions

- What is the incremental contribution of this paper relative to previous work?
- At a minimum useful to acknowledge previous published work.
- What does the stylized model add to the theoretical industrial organization literature on "Boundaries of the Firm?"

Questions?

- What are the new stylized facts we learn from this exercise?
- Are we just replacing stock returns with probability of acquisition as the dependent variable?

- Finally, external finance dependence ≠ Liquidity.
- Measures of liquidity are related to the ability of firms to finance their short-term liabilities with current assets. Examples: cash ratio, quick ratio, current ratio, etc.
- External finance dependence relies on external relative to internal funds to finance investment.