

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 \neq 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.