"The Value of Control in Emerging Markets"

Anusha Chari

Paige Ouimet

Linda Tesar

Dramatic Increase in Emerging Market M&A

- Change in the composition of capital flows to emerging markets:
  - Reversal of short-term capital flows
  - Sustained FDI throughout financial crises

- Increasing fraction of FDI taking form of foreign acquisitions of existing plant and equipment.
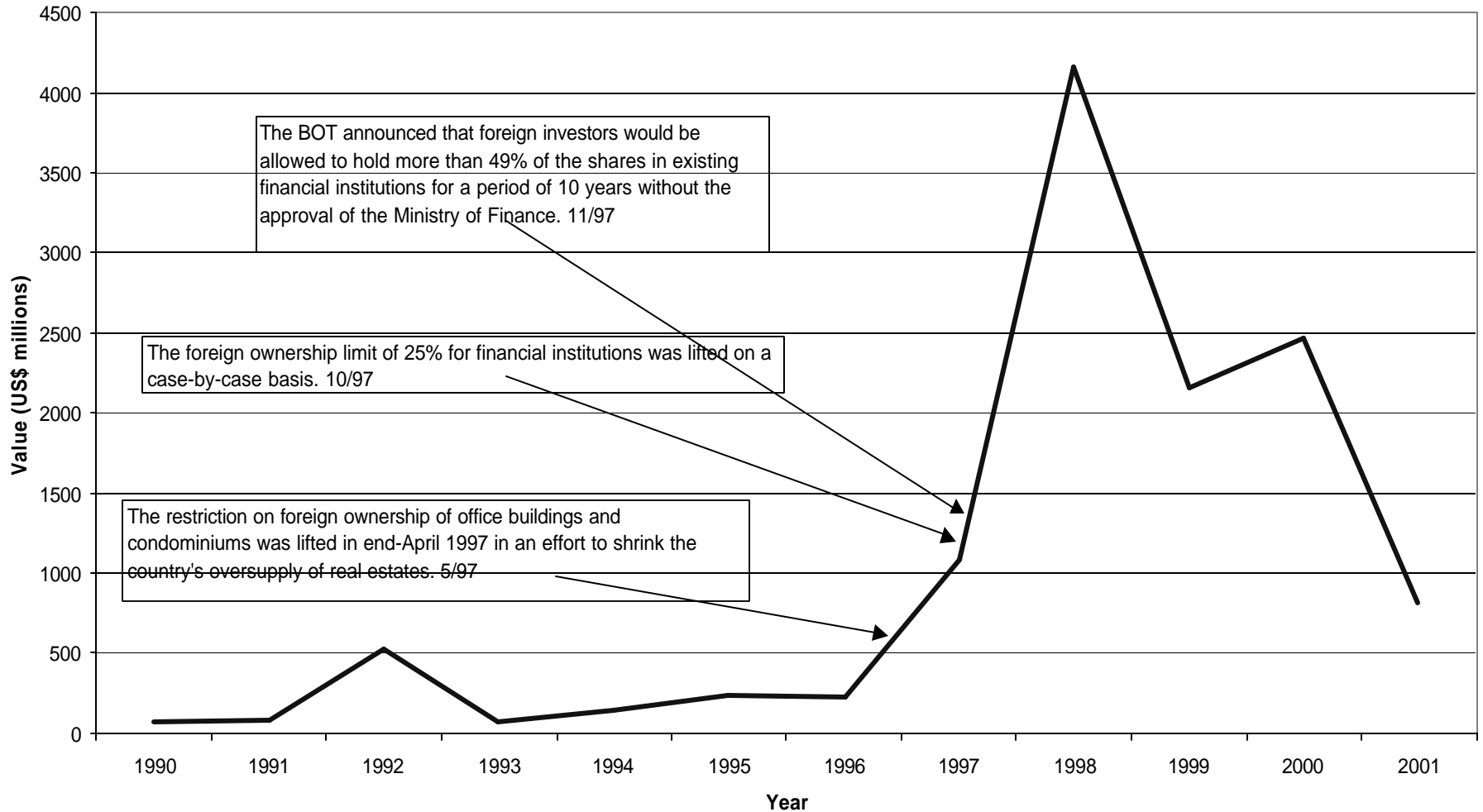
CBMA/FDI	1981-1990	1991-2000
Latin America:	10%	61%
East Asia:	4%	48%

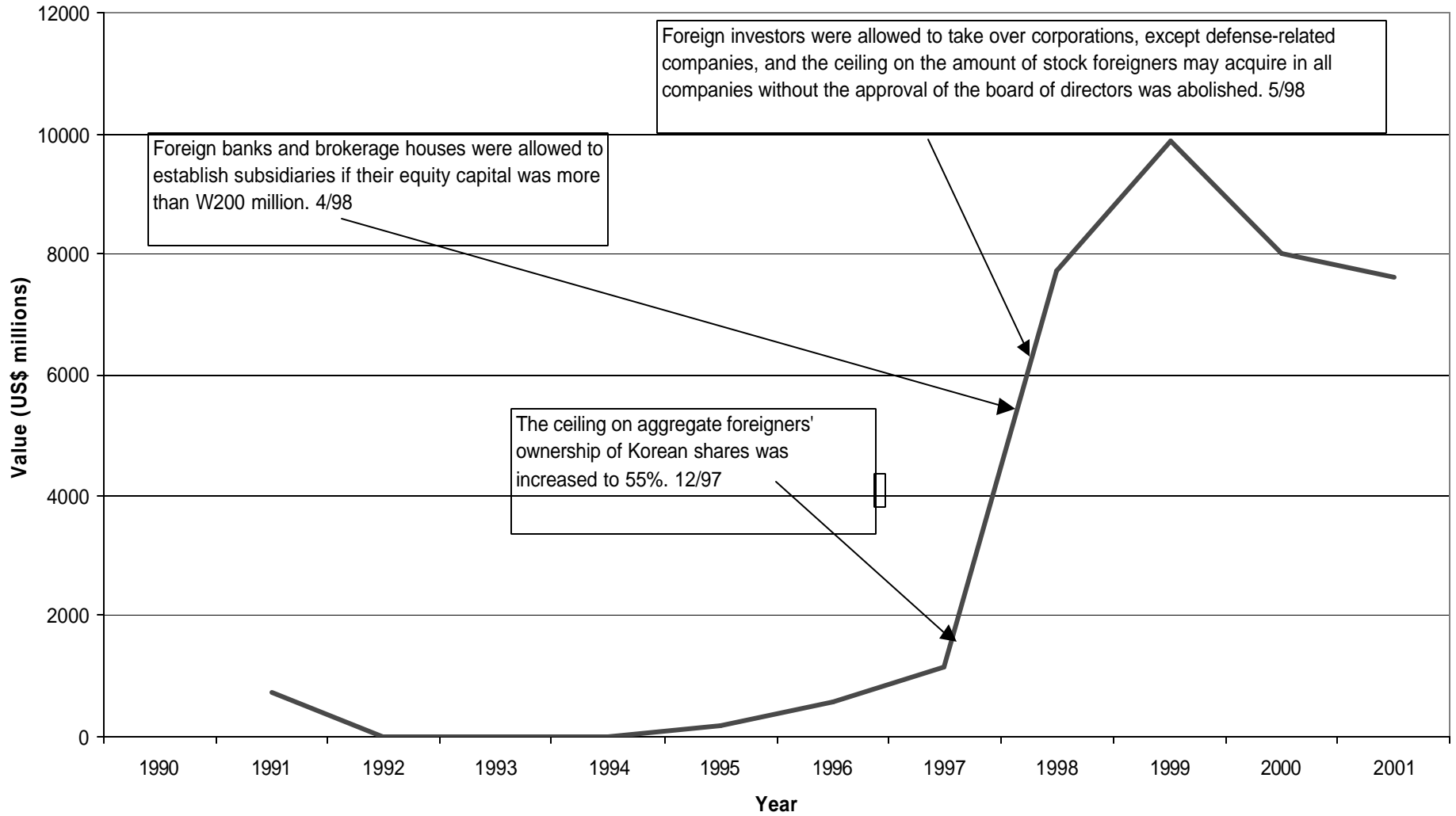# Some Facts about M&A activity in Emerging Markets

- Two waves of M&A activity in Latin America
    - First wave largely privatization and liberalization (1990-1993).
    - Second wave (1996-2001).

- Very little cross border M&A activity in East Asia until 1997.

- IMF bailout packages led to a removal of restrictions on foreign corporate control.

- Foreign acquisitions surged following the implementation of these policies.

Liberalization in the Market for Foreign Corporate Control

Thailand: Value of Cross Border M&A (US$ millions)

The BOT announced that foreign investors would be allowed to hold more than 49% of the shares in existing financial institutions for a period of 10 years without the approval of the Ministry of Finance. 11/97

The foreign ownership limit of 25% for financial institutions was lifted on a case-by-case basis. 10/97

The restriction on foreign ownership of office buildings and condominiums was lifted in end-April 1997 in an effort to shrink the country's oversupply of real estates. 5/97

South Korea: Value of Cross Border M&A (US$ millions)

Foreign investors were allowed to take over corporations, except defense-related companies, and the ceiling on the amount of stock foreigners may acquire in all companies without the approval of the board of directors was abolished. 5/98

Foreign banks and brokerage houses were allowed to establish subsidiaries if their equity capital was more than W200 million. 4/98

The ceiling on aggregate foreigners' ownership of Korean shares was increased to 55%. 12/97

Value (US$ millions)

Year

Cross-Border Acquisitions

Industrialized market

Developing market

Acquiring firm:

$$p_t^A = E_t^A \sum_{s=1}^{\infty} m_{t+s}^A \boldsymbol{d}_{t+s}^A$$

Target firm:

$$p_t^T = E_t^T \sum_{s=1}^{\infty} m_{t+s}^T \boldsymbol{d}_{t+s}^T$$

"New" Firm
When is the value of the new firm different from the sum of its parts?

A Key Feature of Cross-Border M&A in Developing Countries is the Transfer of Control

Number of Acquisitions	Acquirer had Minority Interest Before Acquisition	
Post-Acquisition Ownership	No	Yes
0-50%	233 (22%)	19 (2%)
50-95%	144 (14%)	56 (5%)
95-100%	491 (47%)	108 (10%)

In this paper…

- Foreign purchases of publicly-traded developing country firms offer a unique opportunity to estimate the market-capitalized returns to FDI flows from developed to emerging economies.

Identification Strategy

- On the date a cross border M&A transaction is announced, changes in acquirer and target firm stock prices reveal information about:

  (i) The potential wealth creation from the transaction

  (ii) The distribution of the gains and losses from the transaction to the acquirer and target firms.

Identification Strategy

- Use the stock price reaction (abnormal return) of acquirer and target firms to the announcement of an M&A transaction as a summary statistic for expected surplus value creation generated by developed-market FDI flows to developing countries.

Results: Uncover The Following Stylized Facts…

- Between 1988-2003, developed-market acquirers experience CARs of 1.18% when emerging-market M&A is announced.

- Translate to an aggregate dollar value gain of $111.5 billion for shareholders of acquiring firms for 390 transactions.

- Acquirer returns triple to 4.43% when majority control of a developing country target is acquired.

Results: Uncover The Following Stylized Facts…

- Target firms in developing countries also experience positive monthly returns that range from 4.33% to 8.45% when a cross-border M&A transaction is announced.

- Increases in market-capitalization-weighted joint monthly returns for targets and acquirers are significant only when control is acquired.

- Results are robust to the inclusion of controls for country, time, industrial diversification and method of payment effects as well as acquirer & target firm characteristics such as size and liquidity.

- These facts are consistent with predictions from industrial organization theory.

- In developing countries, rife with problems of incomplete contracting and non-verifiable monitoring, joint surplus value creation in cross-border M&A transactions is intimately linked to the acquisition of majority control.

- Majority control matters more in industries with high asset intangibility.

Question

- Why is surplus value creation in cross-border M&A transactions linked to acquisition of control?

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

$$R^A = P^{T\,''} - P^B = \sum_{s=t}^{\infty} m_s^T \boldsymbol{d}_s \left[(1 + \boldsymbol{y}(\boldsymbol{g}^A))(1 - \boldsymbol{g}^A)(1 + CC) - (1 - \boldsymbol{g}^E)(1 + \boldsymbol{q}) \right]$$

- The acquirer return will be larger:

  (1) the larger the value of technology transfer ? > 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 ? (γ) < 0 & $\gamma^E > \gamma^{A.}$

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

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

The Data

- SDC Thompson's International M&A database

- Time period 1987-2003.

- Publicly listed developed-market acquirers and emerging-market targets

- Completed transaction/ Factiva cross-checked

With these filters in place…

- Emerging markets include Argentina, Brazil, Bolivia, Chile, China, Columbia, Ecuador, India, Indonesia, Malaysia, Mexico, Pakistan, Peru, Philippines, South Korea, Thailand and Venezuela.

- Developed markets include Canada, France, Germany, Hong Kong, Italy, Japan, Netherlands, Singapore, Spain, the United Kingdom, and the United States.

The Data

- Transaction-specific information

    – date announced & completed

    – SIC classification

    – percent of shares sought & acquired

    – pre-acquisition relationship

The Data

- Return information

  - Sources: Data-stream, Bloomberg & ISI Emerging Markets database

  - Weekly and Daily returns

  - Local currency & US$ returns

The Data

- Sample size

  - 1708 publicly listed developed-markets firms announced acquisitions of publicly listed emerging-market targets

  - Data on returns for 415 targets

  - Control group: 1,449 publicly listed targets in other industrialized countries acquired by developed-market acquirers

Summary Statistics

- Developed-market acquirer returns are positive in emerging-market transactions. (Panel A1, Table 3)

- The effect of gaining majority control appears specific to the emerging-market context. (Panel A2, Table 3).

- Announcement returns for emerging-market target firms are also positive & significant and increase when control is acquired (Panel B, Table 3).

- Market-capitalization-weighted, joint returns are positive & significant when majority control is acquired (Panel C, Table 3).

Panel A1, Table 3

Acquirer Returns			
Local Currency Returns	All EM Targets	Acquirer Gains Control	Acquirer does not Gain Control
(-1,+1) Mean	1.18%*	4.43%***	-0.2%

Panel A2, Table 3

Acquirer Returns			
Local Currency Returns	All DM Targets	Acquirer Gains Control	Acquirer does not Gain Control
(-1,+1) Mean	-0.52%	-0.60%	-0.15%**

Panel B, Table 3

Target Returns			
Local Currency Returns	All EM Targets	Acquirer Gains Control	Acquirer does not Gain Control
(-1,+1) Mean	6.62%**	8.45%***	4.33%*

Panel C, Table 3

Joint Returns			
US$ Returns	All EM Targets	Acquirer Gains Control	Acquirer does not Gain Control
(-1,+1) Mean	1.24%	5.61%***	-1.29%

Table 4: Majority Control is a Key Feature of Transactions With Positive Acquirer Returns

$$R_{it} = a_i + b_1 \cdot Control_i + g_j \sum_{j=1}^{n} AcquisitionCharacteristics_j + e_{it}$$

	(1)	(2)	(3)	(4)
Intercept	0.012*	-0.033	-0.013	-0.029
1996-2002		0.034***		0.018
Majority Control			0.046***	0.048***

Majority Control is the Critical Threshold

- A 1% increase in a continuous measure of post-acquisition target ownership leads to a 0.04% increase in the acquirer abnormal returns (Table 4, Column 5).

- Coefficient loses significance when majority control dummy is included.

- Coefficient on majority control = 0.054.

- Log transformation of ownership variable yields same result.

- > 90% of target company drives acquirer abnormal returns up by 3.7%. Acquiring between 50%-90% drives up returns by 5.4% (Table 4, Column 7).

- Coefficient on > 90% ownership loses significance when majority control dummy is included.

Dollar Value Gains

	CAR	Acquirer Market Capitalization ($ million)	Dollar Value Gain per Transaction ($ million)	Transaction Value ($ million)	Target Market Capitalization ($ million)	Net Return per Transaction
Developed-Market Acquirer Gains Majority Control						
Median	0.040	6844.20	104.63	110.54	144.72	**1.37**
Developed-Market Acquirer Does Not Gain Control						
Median	0.000	26830.69	-3.41	52.48	294.77	**-0.20**
Full Sample						
Median	0.001	16984.64	5.17	62.50	165.44	**0.12**

- Why are dollar value gains, elusive in domestic M&As, so huge in emerging-market transactions?

- Hypothesis: 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).

Table 7: Sources of Acquirer Value Gains: Intangible Assets

	Acquirer Returns		Dollar Value Gains	
	1a	2a	1b	2b
Control	0.033**	0.029*	0.011**	0.008
Asset Intangibility/Sales (Target Ind.)	-0.432		-0.085	
*Asset Intangibility/Sales * Control (Target Ind.)*	0.738*		0.303*	
Asset Intangibility/Sales (Acquirer Ind.)		-0.357		-0.085
*Asset Intangibility/Sales * Control (Acquirer Ind.)*		0.798**		0.404***
N	253	240	168	162

Table 7: Sources of Acquirer Value Gains: Intangible Assets

- Pooled sample of developed- and emerging-market targets.

- The interaction term between target industry asset intangibility, control, and an emerging market target is positive and significant with a coefficient of 0.776 (Column 1c).

- Complementarity between asset intangibility and institutions.

Table 8 (Panel B): Corporate Governance Distance Between Developed-Market Acquirers and Targets

	Developed-Market Target (a)	Emerging-Market Target (b)	T-test of Difference (a)-(b)
Rule of Law	0.283 (0.000)	3.968 (3.750)	Yes***
Efficacy of Judiciary	0.264 (0.000)	3.311 (3.250)	Yes***
Contract Repudiation Risk	0.071 (0.000)	2.579 (2.830)	Yes***
Expropriation Risk	0.020 (0.000)	2.287 (2.090)	Yes***

Table 8 (Panel C): Sources of Acquirer Value Gains- Improved Governance (Measure 1)

Intercept	-0.043	-0.031	-0.041	-0.029	-0.04	-0.028
Rule of Law	0.029*	0.008				
Control		-0.009		-0.012		-0.013
*Rule of Law*Control*		0.064**				
Contract Repudiation Risk			0.013	-0.012		
*Contract Repudiation Risk*Control*				0.081**		
Expropriation Risk					0.009	-0.014
Expropriation Risk Control*						0.084***
N	1414	963	1414	963	1414	963

When are Acquirer Returns the Largest?

- Control is acquired and large intangibles– i.e. in industries with high R&D and brand intensity.

- Control is acquired and in countries with high risks of expropriation, contract repudiation and weak rules of law.

- Control is acquired and an increase in the cost of capital in emerging markets.

Conclusion

- Anticipated returns to FDI are large in emerging-markets.

- Acquisition of control key positive returns.

- Shareholder value gains from cross-border M&As → market-based measure of the returns from investments in foreign assets.

- Transaction values in M&A transactions (or book values in the case of green-field investments) can be particularly misleading estimates of FDI flows and the productivity (value) gains associated with these investments.

Preview of Ongoing Project

- New project uses the firm-level information to examine whether multinational firms choose to organize production within firm boundaries by acquiring control or through arms-length contracts in developing countries.

- Central to this exercise is the question of whether the "make versus buy" decision varies across industries depending on the severity of the incomplete contracting problem and whether these problems are compounded by cross-sectional variation in the quality of country-level institutions.

Preview of Ongoing Project

- Literature in international trade that focuses on the organization of multinational firms to study the determinants of inter-firm trade (for example, Antràs (2003, 2005),

- New trade theory focuses on the contracting theory of the firm to generate predictions about the organization of international production networks.

- Data limitations have precluded testing these predictions at the firm-level.

- The cross-border M&A data I use fill this gap.