Comments on: "Are Daily Cross-Border Equity Flows Pushed or Pulled?"

by

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Plan of Discussion

- Theoretical Model
- Empirical Work
- Broader considerations

Some previous work on push/pull

- 1993: Calvo, Leiderman, and Reinhart
  - "Capital inflows and real exchange rate appreciation in Latin America: the role of external factors"
- 1996: Fernandez-Arias
  - "The new wave of private capital inflows: push or pull"
- 1996: Chuhan, Claessens, and Mamingi
  - "Equity and bond flows to Latin America and Asia: the role of global and country factors"
- 1999: Montiel and Reinhart
  - "Do capital controls and macroeconomic policies influence the volume and composition of capital inflows? Evidence from the 1990s"

“Common sense” view of capital flows

- Rates of return in a country rise
- Capital flows into that country

“Finance literature” view of capital flows

- Perfect capital markets -- all investors hold same global portfolio
- Increased Chilean returns $\rightarrow$ both Chileans and foreigners raise desired portfolio allocations to Chile.
- Higher Chilean equity prices raise Chile weight in portfolios.
- No need for assets to change hands -- no need for capital flows.

"Asymmetric information" explanation of capital flows

- Foreigners know less than domestic investors.
- When domestic returns rise, foreigners revise expected returns more than do domestic investors.
- Therefore, foreigners buy stocks from locals.
- Explains home bias, too.

Some previous work on asymmetric info

- 1997: Brennan and Cao
  - "International portfolio flows"

- 2000: Seasholes
  - "Smart Foreign Traders in Emerging Markets"

- 2001: Choe, Kho, and Stulz
  - "Do domestic investors have more valuable information about individual stocks than foreign investors?"

- 2001: Froot and Ramadorai
  - "The Information Content of International Portfolio Flows"

First theoretical result:

- With home bias
- But without asymmetric info
- Higher returns → capital outflows!

Example: Doubling of Chilean Stock Price

	U.S. Investors		Chilean Investors	
	Before	After	Before	After
1.Wealth	$100		$50	
2.U.S. stocks	$90 (90%)		$5 (10%)	
3. Chilean stocks	$10 (10%)		$45 (90%)	

Example: Doubling of Chilean Stock Price

	U.S. Investors		Chilean Investors	
	Before	After	Before	After
1.Wealth	$100	$110	$50	$95
2.U.S. stocks	$90	$90	$5	$5
	(90%)	(82%)	(10%)	(5%)
3. Chilean stocks	$10	$20	$45	$90
	(10%)	(18%)	(90%)	(95%)

Second theoretical result:

- With home bias
- But with asymmetric info and extrapolative expectations
- Higher returns in Chile → capital *inflows*

Third theoretical result:

- With home bias, asymmetric info & extrapolative expectations

- If country is large (like U.S.):

higher U.S. returns →

capital *inflows* to Chile

capital *outflows* from U.S.

II. Empirical Work

Database of Daily Stock Transactions

- How are these data collected?

- How do trends in these data compare with monthly and quarterly data from other sources?

Key Empirical Results

- Higher emerging market returns → capital inflows.
  - Consistent with:
    - Bohn and Tesar (1996)
    - Brennan and Cao (1997)
    - Froot, O'Connel and Seasholes (2001)
    - Richards (2002)
- Higher foreign returns → capital inflows.

?

Does role of U.S. returns reflect wealth effects?

Alternative explanations:

- Correlation of U.S. returns with reductions in risk aversion

- U.S. returns anticipate global growth

Is positive effect of U.S. returns on equity flows to emerging markets robust?

- Evidence in paper for role of U.S. returns weaker than for local returns.

- Previous work using lower frequency data find no no such effect.
  - Bohn and Tesar (1996)
  - Brennan and Cao (1997)

Update Previous Work

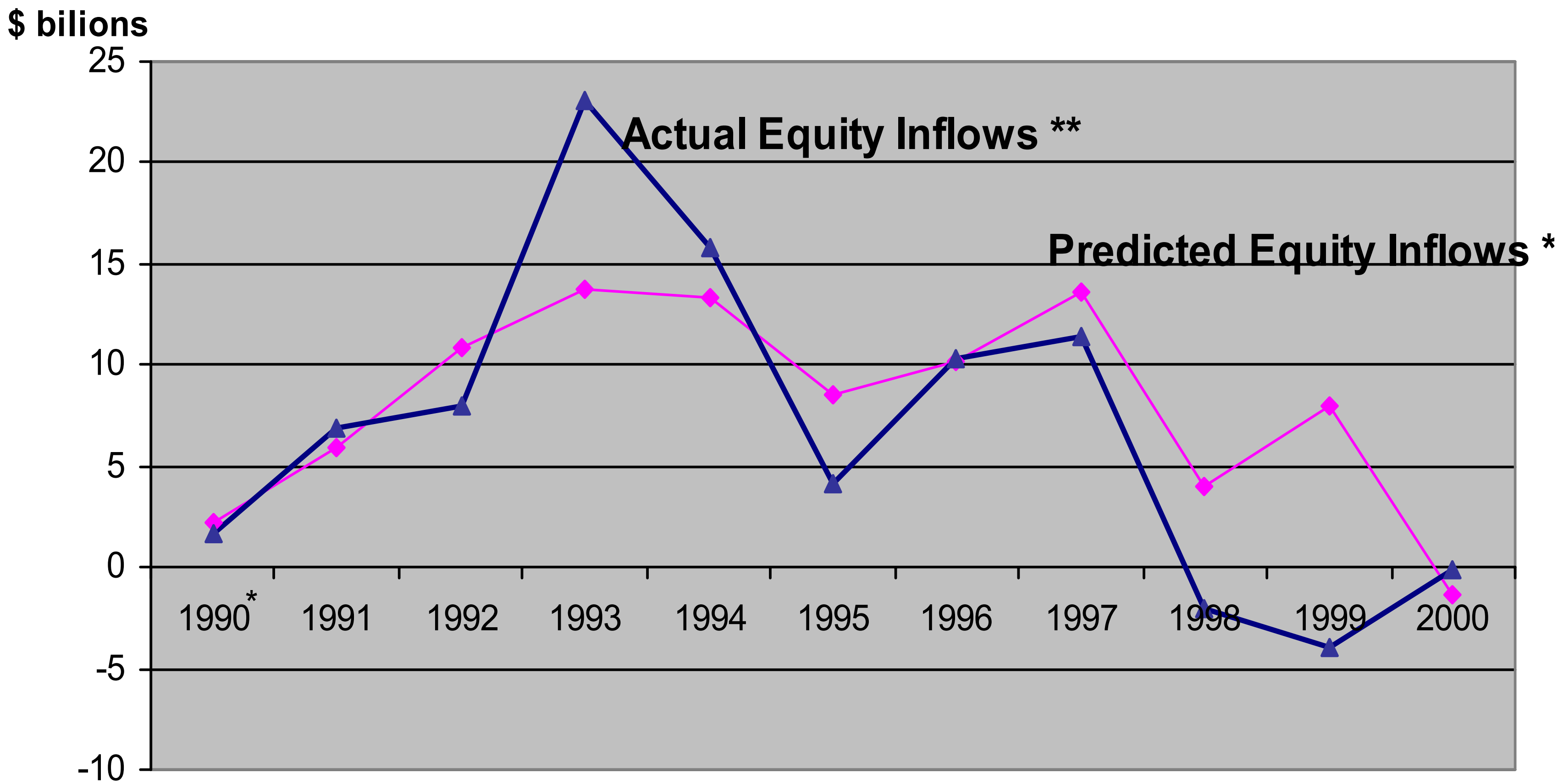
- Quarterly data on equity inflows from IMF BOP database.
- 1990 - 2000
- Lagged dependent variables, trends, dummies for outliers

Dep.Variable: Equity Inflows/Market Cap

	ARG	BRA	CHI	MEX	IND	KOR	THAI
Local	**.06**	.01	.00	**.02**	**.02**	**.01**	**.01**
Return:	**(2.34)**	(.97)	(1.11)	**(3.10)**	**(2.41)**	**(2.51)**	**(2.46)**
U.S.	-.04	.03	-.00	-.04	-.10	.01	.02
Return:	(-.94)	(1.06)	(-.74)	(-2.14)	(-1.63)	(.43)	(1.55)
U.S.							
Return	-.01	.04	-.00	-.02	-.01	.02	**.03**
Only:	(-.18)	(1.34)	(-0.52)	(-.90)	(-.25)	(1.67)	**(2.55)**

(t-statistics in parentheses)

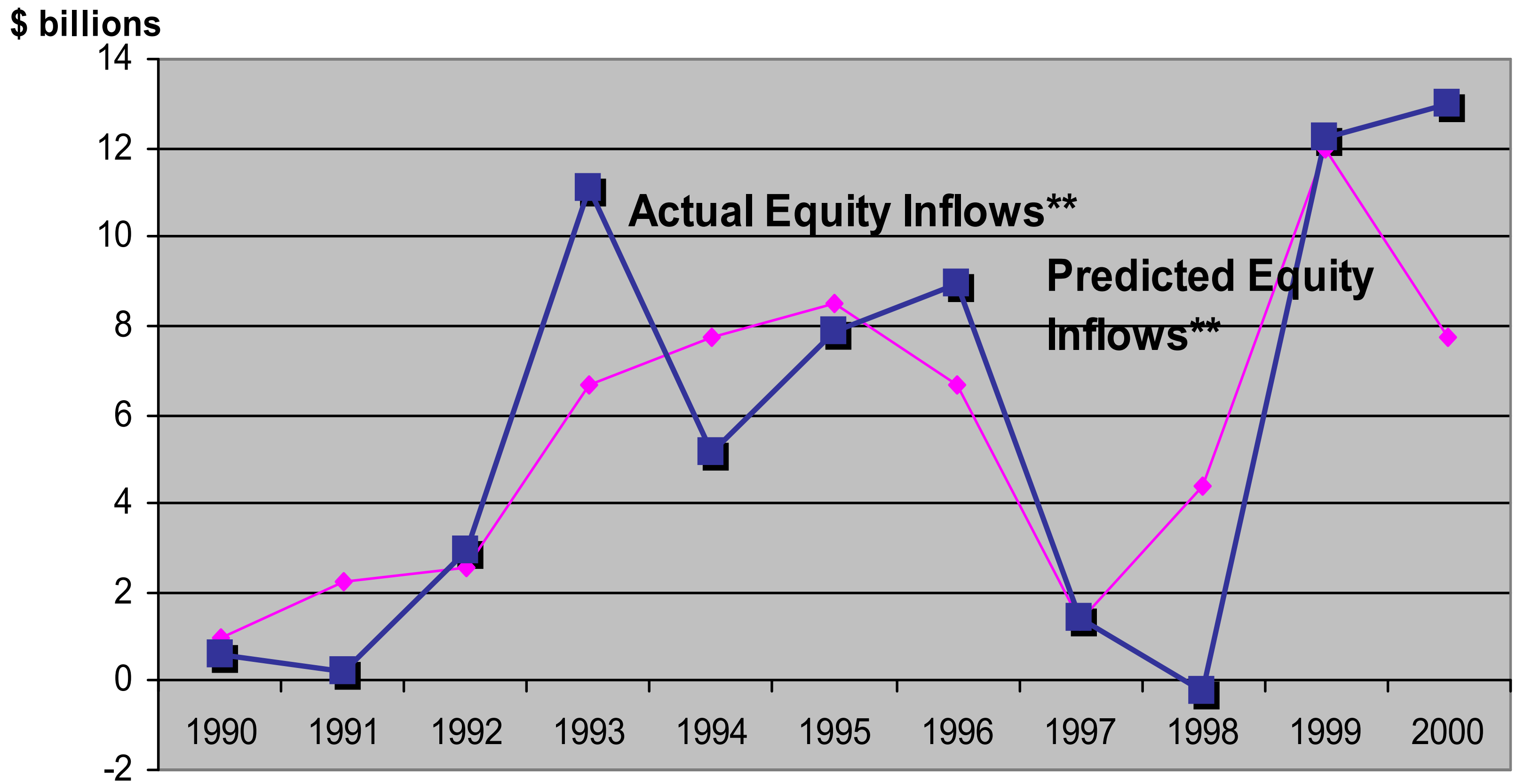
Actual and Predicted Equity Inflows to Selected Latin American Countries (Argentina, Brazil, Chile, Mexico)



* 1990 includes q2, q3, and q4 only.

** Data for Argentina 1990 - 1991 not available.

Actual and Predicted Equity Inflows to Selected East Asian Countries (Indonesia, Korea, Thailand)



* 1990 includes q2, q3, and q4 only.

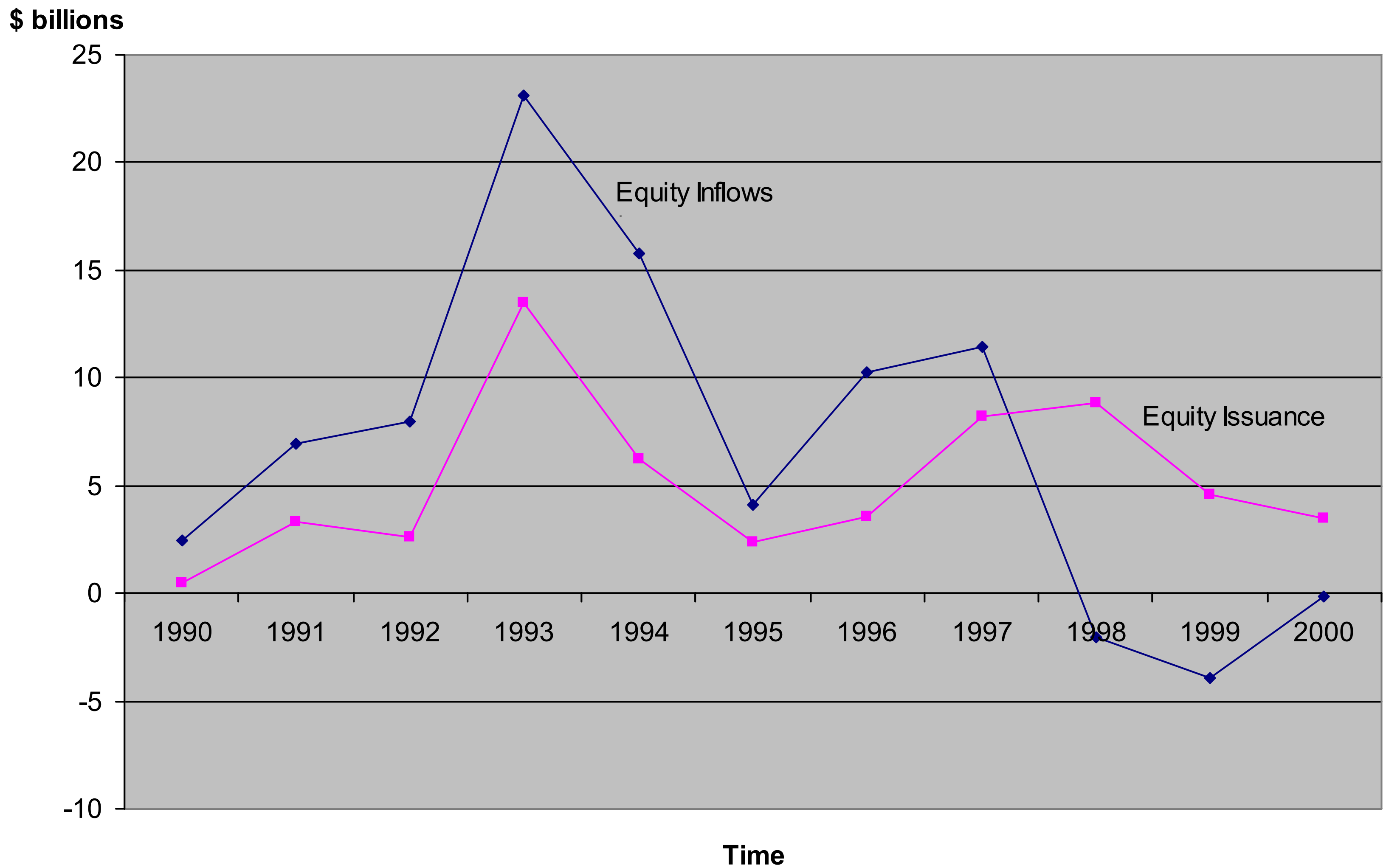
** Data for Indonesia 1990 - 1992 not available.

III. Broader Issues

Supply Matters as well as Demand

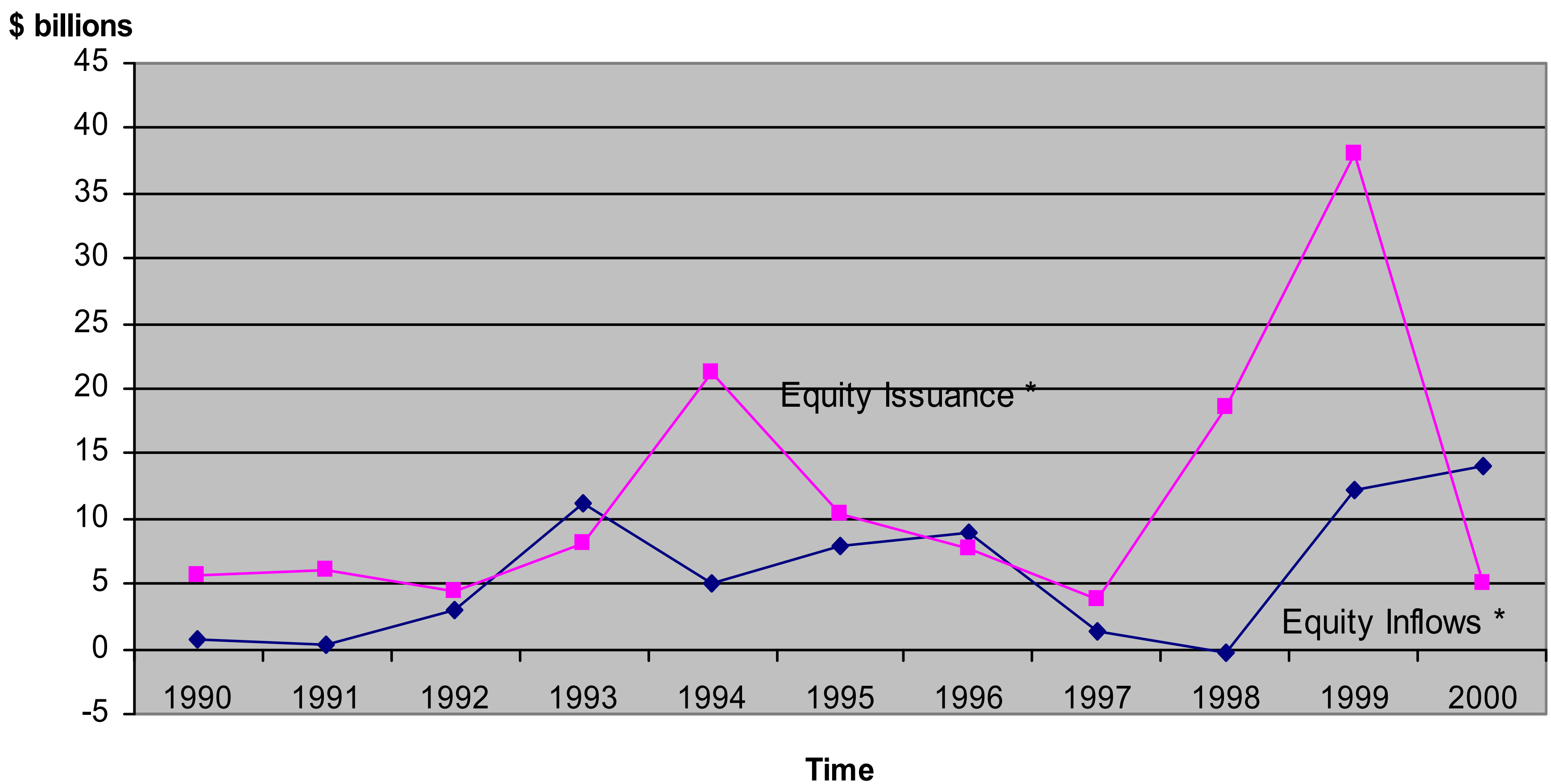
- Paper assumes fixed supply of equities
  - only new information causes equity flows
- But increased supplies of equities may also cause flows
  - even with no new info, no asymmetric info

Equity Issuance and Equity Inflows to Selected Latin American Countries (Argentina, Brazil, Chile, Mexico)



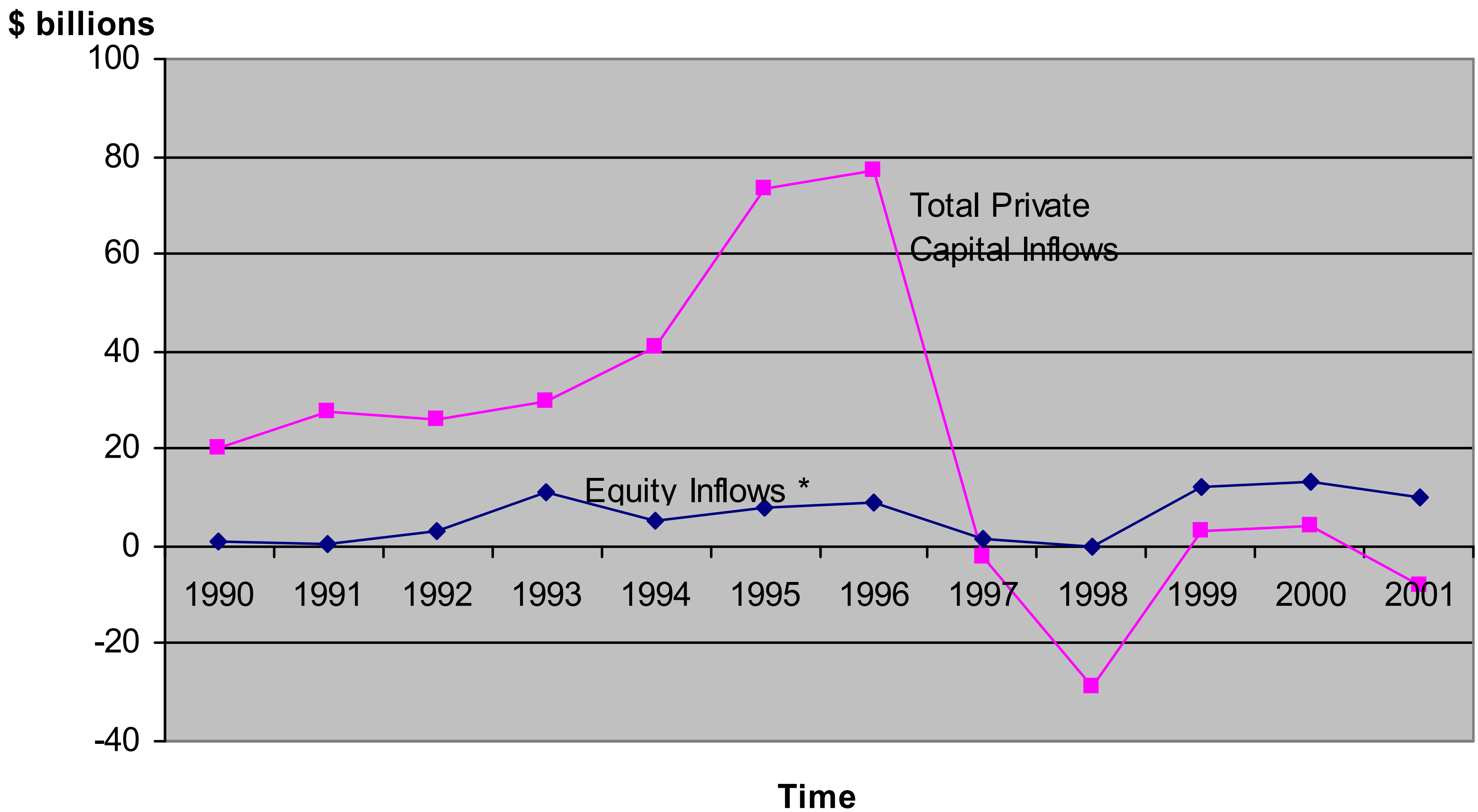
* Data for Argentina 1990 - 1991 not

Equity Issuance and Equity Inflows to Selected East Asian Countries (Indonesia, Korea, Thailand)

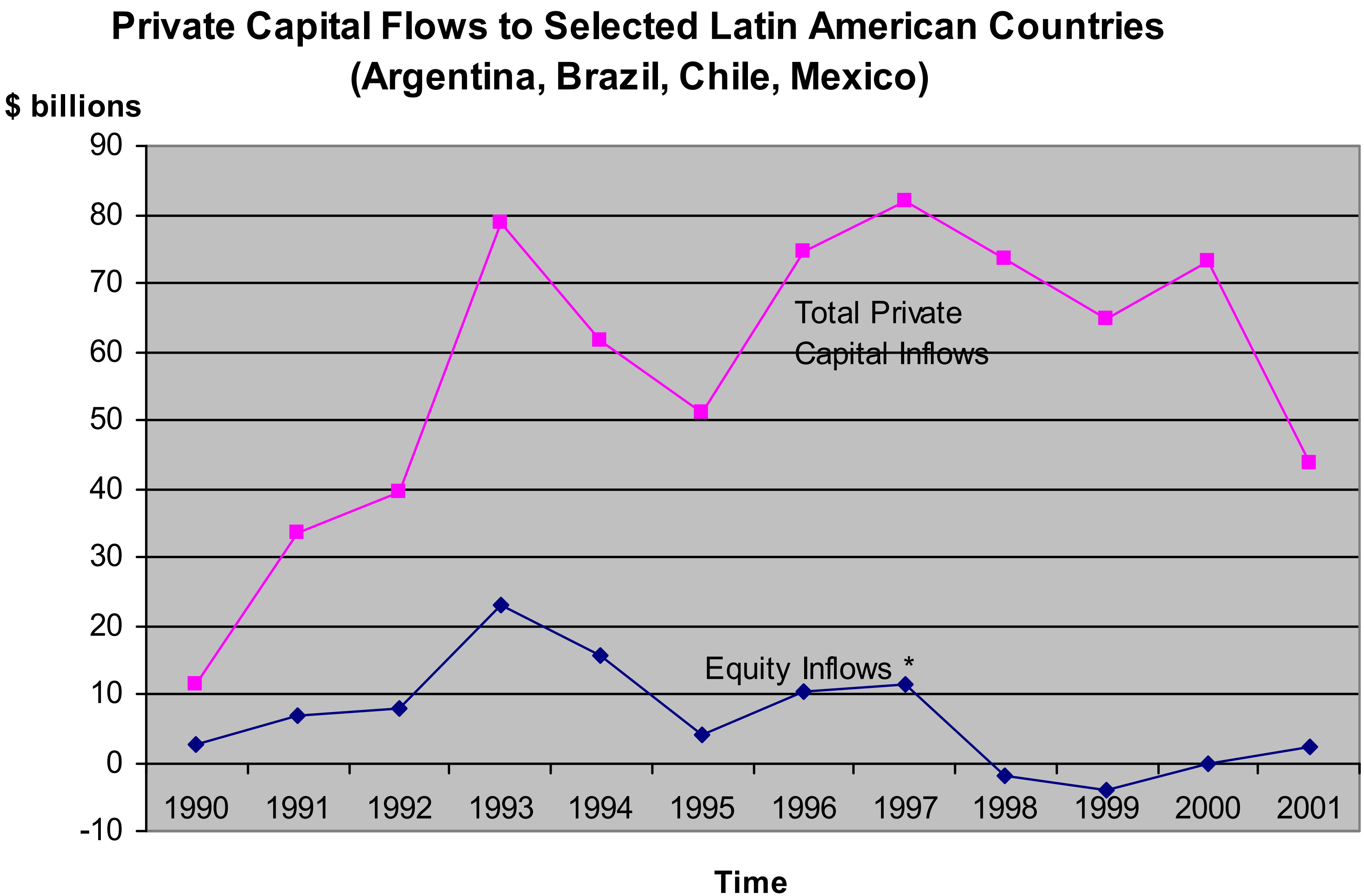


* Data for Indonesia 1990 - 1992 and 2000 not available.

Private Capital Flows to Selected East Asian Countries (Indonesia, Korea, Thailand)



* Data for Indonesia 1990 - 1992 and 2001 not available.



* Data for Argentina 1990 - 1991 not available.

Conclusion

- Important contributions to our understanding of emerging market equity flows
  - theory with home bias and asymmetric information
  - novel daily data
  - new evidence of effect of returns on flows
- Lots more to be done.