

Special interest politics and the exchange rate

Jeff Frieden
Harvard University
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Explaining exchange rate policies

- Regime choice
- Level (i.e. depreciated East Asia vs. appreciated Latin America)
- Sustainability of peg
- Currency crises

The usual approach

- Macroeconomic/welfare → OCA
- Macroeconomic/welfare → anti-inflationary credibility
- Macroeconomic/political economy → electoral exchange rate cycles

True

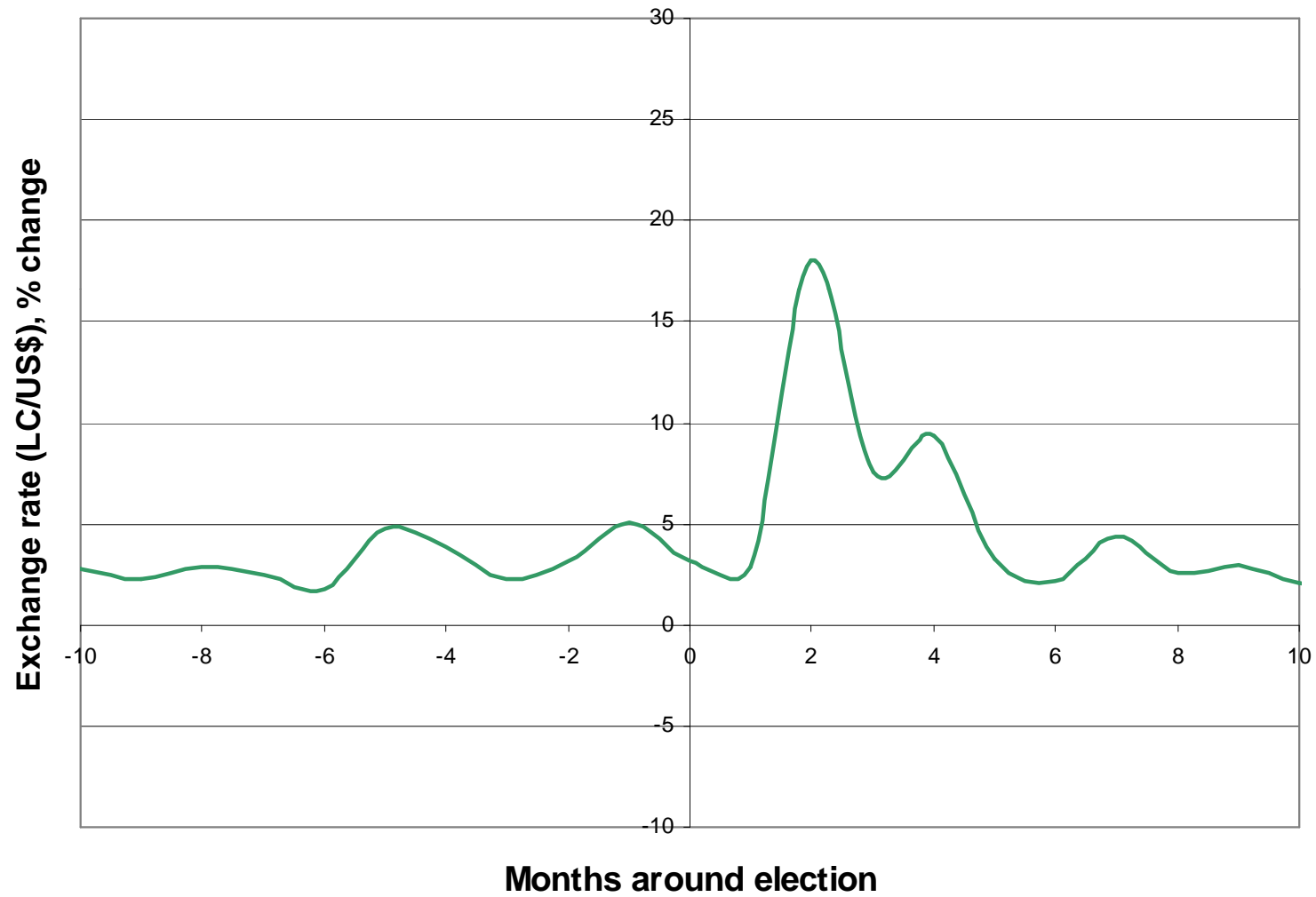
- Evidence of anti-inflationary use:
 - Hyperinflation → 21% greater probability of adopting a currency peg (but no evidence with below-hyperinflationary inflation)
- Evidence of electoral cycle:
 - For countries on a peg, in 8 months before election, 8% reduction in probability of going off peg; during four months after, 4% increase
 - For other countries...

Real exchange rate movements around elections, Latin America, 1972-1994

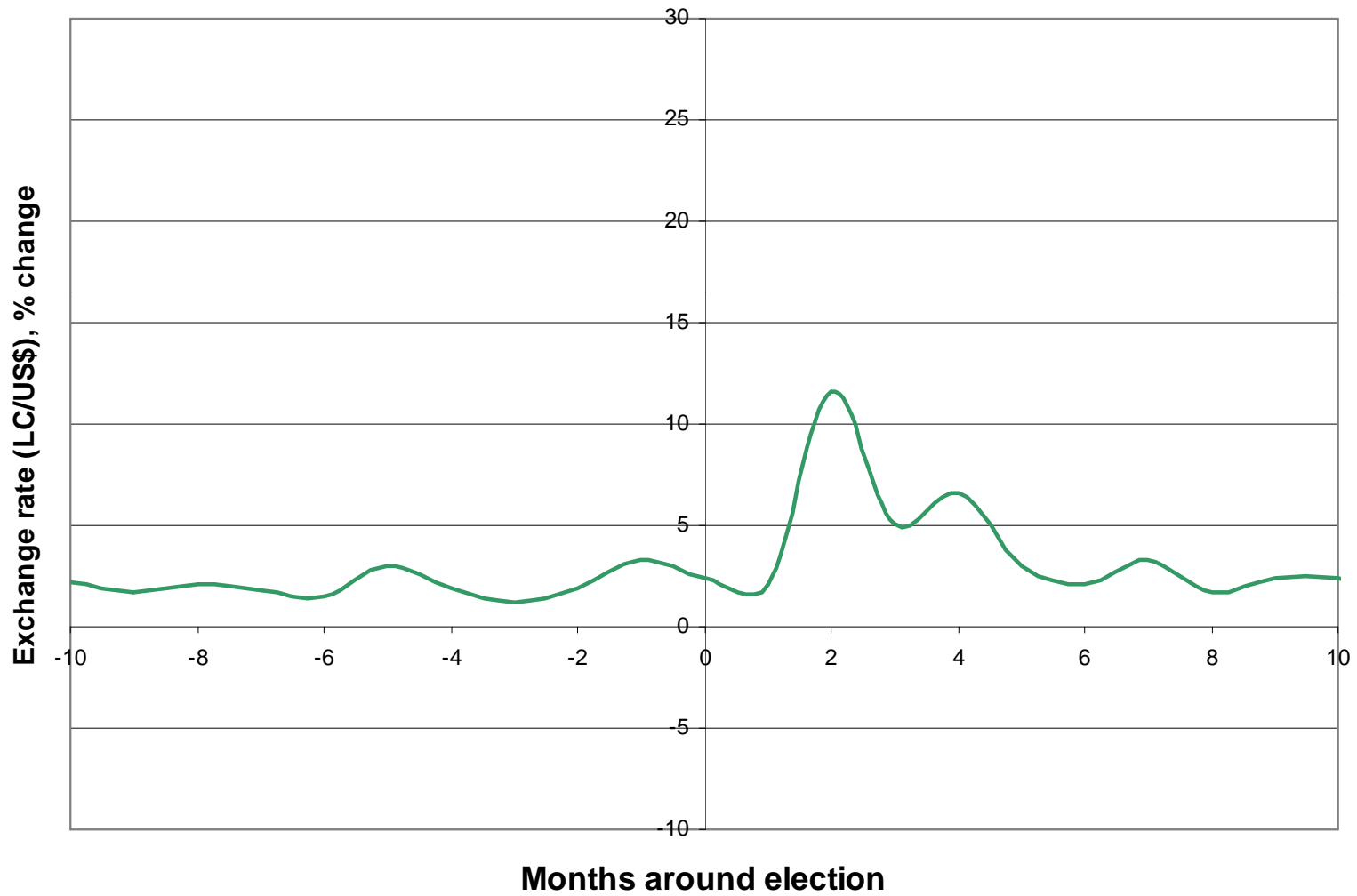
Real Ex Rate
around constitutional changes - 86 episodes



Nominal exchange rate movements around 105 executive elections in Latin America 1970-2004



Nominal exchange rate movements around 167 legislative elections in Latin America 1970-2004



But not true enough....

- Theory:
 - Rarity of benevolent social planner in office
 - Exchange rate as substitute for trade policy
- Practice
 - Casual observation



Siemens warns on Brazil's strong real

By Samantha Pearson in São Paulo

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Brazil faces the risk of “deindustrialisation” unless it imposes more extreme capital controls to rein in the surging local currency, the head of **Siemens** in the country has warned.

Adilson Antonio Primo, the Siemens chief executive for Brazil, told the Financial Times that the strong real was crushing the group's export business in the country.

Siemens, the German industrial group that ranks as Brazil's biggest electronics conglomerate, now only exports some 12 per cent of its products made in the country compared with 20 per cent four years ago.

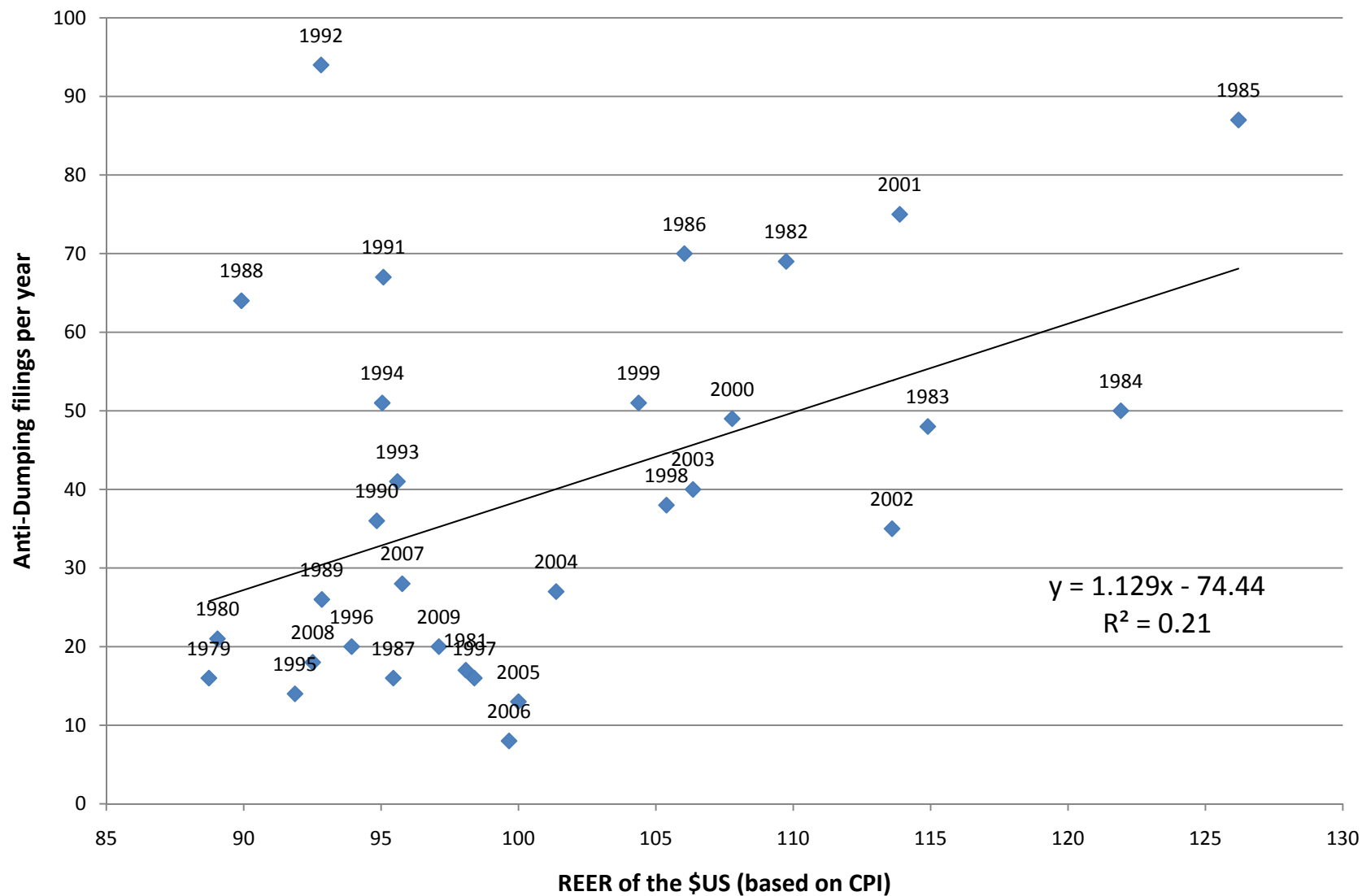
“We need wider measures, harsher measures. If the currency strengthens beyond 1.50, that would be a real disaster for us,” Mr Primo said.

“We're not advocating protectionism, but you need to be able to compete on equal terms. This is fundamental; there is a risk of deindustrialisation.”

More systematic evidence

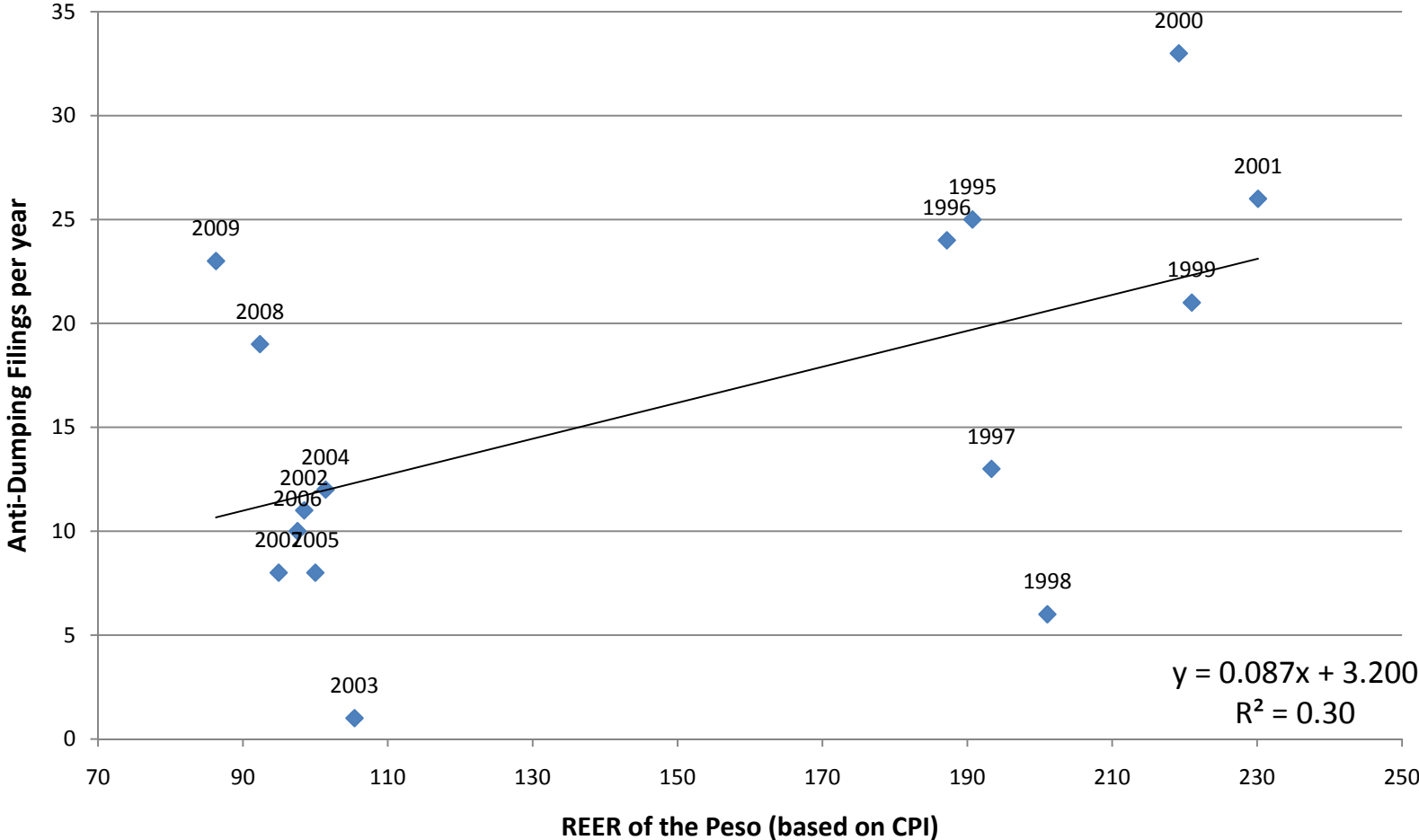
- 1 SD real appreciation \rightarrow 33% increase in antidumping filings (4 countries, Knetter and Prusa 2003).
- 1 SD real appreciation ($\sim 7\%$) \rightarrow 20% to 50% increase in antidumping investigations (4 countries plus EU, Oatley 2010)
- 1 SD real appreciation of dollar ($\sim 10\%$) \rightarrow 27% increase in antidumping filings in US (Broz and Frieden, forthcoming)

Figure 1: U.S. Anti-Dumping Cases, 1979-2009



Even in Latin America....

Figure 2: Argentina's Anti-Dumping Cases, 1995-2009



How to incorporate?

- Particularistic interests in exchange rate policy
- Two dimensions
 - Regime
 - Level
- Pin down preferences
- Examine institutional mediation

Some simple ideas

- Preference for depreciated currency increasing in tradability
- Preference for fixed (or at least stable) currency increasing in exposure to cross-border (currency) risk
- Intensity of preferences varies with incidence; influence varies with concentration

Simple ideas, applied

- Manufacturers and tradable agriculture favor a depreciated rate (intense, concentrated),
Typically also implies flexible/floating rate (especially in high-inflation environment)
- Foreign-currency debtors favor a fixed/stable currency (intense, concentrated)
- Consumers favor an appreciated rate (weak, diffuse)

How to evaluate?

- Special-interest pressures largely unobservable
- Relative impact of special interests difficult or impossible to retrieve from policy outcomes
- Cross-national comparisons confounded by cross-national economic, institutional differences
- Try many methods

Cross-national studies

- Infer SIG pressure from economic structure:
 - share of manufacturing/agricultural output or employment → Influence of tradables producers
 - Foreign-currency liabilities → Influence of forex debtors
 - Openness → Influence of internationally-oriented producers, investors
- Study of Latin American ER regime choice, 1972-1994; of duration of Latin American currency pegs, 1972-1999

Latin American exchange rate regimes, 1972-1994: Ordered logit regressions with regime on 0-8 scale, lower more fixed

	(1)	(3)	(5)
Log inflation	0.32 (3.49)	0.36 (3.46)	0.23 (1.98)
Hyper	-2.39 (-3.89)	-2.50 (-3.88)	-2.62 (-3.83)
Open	-1.74 (-3.64)	-1.85 (-3.79)	-3.07 (-5.15)
Reserves/m2	0.50 (1.20)		
TOT volatility	-4.68 (-2.23)		
Capital controls 1	0.18 (0.82)		
Manufl		8.97 (3.08)	10.10 (3.47)
Govseats			-2.59 (-2.75)
Efpart			-0.34 (-2.63)
Dict			-1.07 (-2.29)
Trend	Yes	Yes	Yes
N	616	679	562

A positive sign means that the variable increases the probability of adopting a more flexible regime. z-statistics in parentheses

Table 2. Explaining the duration of Latin American currency pegs, 1972-1999

Variable	(1)=political	(2)=(1)+economic	(3)=(2)+misalign	(4)=(3)+controls
Constant	7.254 *** (0.764)	6.667 *** (0.163)	7.045 *** (0.807)	5.633 *** (0.807)
MAN/GDP	-11.05 *** (3.624)	-9.171 *** (1.063)	-12.794 *** (1.882)	-12.493 *** (4.456)
ELECTION	0.552 ** (0.270)	0.275 * (0.163)	0.563 * (0.319)	0.570 * (0.340)
OPENNESS		-1.314 *** (0.116)	-1.002 *** (0.391)	-1.050 ** (0.529)
LN(INFLATION)		-1.047 *** (0.186)	-0.234 (0.146)	-0.327 (0.343)
DGDP		13.467 *** (4.014)	25.850 *** (6.266)	25.737 *** (8.705)
INTL REGIME		1.839 *** (0.172)	1.630 *** (0.605)	1.509 (1.199)
NX/GDP				-0.024 (0.033)
LN(GDP)				0.168 (0.541)
I/GDP				-0.002 (0.040)
High Misalign			-0.879 ** (0.511)	-0.771 (0.675)
Low Misalign			-0.324 (0.453)	-0.202 (0.485)
ρ	1.399 *** (0.207)	1.154 *** (0.174)	1.173 *** (0.110)	1.197 *** (0.167)
Chi-Sq(2)	4.23	3.21	2.38	2.33
P-value	(0.12)	(0.20)	(0.30)	(0.31)
pseudo R ²	0.431	0.797	0.525	0.541

Notes: Column (1) includes political covariates as suggested by the model. Column (2) adds standard economic variables as suggested by the model. Country fixed effects are included (though not reported). Column (3) adds misalignment variables and Column (4) adds further economic controls. The row entitled Chi-Sq(2) is a test that the coefficients associated with the pre-election and post-election components of ELECTION are statistically different from one another. The row P-value reports the p-value associated with this test. Standard errors are in parenthesis and are clustered by country month cell. * is significant at 0.10 level, ** at .05 level, *** at .01 level.

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Manufacturers and currency policy

- From study of regime choice, Latin America, 1972-1994
 - One SD increase in mfg/GDP (lagged) associated with 11% reduction in probability of fixed rate
- From study of peg duration, 1972-2000
 - One SD increase in mfg/GDP associated with reduction of .66 in conditional probability of sustaining peg
- NB: These refer to fixing, not level

Openness and currency choice

- Note possible interpretation: OCA, or special-interest (more open, more exposed interests)
- From study of regime choice, Latin America, 1972-1994
 - One SD increase in $(X+M)/GDP$ (lagged) associated with 25% increase in probability of fixed rate
- Similar study of choice of fixing to euro among ECE/FSU countries, 1992-2005

Table 4 The determinants of de facto exchange rate regimes in transition economies, 1993–2004

	Dependent variable: 1 if de facto peg, 0 otherwise				
	(1)	(2)	(3)	(4)	(5)
Imports plus exports/GDP	0.387 ^a (4.10)	0.308 ^a (3.41)	0.352 ^a (2.72)	0.556 ^a (4.34)	0.134 ^a (2.87)
Exports to Germany/GDP	-4.349 ^a (-3.86)	-4.567 ^a (-3.62)	-3.281 ^a (-3.63)	-5.134 ^a (-3.35)	-0.111 (-0.16)
Share of agricultural employment	-1.032 ^a (-2.78)	-0.785 ^b (-2.37)	-0.401 ^c (-1.75)	-1.109 ^b (-2.36)	-0.565 ^a (-4.13)
Share of manufacturing employment	-2.460 ^a (-3.49)	-1.282 ^b (2.09)	-0.722 (-1.54)	-2.192 ^b (-2.44)	-0.873 ^a (-3.56)
Democracy	0.024 ^a (2.96)	0.025 ^a (3.56)	0.014 ^b (2.23)	0.022 ^b (2.37)	0.011 ^b (2.54)
Stock of FDI/GDP		0.387 ^c (1.93)			
Inflation			-0.033 ^a (-2.93)		
Trade balance			0.545 ^c (1.75)		
External debt/GDP			0.001 ^b (2.20)		
Financial development			-0.257 ^a (-2.58)		
Trade and currency market liberalization				0.073 (0.86)	
Central bank independence				-0.102 (-0.35)	
Exports to Germany/GDP 1993–1995					-6.471 ^a (-2.88)
Dummy for Central and East European countries	0.169 ^b (2.15)	0.116 ^c (1.89)	0.128 ^b (2.21)	0.115 (1.37)	0.202 ^a (4.29)
Number of observations	221	217	207	190	221
Wald Chi2(# indep. variables)	58.92	65.59	135.35	40.28	66.33

The table reports marginal effects from Probit analysis. Z-statistics in parentheses. ^a(^b^c) indicates statistical significance at the 1(5,10) percent level

Selected results from ECE/FSU, 1993-2004 (Probit, 1=peg, 0 otherwise)

Imports plus exports/GDP	0.352*** (2.72)
Share of agricultural employment	-0.401* (-1.75)
Share of manufacturing employment	-0.722 (-1.54)
Democracy	0.014** (2.23)
Inflation	-0.033*** (-2.93)
Trade balance	0.545* (1.75)
External debt/GDP	0.001** (2.20)
Financial development	-0.257*** (-2.58)

ECE/FSU, 1993-2004: Impact of one standard-deviation increase in explanatory variables on likelihood of adopting a de facto peg.

Variable	Effect	Variable	Effect
Imports plus exports/GDP	12.0	Stock of FDI/GDP	8.1
Share of agricultural employment	-16.5	Trade balance	4.9
Share of manufacturing employment	-19.5	External debt/GDP	2.8

Predicted and actual exchange rate regimes

Country	Predicted probability of a peg in 2005	De jure/de facto exchange rate regimes in 2004	Country	Predicted probability of a peg in 2005	De jure/de facto exchange rate regimes in 2004
Estonia	0.91	Peg/Peg	Croatia	0.50	Managed float/MF
Latvia	0.90	Peg/Peg	Slovak Rep.	0.30	Managed float/MF
Bulgaria	0.89	Peg/Peg	Slovenia ^a	0.18	Managed float/MF
Lithuania	0.86	Peg/Peg	Poland	0.18	Managed float/MF
Macedonia	0.65	Managed float/MF	Czech Rep.	0.13	Float/MF
Hungary	0.53	Managed float/MF	Romania	0.08	Float/MF
Albania	0.51	Managed float/MF	Notes: countries in red are members of the European Union.		

Cautionary notes

- Highly preliminary studies, inadequate attention to endogeneity
- Difficult to infer special-interest involvement from national-level policy outcomes
- Closer: American policy toward gold standard, 1865-1935
 - Standard story: debtors vs. creditors, w/debtors wanting inflation (hostile to gold)
 - My story: sectoral conflict over real exchange rate, w/exposed tradables producers (export agriculture) wanting a depreciated floating currency

ESTIMATED IMPACT OF EXPLANATORY VARIABLES IN LOGIT MODEL

Variable	Coefficient	Effect of a Percentage Point Increase in Variable on Probability of Voting Hard Money (percentages)	Effect of a Half-Standard Deviation Increase in Variable on Probability of Voting Hard Money (percentages)
Votes in the Senate			
Real estate debt as share of land value	9.707	+2.42	+7.23
Share of labor force in:			
Agriculture and mining	-4.256	-1.06	-9.46
Professional service	14.716	+3.67	+1.84
Trade and transport	-33.272	-8.24	-19.67
Mechanical/manufacturing	20.640	+5.14	+25.68
Votes in the House of Representatives			
Real estate debt as share of land value	9.863	+2.46	+8.54
Share of labor force in:			
Agriculture and mining	-7.071	-1.77	-16.19
Professional service	10.591	+2.65	+1.32
Trade and transport	-30.963	-7.68	-18.44
Mechanical/manufacturing	12.543	+3.13	+16.59
Votes by Democrats Only in the House of Representatives			
Real estate debt as share of land value	10.347	+2.58	+8.96
Share of labor force in:			
Agriculture and mining	-10.972	-2.74	-23.93
Professional service	4.494	+1.12	+0.56
Trade and transport	-37.029	-9.15	-21.62
Mechanical/manufacturing	9.648	+2.41	+12.96

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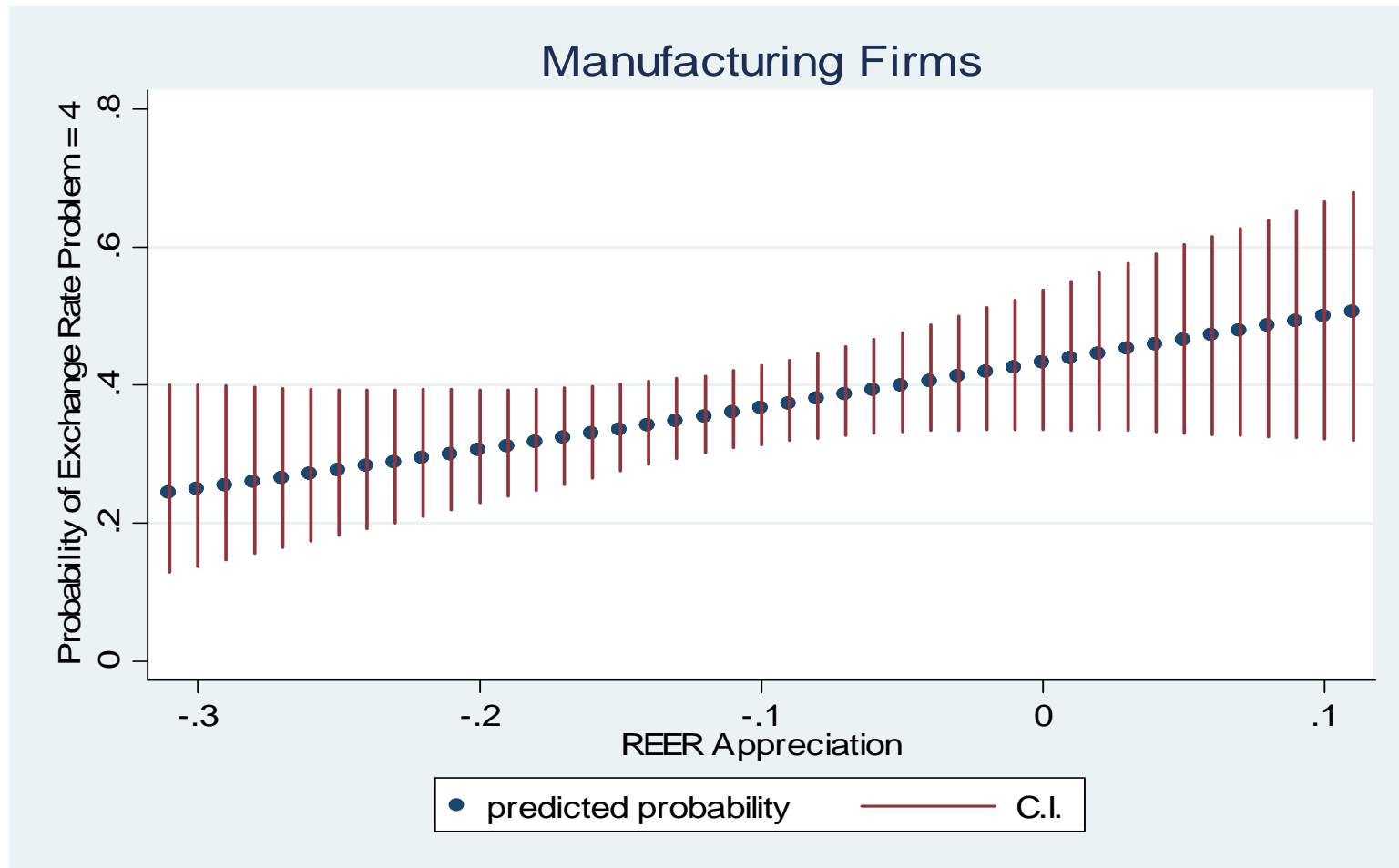
Still a stretch

- Legislative, partisan, electoral institutions mediate constituency interest
- Evaluate preferences more directly -- surveys
- World Business Environment Survey (WBES) responses to question about the exchange rate, by owners and managers of over 10,000 firms in 80 countries in 1999
- We know sector of firm; regime and level of real exchange rate in country at time

Attitudes toward the level of the exchange rate in floating regimes

	(1)	(2)	(3)	(4)
REER Appreciation (1yr.)	1.353 (1.134)	0.522 (1.006)	0.450 (1.038)	0.879 (1.226)
Manufacturing		0.267*** (0.078)		
Manufacturing * REER Appreciation		1.168*** (0.358)		
Tradable			0.212*** (0.063)	
Tradable * REER Appreciation			1.249*** (0.330)	
Exporter				0.278*** (0.105)
Exporter * REER Appreciation				1.599*** (0.615)
Observations	2323	2258	2258	2276
Countries	16	16	16	16
Pseudo R-squared	0.078	0.084	0.083	0.082

Manufacturers are increasingly concerned about the exchange rate as it appreciates



10% REER appreciation associated with change in predicted probability that manufacturers see ER as “major problem” from .43 to .50; no relationship for non-manufacturing firms.

Complications

- Need strategy to address endogeneity
- Incorporate greater heterogeneity of interests
 - Tradables producers
 - Pass-through
 - Invoice currency (LCP, PCP, DP)
- Availability of policy substitutes
 - Hedging, insurance
 - Compensation
- Strategic interaction among governments

Some speculative applications

- Explanations of persistently strong/weak currencies (i.e. East Asia vs. Latin America)
 - Relative influence of exporting groups
 - Relative concern for impact on consumers (esp. consumers of importables)
- Explanations of currency crises (esp. delayed adjustment)
 - Relative influence of tradables producers, foreign-currency debtors
 - Impending elections

The way forward

- More rigorous theory
 - Grossman-Helpman-style models of currency choice
 - SIG pressures vs. consumer interests?
- More rigorous attention to heterogeneity among broad categories
- More rigorous empirical work
 - with special attention to special interests