



**Fear of Declaring:
Do Market Care What Countries
Say About Their Exchange Rate Policies?**

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Presentation given at the 8th Jacques Polak Annual Research Conference
Hosted by the International Monetary Fund
Washington, DC—November 15-16, 2007
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I. Introduction

This paper is motivated by two key strands of the literature

- Fear of floating (Calvo & Reinhart, 2002)
- Deeds vs. Words (Levy-Yeyati & Sturzenegger, 2001, 2007)

Fear of Floating

- Emerging economies that are classified as floating tend to intervene vigorously:
 - Low variability of exchange rates
 - High variability of reserves and interest rates
- Good reasons for doing so:
 - Devaluations are costly (pass-through, balance sheet effects, market reaction, etc.)
 - Appreciations are also costly (Dutch Disease).

I. Introduction

Deeds vs Words

- Empirical attempt to “measure regimes” by examining observable variables:
 - Exchange rates (variability,....)
 - International reserves
 - Cluster analysis to create categories
- **One key result:** there is a **disconnect** between deeds and words. About 50% of the time, the de jure and de facto classifications do not line up.

I. Introduction

Deeds vs Words, recent update

(Levy-Yeyati & Sturzenegger, 2007)

- Revisit the “de facto” classification:
- Disconnect between deeds and words persists.
- The more recent experience shows emerging economies intervening largely to resist *appreciations*.
Furthermore, they appear to succeed (with possible economic benefits).

I. Introduction

Given that there appear to be legitimate reasons to intervene, why not align words with deeds? (Fear of declaring)

Some possible reasons:

- Genberg & Swoboda (2005): floating not a promise not to intervene, rather an **honest** lack of commitment.
- Other economic and non-economic reasons:
 - better performance in times of turbulence
 - seen as precondition for inflation targeting
 - political economy/signalling
 - other biases

I. Introduction

In this context, we ask whether

- **markets reward floaters, either de facto or de jure**
- **markets punish de jure floaters who intervene (FoF).**

Controlling for other relevant factors, do floating regimes have lower spreads?

Thus, we test this with panel data regressions explaining EMBI spreads as a function of:

- domestic fundamentals
- international conditions
- regimes
- actual intervention

II. Specification

Basic form:

$$EMBIG_{it} = FUND_{it} + EXT_{it} + REGIME_{it} + INTERV_{it} + \beta_i + \gamma_T$$

FUND: country fundamentals

- Inflation
- Current account balance/GDP
- Governmental overall balance/GDP
- International reserves minus gold/GDP
- Public debt/GDP
- Real (bilateral) exchange rate volatility
- Currency crisis

EXT: external conditions

- VXO: Index of (S&P 100) expectations of future volatility
- Year dummies

II. Specification

REGIME: (de jure) exchange rate regime:

- Agreed IMF-Country classifications (quarterly)
- Two taxonomies:
 - 1982: 7 categories, covers Jan 82 – March 98.
 - 1998: 8 categories, covers June 97 – present.
- We aggregated into 3 categories:

Floating: (base):

Independently floating (8)

Managed floating:

Managed floating with no

predetermined path for the exchange rate (7)

Fixed:

Crawling band (6), Crawling peg (5),

Pegged within horizontal bands (4),

Conventional peg (3), Currency Board (2), No separate legal tender (1).

II. Specification

INTERV: degree of actual exchange rate intervention:

$$INTERV = \frac{\left(\frac{\partial IR}{BM}\right)^2}{\left(\frac{\partial E}{E}\right)^2 + \left(\frac{\partial IR}{BM}\right)^2}$$

Measures the relative degree to which shocks to the exchange market are transmitted to int'l reserves vs. the exchange rate. (Similar to LYS)

Fluctuates between zero and one.

INTERV = 1

Fixed extreme (no change in e)

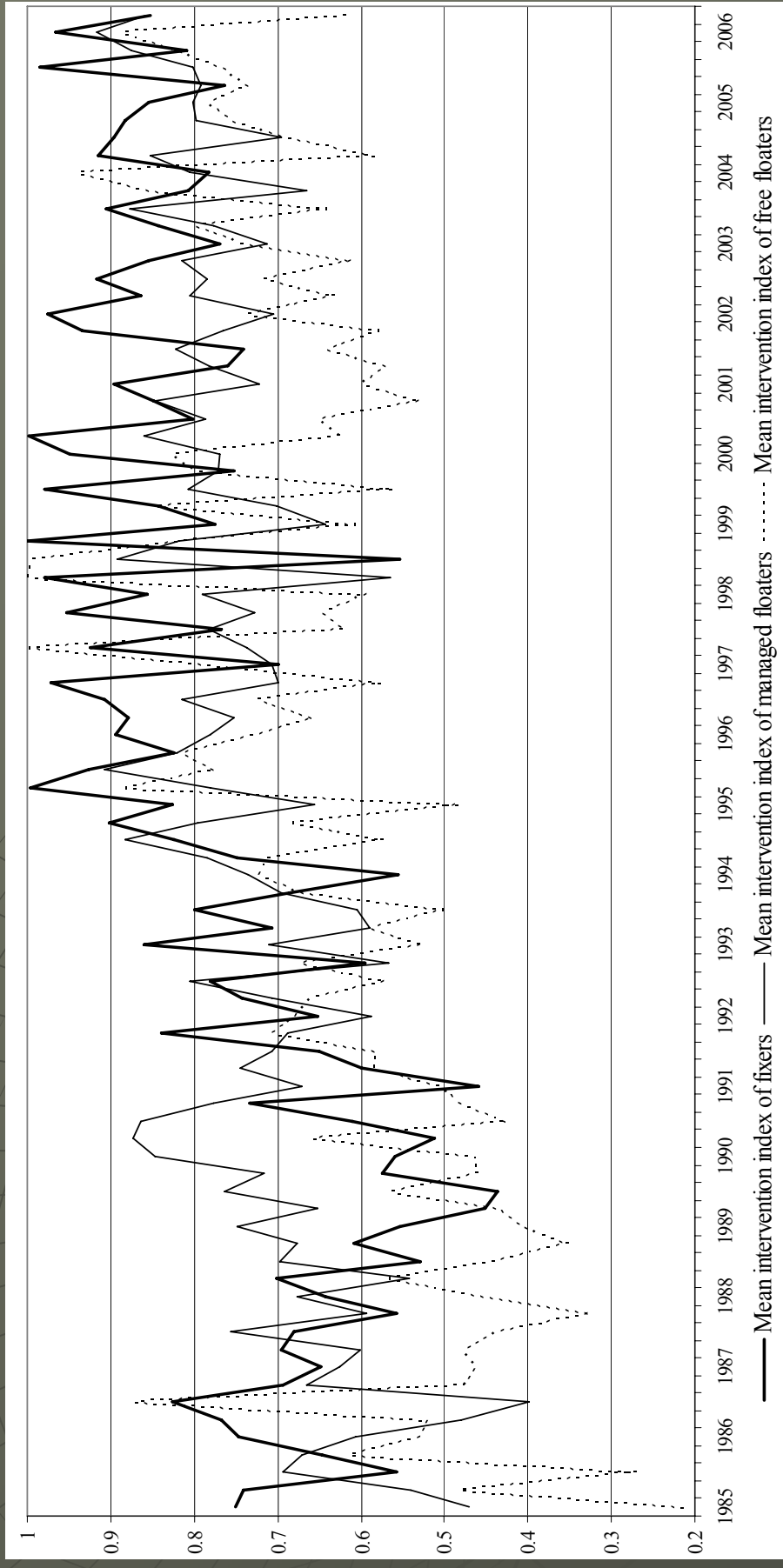
INTERV = 0

Floating extreme (no change in IR)

“Clean” measure: each pair of IR evaluated at same e .

I. Specification

Mean Intervention Index for the Three Exchange Rate Categories, 1985-2006



III. Results

One critical control: make sure that results are not driven by currency crises:

- Crises often associated with exit from fixed to floating regimes, as well as increase in spreads. Floating regimes might be incorrectly associated with higher spreads.

What is a currency crisis?

- Abnormally large observation of “exchange market pressure” = weighted average of fall in IR , depreciation e .

$$EMP_{it} = \alpha (\Delta \% e) - (1 - \alpha) (\Delta \% IR)$$

- Measurement Issues:
 - weighting α so that each component's σ is equal.
 - Used real e and threshold of two σ 's above mean.
 - CRISIS dummy then defined by 5Q centered window.

III. Basic Results

Sample:
 Quarterly observations
 1997:4 – 2006:2
 22 – 31 countries
 (unbalanced panel)

Fixed effects
 estimation

Basic results:
 Fixing (both de jure and de facto) brings about *lower* spreads.

Even when controlling for exchange rate volatility, and for CRISIS.

Determinants of EMBI-G Spreads, All Countries

Inflation	1.20 [0.62]	1.16 [0.63]	0.91 [0.52]	0.61 [0.39]
Current Account	9.82 [1.24]	9.92 [1.26]	9.99 [1.28]	4.90 [0.96]
General Government Balance	-17.32 [1.88]*	-16.82 [1.87]*	-16.95 [1.91]*	-9.44 [1.60]
Reserves Minus Gold	-32.79 [2.70]**	-30.43 [2.64]**	-33.04 [2.85]***	-27.82 [2.59]**
Public Debt (t-3)	24.41 [3.83]***	24.78 [4.08]***	22.97 [3.22]***	29.12 [3.20]***
Volatility Index	10.18 [3.90]***	10.23 [4.08]***	10.14 [4.10]***	8.31 [3.67]***
<i>De Jure</i> Fixed	-668.71 [2.23]**	-640.12 [2.18]**	-677.85 [2.38]**	-641.42 [2.23]**
<i>De Jure</i> Managed Floaters	3.03 [0.03]	2.00 [0.02]	-0.22 [0.00]	-50.96 [0.54]
Intervention Index		-226.59 [2.08]**	-224.71 [2.05]*	-197.72 [2.54]**
RER Volatility			0.11 [2.25]**	
CRISIS1 (t-2, t+2)				1,336.05 [2.05]*
Constant	-316.95 [0.86]	-158.70 [0.47]	-51.91 [0.15]	-36.31 [0.11]
Number of observations	705	704	704	672
Number of countries	25	25	25	24
R-squared	0.43	0.44	0.44	0.51

Robust t statistics in brackets
 * significant at 10%; ** significant at 5%; *** significant at 1%

III. Results

Next step:
interacting
CRISIS with
de jure
regimes.

**If there is a
preference for
certain
regimes, does
it change
during a
crisis?**

Determinants of EMBI-G Spreads, All Countries

<i>De Jure</i> Fixed	-838.58 [2.77]**	-839.99 [2.76]**
<i>De Jure</i> Managed Floaters	-296.8 [2.48]**	-296.21 [2.49]**
Intervention Index	-194.01 [2.73]**	-194.66 [2.72]**
RER Volatility		-0.35 [0.41]
CRISIS (t-2, t+2)	1,818.04 [5.61]**	1,821.00 [5.56]**

Interactions between *De Jure* Regimes and Crisis

<i>De Jure</i> Fixed · CRISIS	0 [.]	0 [.]
<i>De Jure</i> Managed Floating · CRISIS	182.69 [0.35]	178.82 [0.35]
<i>De Jure</i> Floating · CRISIS	-1,649.42 [4.99]**	-1,651.24 [4.97]**
Constant	91.21 [0.27]	95.84 [0.28]
Number of observations	672	672
Number of countries	24	24
R-squared	0.54	0.54

Robust t statistics in brackets

* significant at 10%; ** significant at 5%; *** significant at 1%

Results:

Floating
regimes have
higher
spreads in
normal times,
but fare
better in
crises.

INTERV

continues to
be associated
with lower
spreads.

III. Results

Other extensions and robustness checks:

- ◆ Dealing with Argentina:
 - **EMBI spreads:** extremely high during and after crisis, then discrete plummet in June 2005.
 - **2 methods:** Dummy for June 2005 Argentina only, dropping Argentina altogether.
 - **Results:** Dummy highly significant, other results hold. Dropping Argentina reduces significance of *INTERV*.
- ◆ Use sample of floaters only (**FF** or **MF + FF**).
 - *INTERV* then becomes a measure of Fear of Floating
 - **Result:** negative but not significant; Fear of Floating not punished nor rewarded.
- ◆ Use Reinhart-Rogoff de facto classif. in place of *INTERV*.
 - Aggregated (**1** Fixed **5** Free falling) correl w *INTERV*: **-0.34**
 - **Results:** stronger results on fear of floating: lower spreads.

IV. Conclusions (so far)

- **Puzzle:** no evidence of a reward in normal times for countries who declare as floating (we even get the opposite result).
- **Similarly** – not as puzzling – there is evidence that intervention lowers spreads.
- **No punishment for fear of floating.**
- **Why then declare a floating regime?**
 - Lower punishment during CRISES.
 - “Floating” required as precondition for inflation targeting.
 - Benefits of discretion – protection against domestic lobby (exporters).

V. Thoughts on Future Research

- **Improve data base**
 - More detailed debt data (maturity, currency composition,...)
- **Incorporate credit ratings**
 - Results should be consistent with those for spreads.