Fiscal solvency and Macroeconomic Uncertainty in Emerging Markets: The Tale of the Tormented Insurer
Enrique G. Mendoza and P. Marcelo Oviedo

Currency Mismatch, Uncertainty, and Debt Structure
M. Bussière, M. Fratzscher, and W. Koeniger

Comments by:
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Outline of talk

- Elements that are common to both papers

- Mendoza & Oviedo (M&O)

- Bussière, M. Fratzscher, and W. Koeniger (BFK)

- Reflections on the issues

Common elements

Debt:

M&O want to explain debt ceilings

BKF want to primarily explain maturity structure

Role of uncertainty/volatility:

M&O focuses on tax revenues

BKF on real exchange rates

Common elements

Emerging markets (EMs):

M&O want to explain why EMs have lower safe debt thresholds—Natural Debt Limits (NDLs)

BKF want to explain EMs borrow at shorter maturities

Both are real models

Common elements

Liability dollarization:

Both papers **ASSUME** EMs cannot borrow in their own currencies—neither paper **EXPLAINS** why this is the case

Combination of theory and empirics:

Both models offer well-defined testable implications, which the authors investigate

Common elements

- **Unfortunately**, the two papers (both the models and empirics
- Ignore the role of

CREDIT HISTORY!!

in explaining why EMs can borrow less and why they disproportionately borrow at short maturities. More of this later…

M&O: Key assumptions

- Stochastic framework in which the government’s objective is to **SMOOTH outlays**
- The government faces uncertain and variable revenues (shocks hit domestic income and world interest rates)
- Government can only borrow in a foreign currency
- There is **NO** risk premia--government borrows at the world rate

M&O: Main implications of the model and contribution of the paper

- Countries that have more variable tax revenues face lower debt ceilings and are able to borrow less
- This is a **very important** result because traditional debt sustainability exercises (which neglect the role of uncertainty and volatility) **IGNORE** this critical fact altogether.

M&O Main criticisms and possible extensions

- **Assumtion:** The ad hoc government objective is to **SMOOTH outlays**
- **Implication:** Fiscal expenditure does not vary across the economic cycle in this model—thus, there should be no correlation between the fiscal spending and economic cycles.

M&O Main criticisms and possible extensions

- **Question:** Is there evidence on government consumption smoothing (acyclical spending) in EMs?

- **Answer:** **NO**

M&O Main criticisms and possible extensions

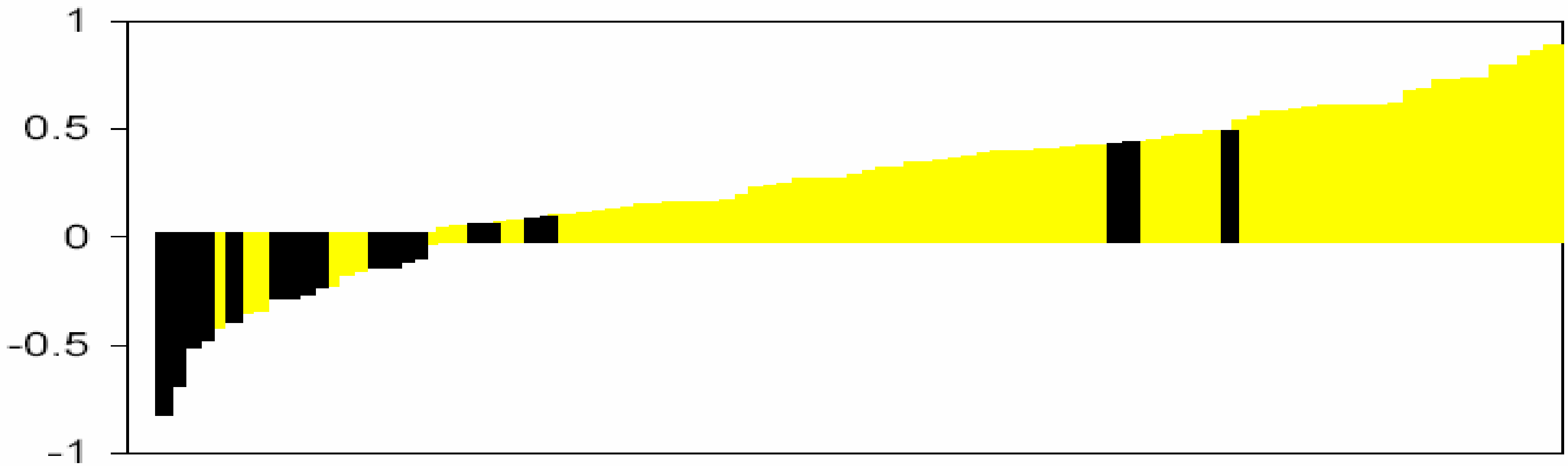
- Governments are notoriously procyclical in EMs—increasing spending in good times and cutting back in bad times
- The cyclical components of real GDP and real government spending are **positively** and **significantly** correlated

Evidence of procyclical fiscal spending in EMs: Kaminsky, Reinhart, and Vegh (2004)

1960-2003 Real Central government expenditure (annual percent change) when GDP growth is:			
	Above the median (1)	Below the median (2)	Difference (1)-(2)
OECD	3.4	3.1	0.3
Non-OECD	7.7	0.8	6.9

Evidence of procyclical fiscal spending in EMs: Kaminsky, Reinhart, and Vegh (2004)

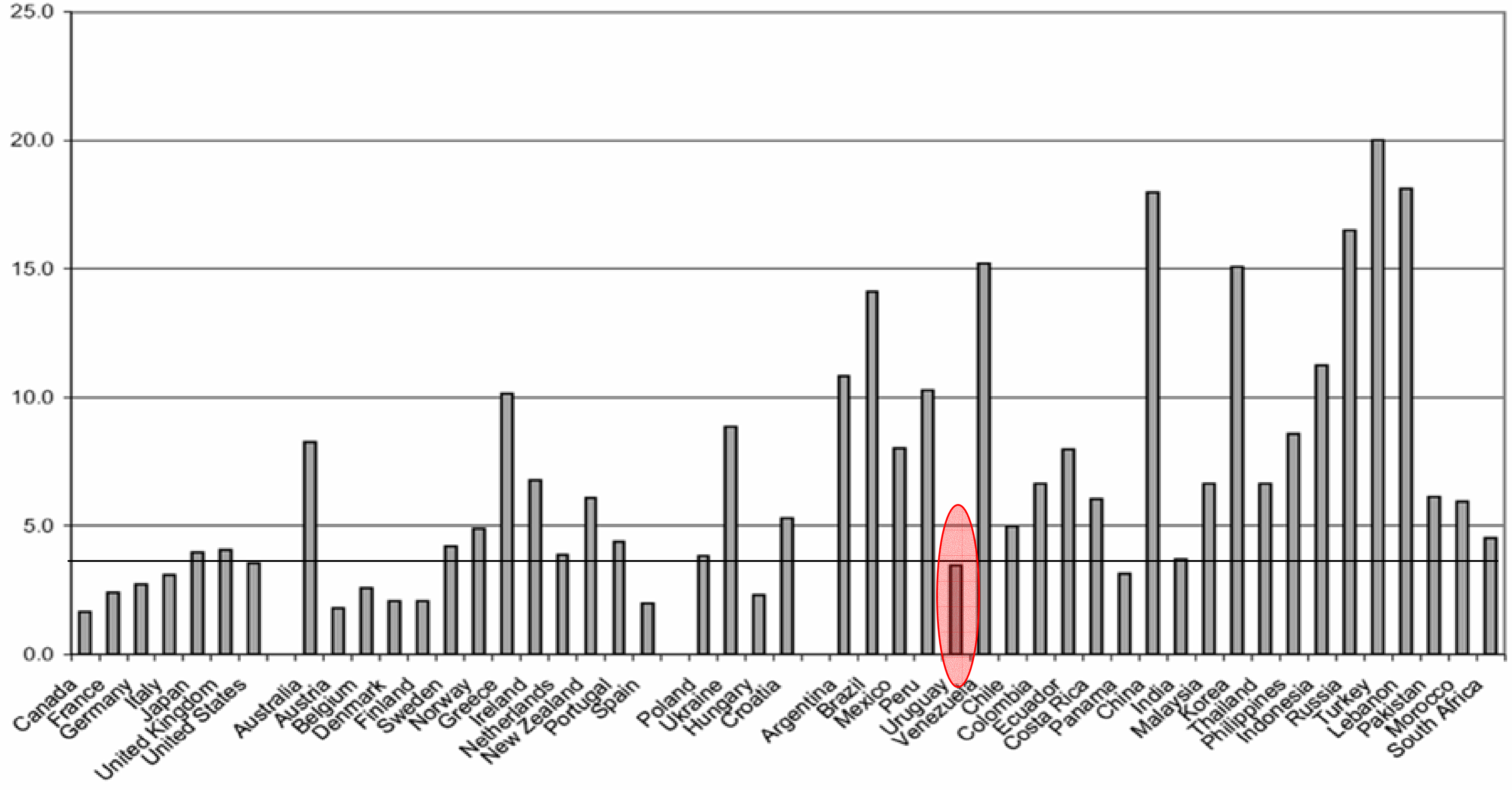
Country-Correlations Between
the Cyclical Components of Real Government Expenditure and Real GDP
1960-2003



Notes: Dark bars are OECD countries and light ones are non-OECD countries.
The cyclical components have been estimated using the Hodrick-Prescott Filter.
A positive correlation indicates procyclical fiscal policy.
Real government expenditure is defined as Central Government expenditure deflated by the GDP deflator.
Source: IMF, *World Economic Outlook* .

M&O Main criticisms and possible extensions

Figure 4. Coefficients of Variation of Public Revenue-GDP Ratios: 1990-2002



M&O Main criticisms and possible extensions

- M&O place tax revenue volatility as the main determinant (apart from international interest rates) of binding debt ceilings--their results suggest that Uruguay, for example, which has lower revenue volatility than other EMs has a higher debt threshold than Argentina, Brazil, Mexico, Venezuela, among some prominent EMs. Fine, makes sense.
- According to M&O, Uruguay also has a higher debt threshold than…

M&O and BFK criticisms—as this applies to both papers

- Australia, Japan, New Zealand, the UK, the US, Sweden, Norway…What do you think?
- As I said earlier — **history matters!**

Why history matters: Reinhart, Rogoff, and Savastano (2003)—Debt Intolerance

Measuring Risk

	% of years in a state of default or restructuring since 1824	% of 12-mo period with inflation > 40% since 1958	Institutional Investor Rating 2002
Uruguay	13.8	34.7	45.4
Brazil	25.6	59.0	40.1
Venezuela	38.6	11.6	32.5
Australia	0	0	83.8

M&O extensions: suggestions

- Consider other fiscal spending rules that match stylized facts more closely—hunch revenue volatility will still matter!
- Why not include a deterministic (inherited state variable) that captures a country's credit history so that the model is couched on the impact of revenue volatility conditional on "historical track record" closely—hunch revenue volatility will still matter!

BFK: Key assumptions

- Only international debt is available
- Always denominated in foreign currency (i.e., the tradable good)
- Debt is only type of financing (no equity or FDI)
- Countries **always repay**
- Lenders can appropriate **full collateral**

BFK: Main implications of the model and contribution of the paper

Higher real exchange rate uncertainty should:

i. reduce a country's capacity to borrow

ii. Increase it's reliance on short-term debt

iii. Raise short-run growth volatility

These are eminently sensible implications. The feedback effects from uncertainty to growth volatlity that BFK stress are very important.

BFK: Main criticisms and possible extensions

- **Always repay?** Please, do not throw out the baby with the bath water
- **Fully collateralized debt?** Even the US Marines in the 1800s could not retrieve all the collateral
- As noted earlier, the most dollarized economies (also shorter maturities) have a **HISTORY** of serial default and high inflation

BFK: Recovering full collateral?

- Prior to the Brady restructuring in the late 1980s Bolivian debt traded at 10 cents to the dollar; Argentine debt around 24 cents.

BFK extensions: suggestions

- Relax assumptions about repayment with certainty (hard)
- Relax assumption about full recovery of collateral by lenders (easier)
- Include in the empirical analysis (model is harder) measures of credit history

Bottom line

HISTORY MATTERS!!!!