



BANK FOR INTERNATIONAL SETTLEMENTS

Emerging market local currency bonds: diversification and stability

Global Finance in Transition

7 May 2013, Istanbul

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The views expressed in these slides are those of the presenter and do not necessarily reflect those of the Bank for International Settlements.



Outline

- Motivation
- Estimation
 - Model
 - Econometric results
- Summary of findings
- Implications



Different views on EM local bonds

- EMEs lack capacity to borrow in their own currencies
 - Original sin; Eichengreen and Hausmann (1999)



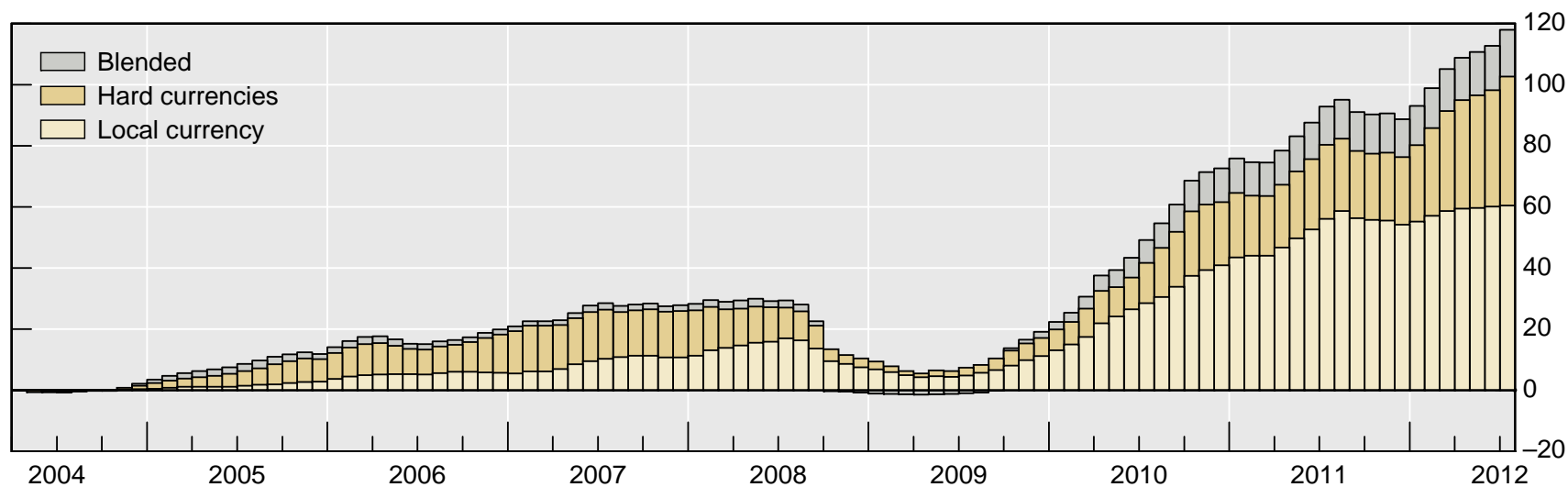
- EMEs have developed domestic bond markets
 - Classens et al (2007), Goldstein and Turner (2004), Montoro and Rojas-Suarez (2012), BIS (2002, 2012a, 2012b)
 - Better macroeconomic management



EM Local currency bonds are attractive

Graph 1

Cumulative net inflows to mutual funds dedicated to emerging market bonds
In USD bn



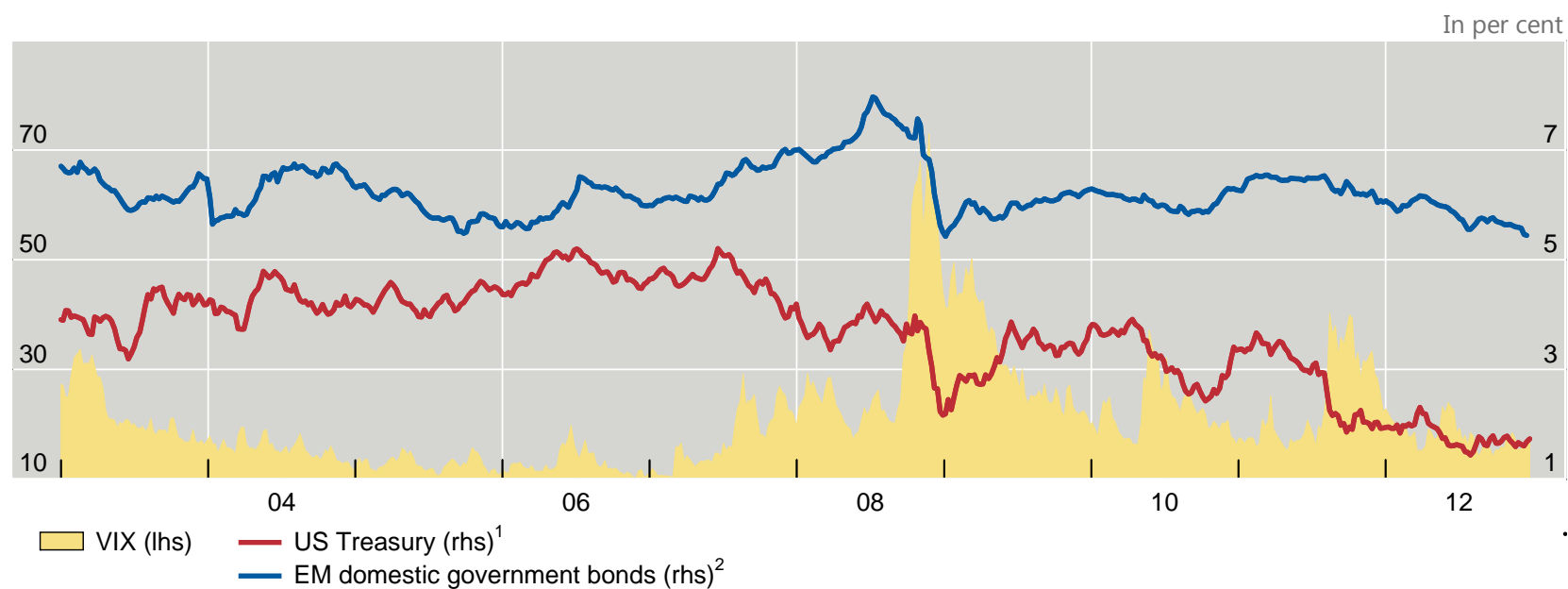
Source: EPFR.



EM yields move closely with "safe" yields

US and EM domestic government bond yields and the VIX index

Graph 7



¹ Ten-year yield. ² GBI-EM broad traded index yield.

Sources: Bloomberg; JP Morgan Chase.

Questions

- EM domestic government bond yields
 - Determinants?
 - Resilient to external shocks?



Model

$$i = f \left(i_s^d, T(z), i^*, -q(V - \varphi - 1), \frac{E[s_{t+1}]}{s_t} \right)$$

- Term structure of bond yields (Caporale and Williams, 2002)

- Variables

i and i^* = nominal domestic and foreign short rates,

$T(z)$ = term premium

q = default probability

V = recovery value

Φ = risk aversion

$E[s']/s$ = expected rate of currency depreciation



Data

- Domestic government bond yields in 11 EMEs
 - Brazil, Chile, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Poland, South Africa and Turkey
- External factors
 - US 10-year yield, VIX
- Domestic factors (forecasts)
 - domestic short-term interest rate, GDP growth, inflation, fiscal balance
- January 2000-December 2011



Domestic factors are important (static panel model)

Domestic and external determinants of EM local currency government yields from a panel regression¹

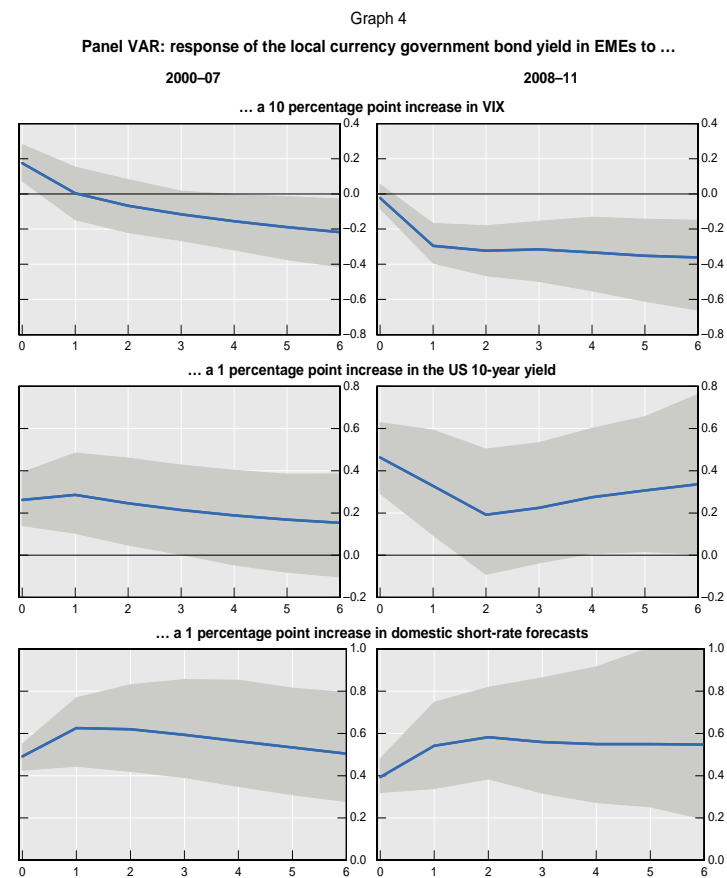
Table 2

	2000–11		2000–07		2008–11	
	Coeff	t value	Coeff	t value	Coeff	t value
Domestic short rate forecast	0.894	5.888	0.846	10.548	0.830	3.256
Inflation forecast	0.222	1.257	0.253	1.077	0.321	1.059
Growth forecast	-2.11	1.902	0.016	0.124	-0.198	4.512
Fiscal balance forecast	-0.257	2.264	-0.264	2.436	-0.369	2.889
US 10-year yield	0.319	1.675	0.370	1.751	0.598	2.389
VIX	0.007	0.702	0.020	2.351	0.010	0.669

¹ Using regression coefficients from $yield_{it} = \alpha * fcrate_{it} + \beta * fcinf_{it} + \gamma * fcgdp_{it} + \zeta * fcfisc_{it} + \kappa * us10 + \theta * vix$ where *fcrate*, *fcinf*, *fcgdp* and *fcfisc* are one year-ahead forecasts for the domestic short rate, year-on-year inflation, year-on-year GDP growth and the fiscal balance as a percentage of GDP, respectively, and *yield*, *us10* and *vix* are the EM domestic government yield, the US 10-year yield and the VIX index, respectively.

Source: K Miyajima, M S Mohanty and T Chan (2012).

Not a credit product any more? (dynamic panel model)



Note: The x-axis shows the number of months, and the y-axis per cent. The results are based on panel-VAR regressions for 11 EMEs with 2 lags, using 200 iterations for errors.

Sources: Bloomberg; BIS calculations.



Summary

- EM government yields ...
 - ... are driven mainly by local factors
 - Diversification benefit
 - ... drop as VIX rises (after 2008)
 - Not a credit product any more?
 - ... rise with UST yield
 - Susceptible to a rise in global interest rates?



Implications

- Long-term financing
- At home
 - Fixed capital formation
- Globally
 - Current account surplus





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Thank you.

Paper: <http://www.bis.org/publ/work391.htm>

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