

## **Capital Flows: Build-ups and let-downs**

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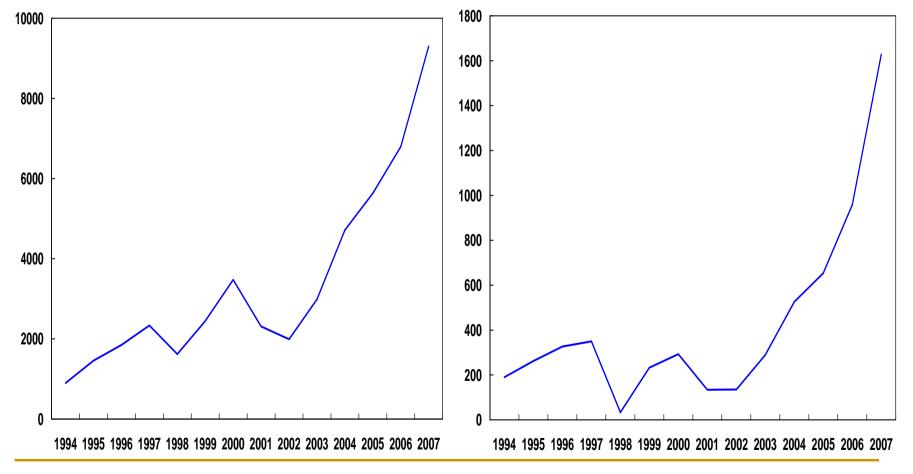
## Outline

- Recent history of capital inflows and net flows
- Forecasts of capital flows
  - Baseline
  - Econometric work
- Policies for medium term
  - What financial system characteristics influence capital flows

#### **Total Capital Inflows** (In billions of U.S. dollars)

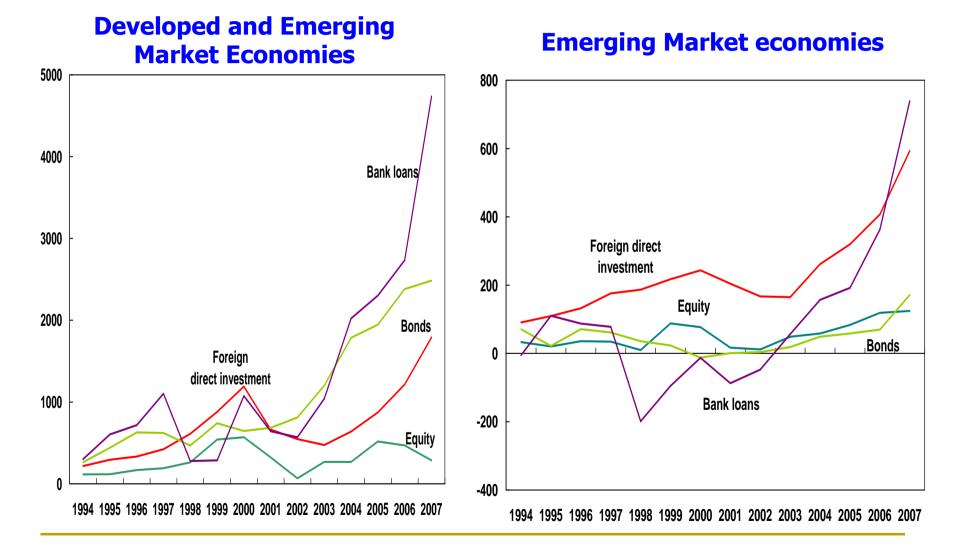
Developed and Emerging Market Economies





Note: sample of 56 countries comprising 84% of world capital flows.

#### **Composition of Capital Inflows** (In billions of U.S. dollars)



Note: sample of 56 countries comprising 84% of world capital flows.

#### **Emerging and Developing Economies: Net Capital Flows** (In billions of U.S. dollars)

#### **Emerging and Developing Economies**

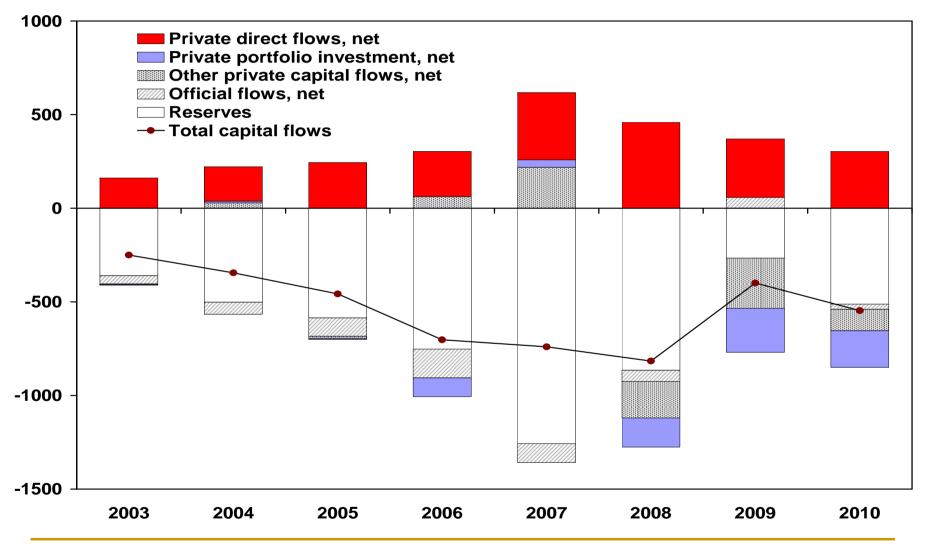
	2003	2004	2005	2006	2007	2008	2009	2010
Private direct flows, net	161.3	183.9	243.7	241.4	359.0	459.3	312.8	303.1
Private portfolio investment, net	-3.8	10.0	-5.6	-100.7	39.5	-155.2	-234.5	-195.3
Other private capital flows, net	-3.3	28.0	-11.3	62.2	219.2	-194.6	-268.5	-114.2
Official flows, net	-43.3	-64.9	-98.5	-154.1	-100.5	-60.0	57.6	-28.1
Reserves	-360.6	-501.9	-585.7	-751.7	-1257.8	-865.7	-266.5	-512.2
Total capital flows	-249.7	-344.9	-457.4	-702.9	-740.6	-816.2	-399.1	-546.7

#### **Central and Eastern Europe**

	2003	2004	2005	2006	2007	2008	2009	2010
Private direct flows, net	13.3	30.0	37.4	58.9	72.0	64.1	30.1	32.5
Private portfolio investment, net	9.7	25.3	25.9	9.4	-7.4	-13.2	-6.1	4.6
Other private capital flows, net	19.2	6.1	36.6	51.7	108.9	96.2	-62.4	-23.6
Official flows, net	-2.4	-4.1	0.0	-7.9	-6.0	7.3	26.8	9.6
Reserves	-9.3	-8.1	-36.1	-20.3	-31.2	-9.7	36.6	6.1
Total capital flows	30.5	49.2	63.8	91.8	136.3	144.7	25.0	29.2

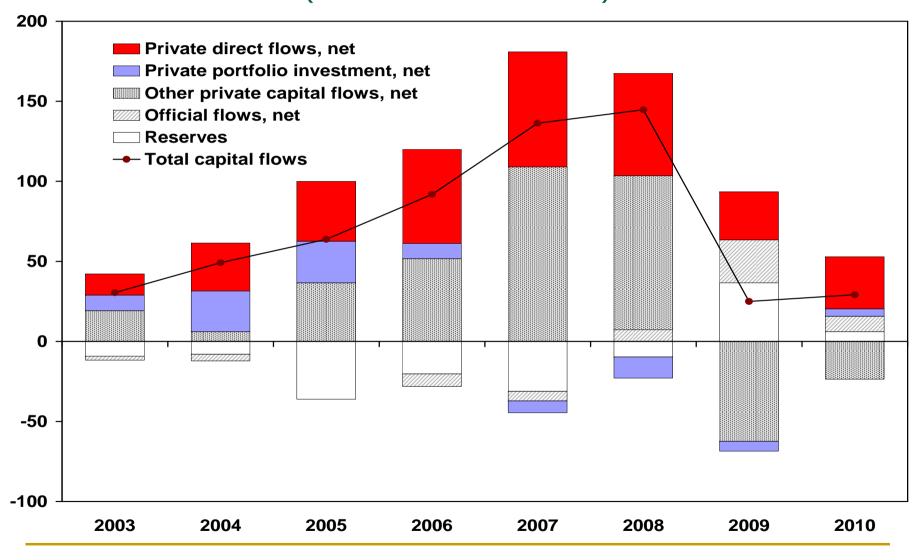
Source: IMF, World Economic Outlook.

#### **Emerging and Developing Economies: Net Capital Flows** (In billions of U.S. dollars)



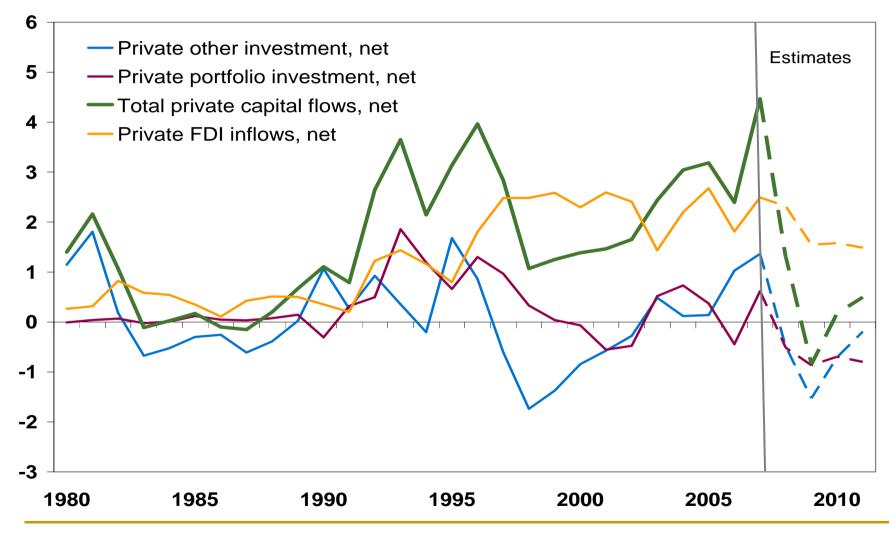
Source: IMF, World Economic Outlook.

#### **Central and Eastern Europe: Net Capital Flows** (In billions of U.S. dollars)



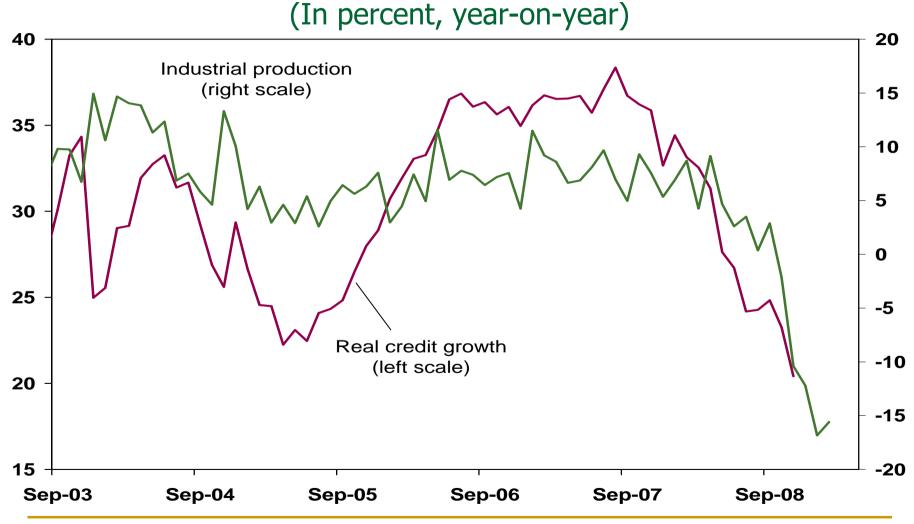
Source: IMF, World Economic Outlook.

#### **Emerging Market Net Private Capital Flows** (In percent of GDP)



Source: IMF, World Economic Outlook database.

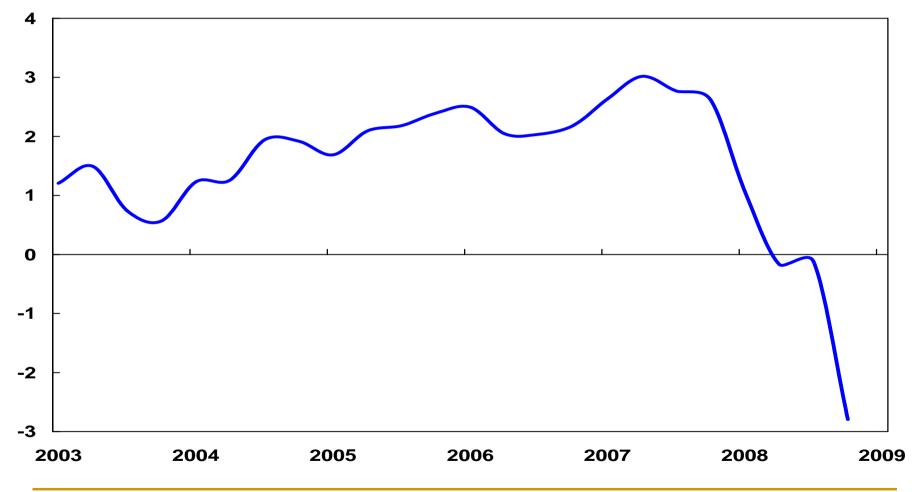
## **Emerging Europe: Real Credit Growth to the Private Sector and Output**



Sources: Bloomberg L.P.; IMF, International Financial Statistics database; and IMF staff estimates.

## Cross-Border Assets as a Proportion of Total Assets

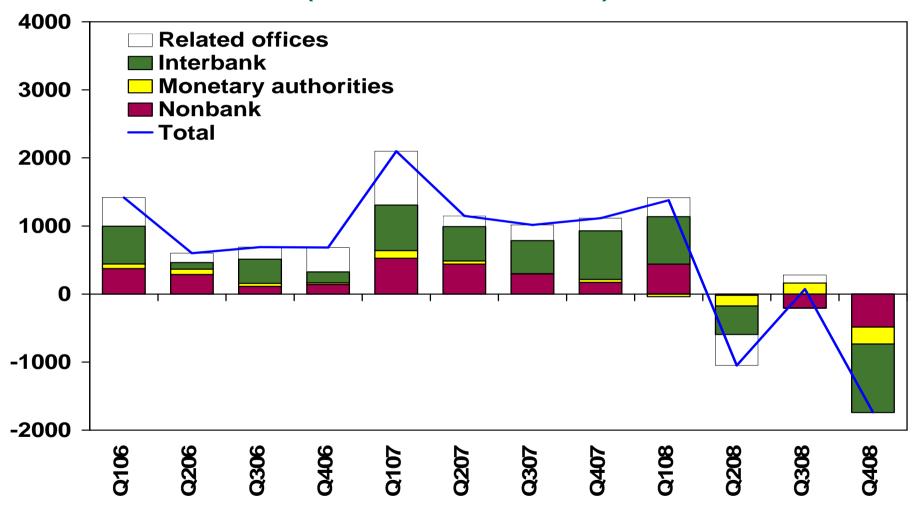
(Annual change in percentage points)



Sources: Bank for International Settlements; and IMF staff estimates.

#### BIS Reporting Banks: Cross-Border Liabilities, Exchange-Rate-adjusted Changes

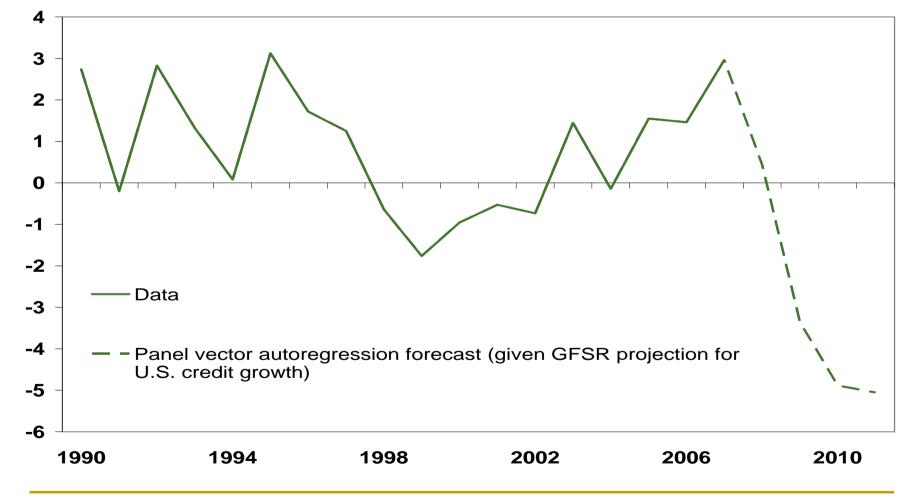
(In billions of U.S. dollars)



Sources: Bank for International Settlements; and IMF staff estimates. Note: Related offices refers to banks that are legally similar, the best example being a parent bank in the home country lending to its subsidiary in another country.

### Net Private Other Investment Flows to Emerging Markets

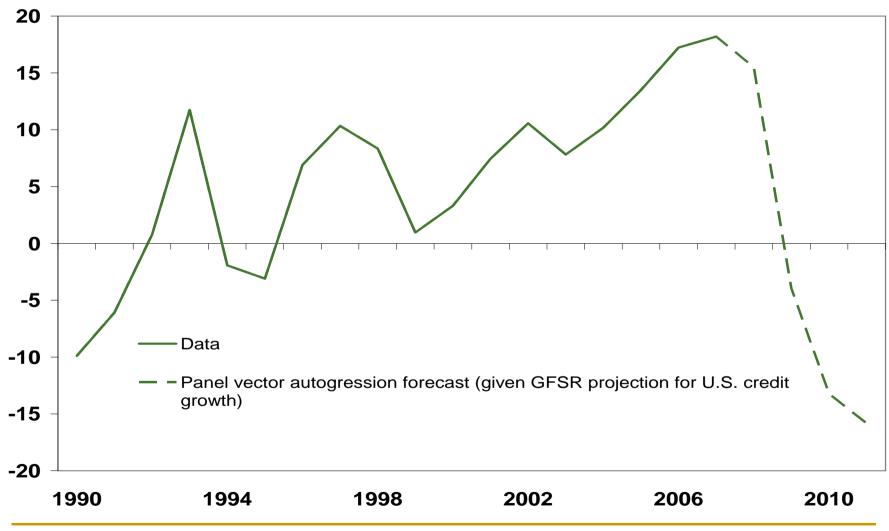
(In percent of GDP, average in panel)



Sources: IMF, World Economic Outlook database; and IMF staff estimates.

### **Emerging Market Real Credit Growth**

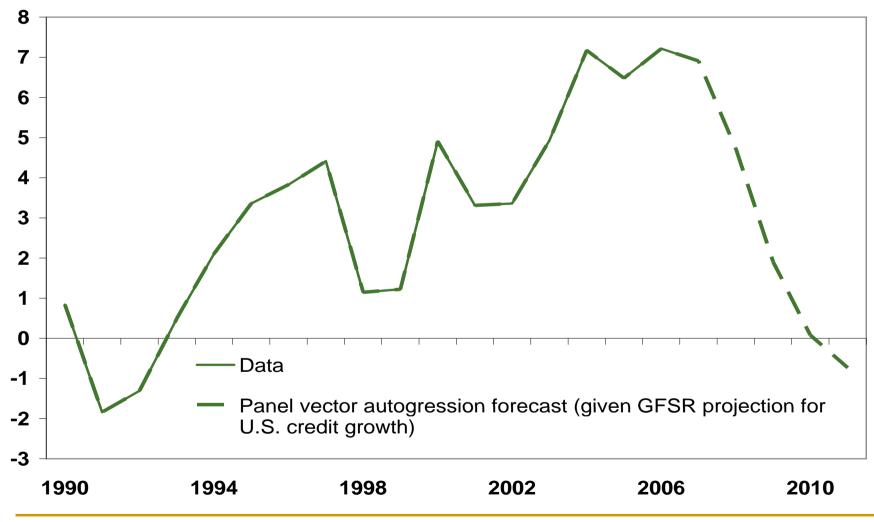
(In percent, year-on-year, average in panel)



Sources: IMF, World Economic Outlook database; and IMF staff estimates.

## **Emerging Market GDP Growth**

(In percent, year-on-year, average in panel)



Sources: IMF, World Economic Outlook database; and IMF staff estimates.

## Caveats to Econometric Capital Flows Study

- Constant model coefficients across countries.
- Assumes "typical" policy response from EM countries, without accounting for larger reserves and better fiscal situations.
- Does not factor in global policy response and increase funding for IMF and others.
- Parent-subsidiary relationships perhaps stronger this time, supporting cross-border lending.

## **Cumulative EM Fund Flows**

(In billions of U.S. dollars)

## **EM Bond Issuance 1/** (In billions of U.S. dollars)

Latam Asia Equity funds Debt funds -20 

Sources: Emerging Portfolio Research; and Dealogic. 1/EM bond issuance reflect January–May data for each year.

#### Panel Least-Squares Estimation of Determinants of Capital Inflows, 1998-2006 1/

	<b>All Countries</b>	<b>Emerging Markets</b>
Financial Development Indicators		
Equity market turnover	$\checkmark$	$\checkmark$
Equity market capitalization	—	—
Financial openness	$\checkmark$	$\checkmark$
Corporate governance quality	$\checkmark$	—
Accounting standards	—	—
Macroeconomic Factors		
Growth expectation	$\checkmark$	$\checkmark$
Interest rate differential	$\checkmark$	$\checkmark$
Global liquidity	_	_

Sources: Chin and Ito (2006); De Nicolo and others (2006); and IMF staff estimates 1/Total capita inflows/GDP.  $\sqrt{}$  = statistically significant.

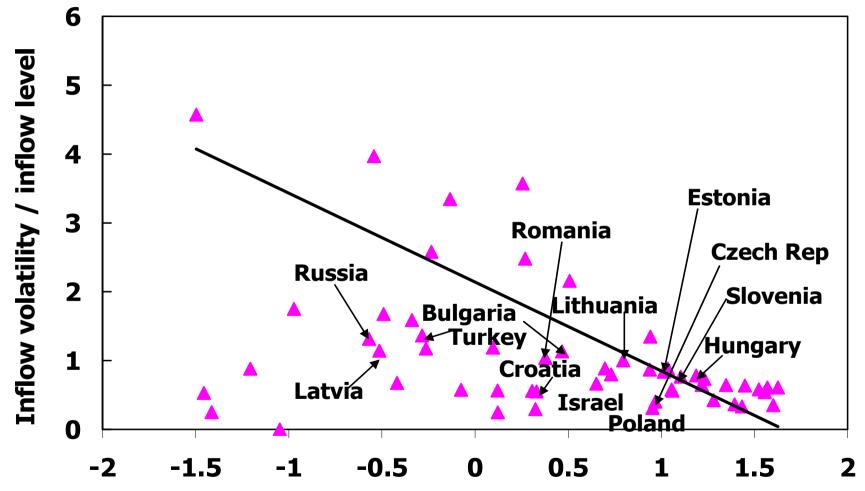
# Panel GMM Estimation of the Determinants of the Standard Deviation of Capital Inflows, 1998-2006 1/

	All Countries	<b>Emerging Markets</b>
Financial Development Indicators		
Equity market turnover		—
Equity market capitalization		—
Financial openness	$\checkmark$	$\checkmark$
Corporate governance quality	—	—
Accounting standards	—	—
Macroeconomic Factors		
Growth expectation	_	—
Interest rate differential	_	—
Global liquidity	$\checkmark$	√

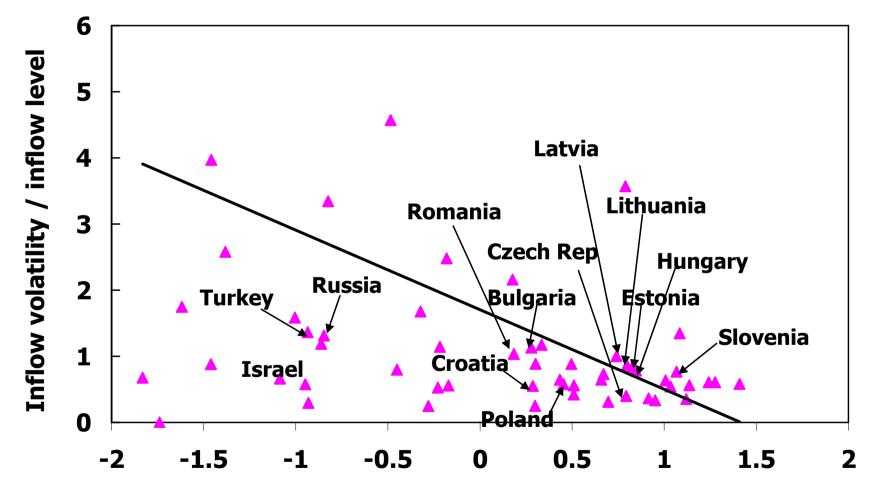
Sources: Chin and Ito (2006); De Nicolo and others (2006); and IMF staff estimates. 1/Standard deviation of total capita inflows/GDP.  $\checkmark$  = statistically significant.

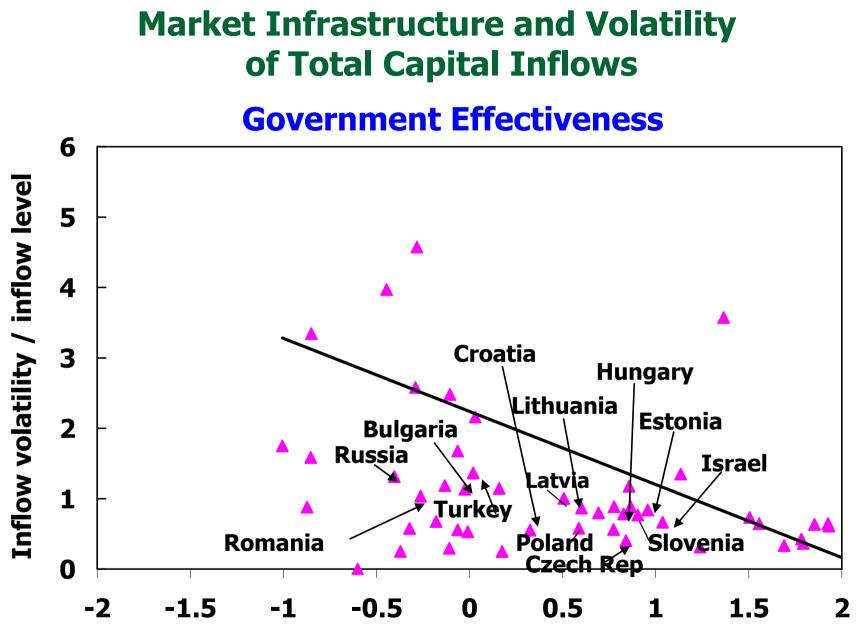
#### Market Infrastructure and Volatility of Total Capital Inflows

#### **Voice and Accountability**

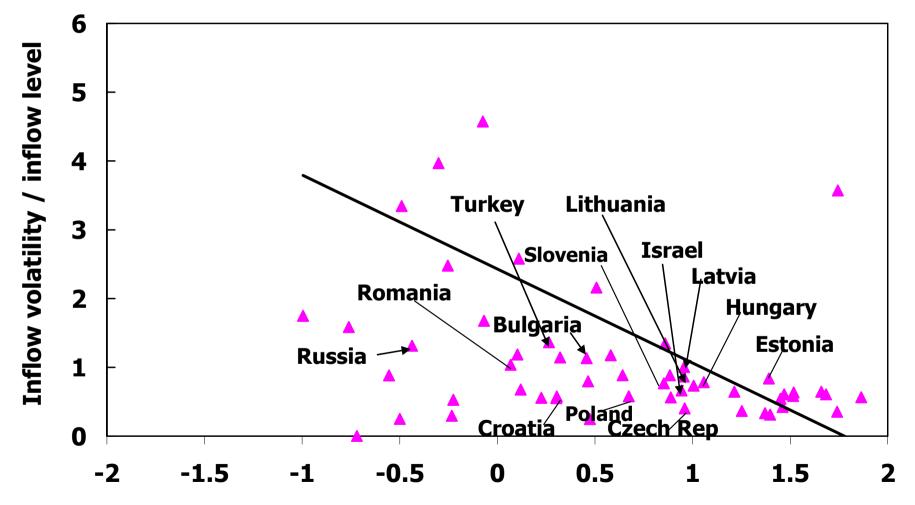


### Market Infrastructure and Volatility of Total Capital Inflows Political Stability

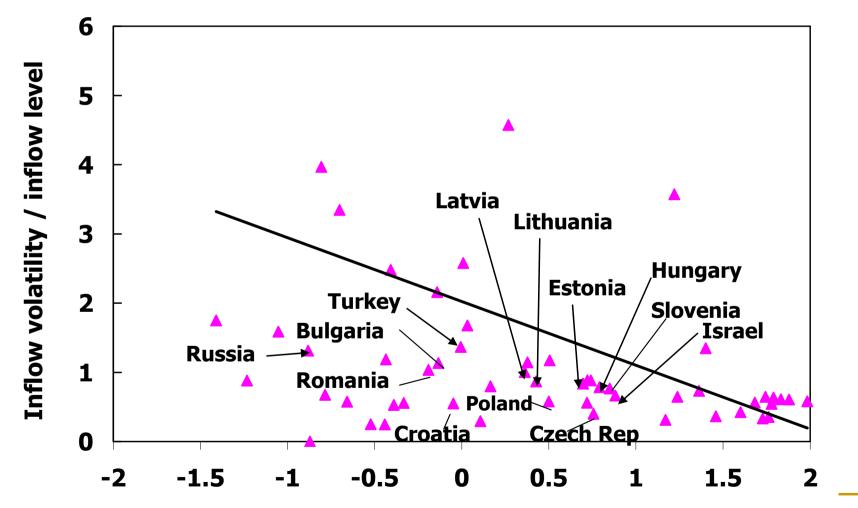




### Market Infrastructure and Volatility of Total Capital Inflows Regulatory Quality

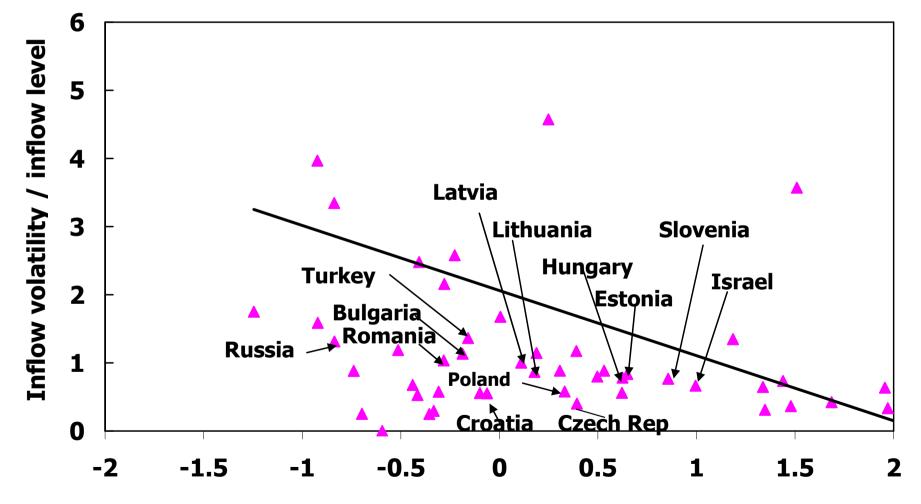


#### Market Infrastructure and Volatility of Total Capital Inflows Rule of Law



#### Market Infrastructure and Volatility of Total Capital Inflows

#### **Control of Corruption**





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