



*Osaka School of  
International Public Policy*

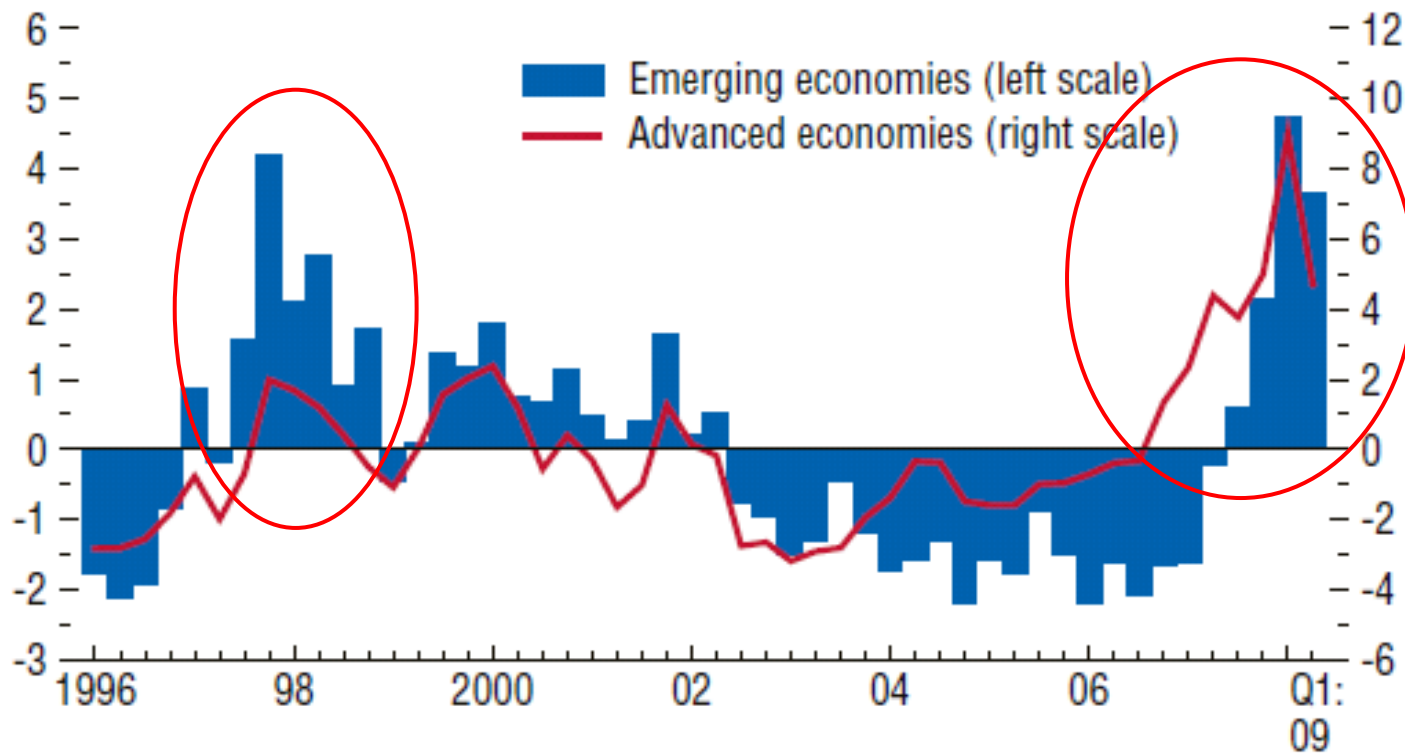
# **Macro-financial Linkages and Financial Deepening**

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Osaka University

October 21, 2010  
Concurrent Session 4  
PECC General Meeting, Tokyo

# 1. Financial Crisis Spillovers through Financial Linkages

Comparison of Financial Stress Levels



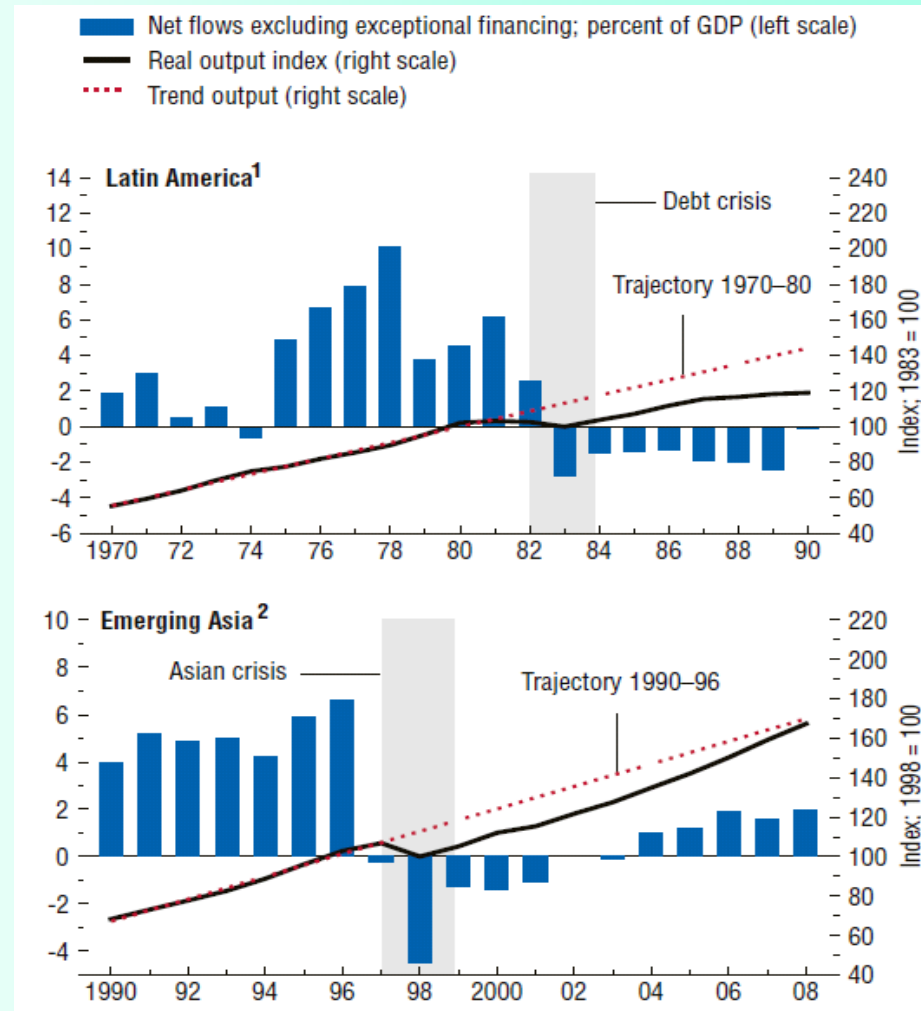
# Sudden Stops and Output Crash?

## *Financial Crises from Emerging Markets*

Macroeconomic Costs  
due to Sudden  
Capital Reversals

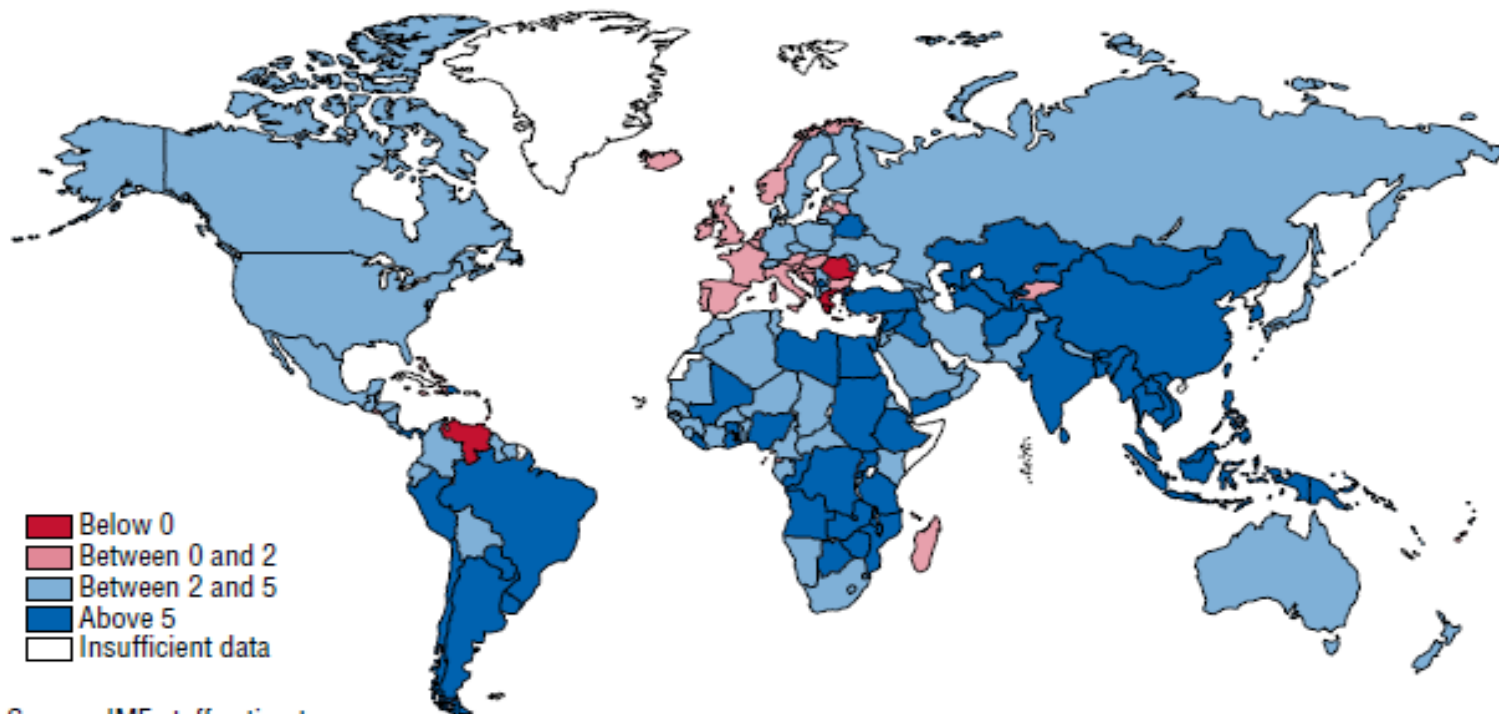
Lost decades in Latin  
America (1980s)

Asian Economic  
Crisis (1997-98)



# Diverse Outcomes across Emerging Markets

**Figure 2.1. Average Projected Real GDP Growth during 2010–11**  
(Percent)



Source: IMF staff estimates.

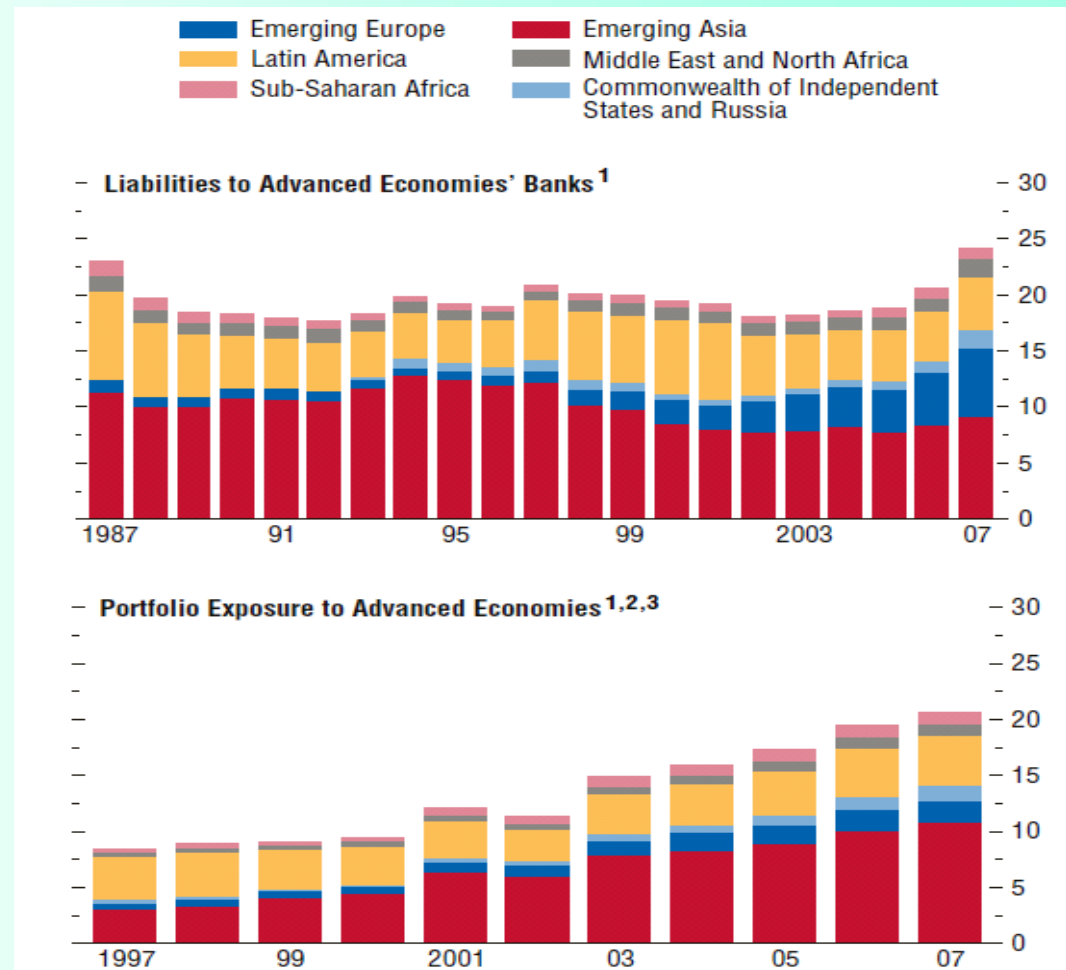


# Financial Flows to Emerging Markets (outstanding stock)

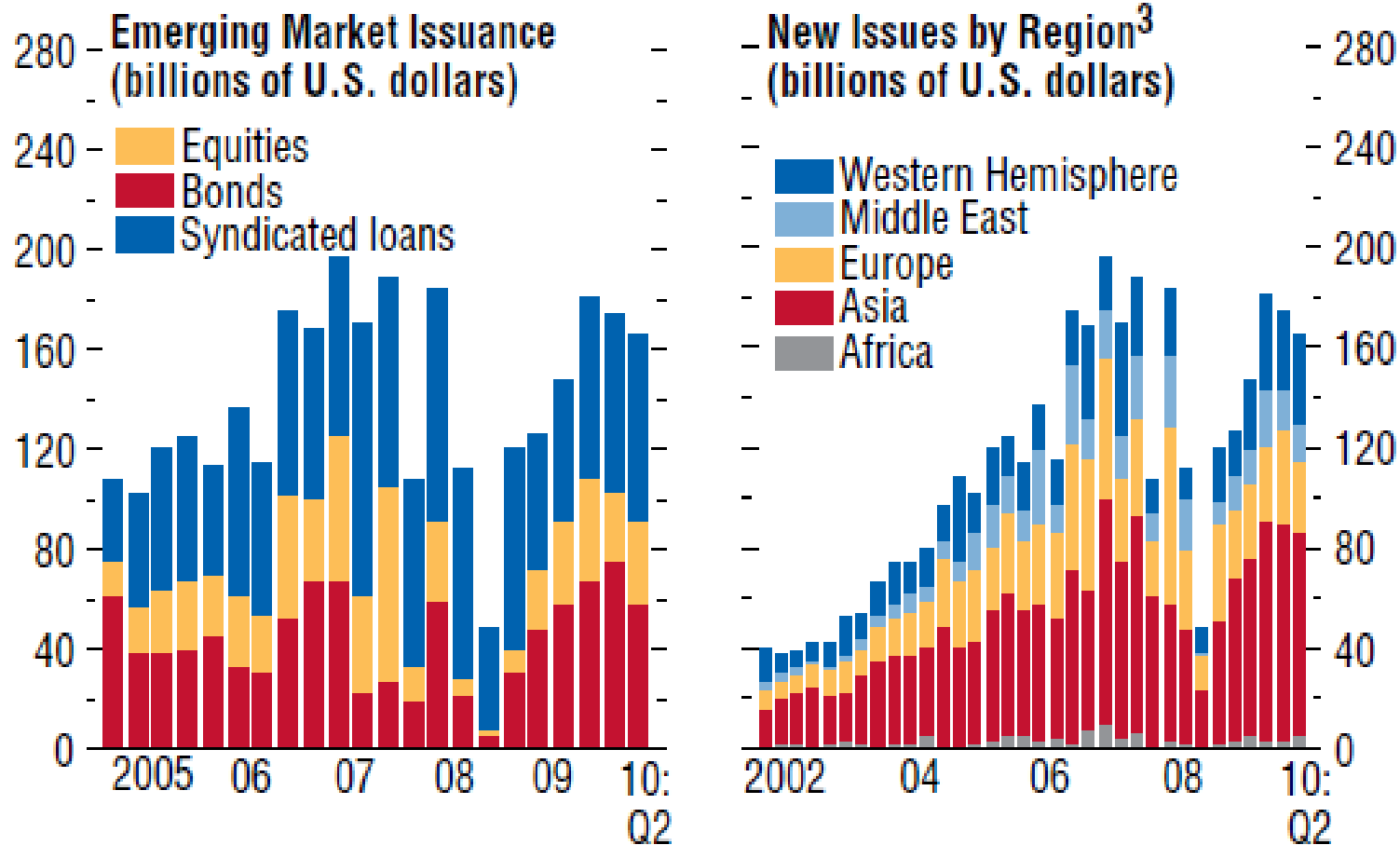
(% of EM GDP)

Bank loans: rises only in  
Europe, and gradual  
falls in others

Portfolio investment: large  
and strong growth in  
Asia, small but some  
growth in Europe, and  
large but stagnant in  
LA



# Recent Financial Flows



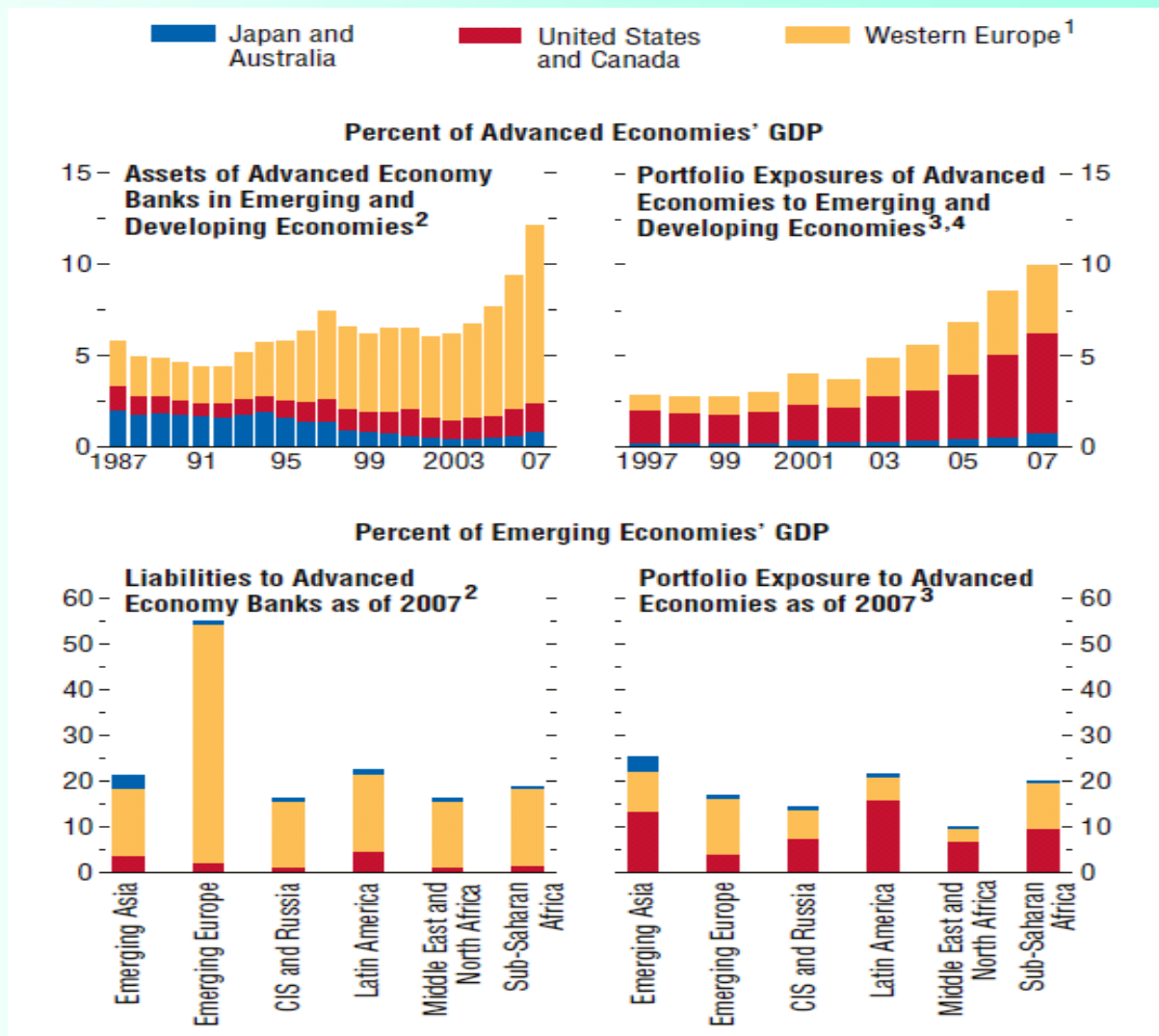
# Geographical Financial Linkages

(Investor countries)  
Bank loans: Mostly  
from Europe.

Portfolio investment:  
US > Europe

(Regional linkages)  
Bank loans: Mostly  
from Europe to  
Europe

Portfolio investment:  
Regional biases



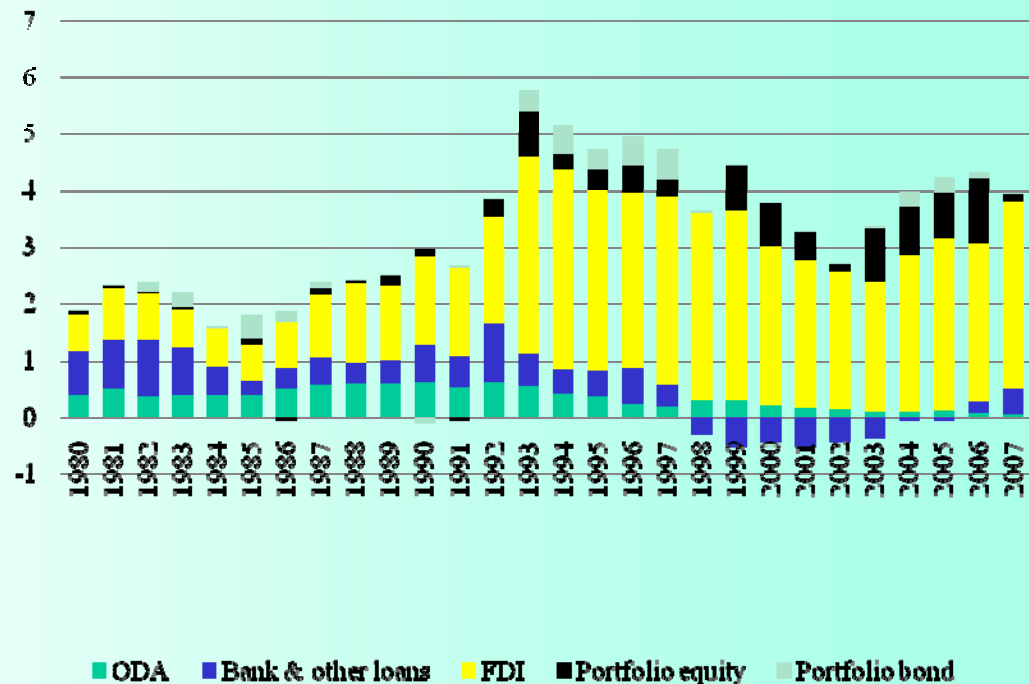
## 2. Changing Nature of International Capital Flows in East Asia

FDI: dominant and  
stable

Bank loans:  
dwindled

Portfolio investment:  
mostly equities  
recovering  
recently

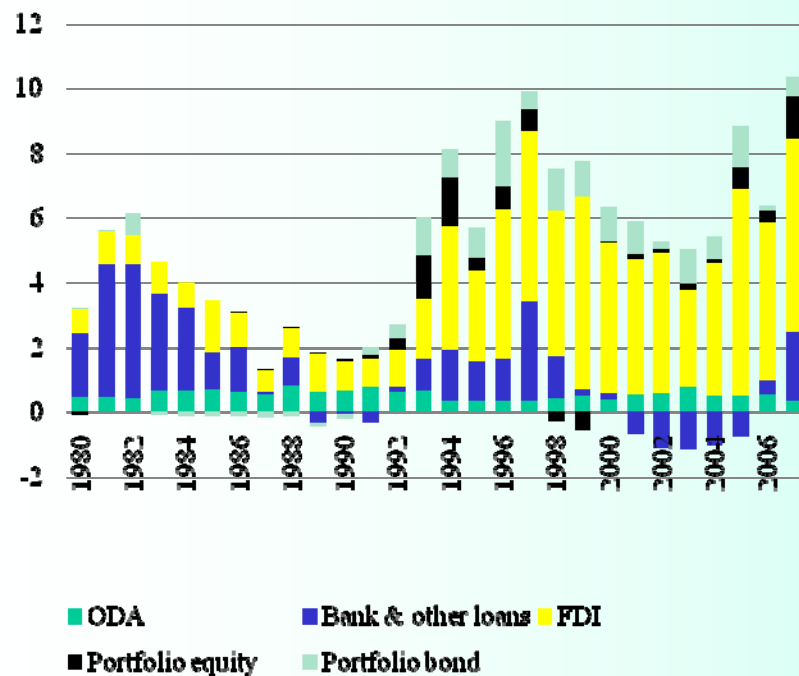
**Financial Inflows to EM:  
East Asia (% of GDP)**



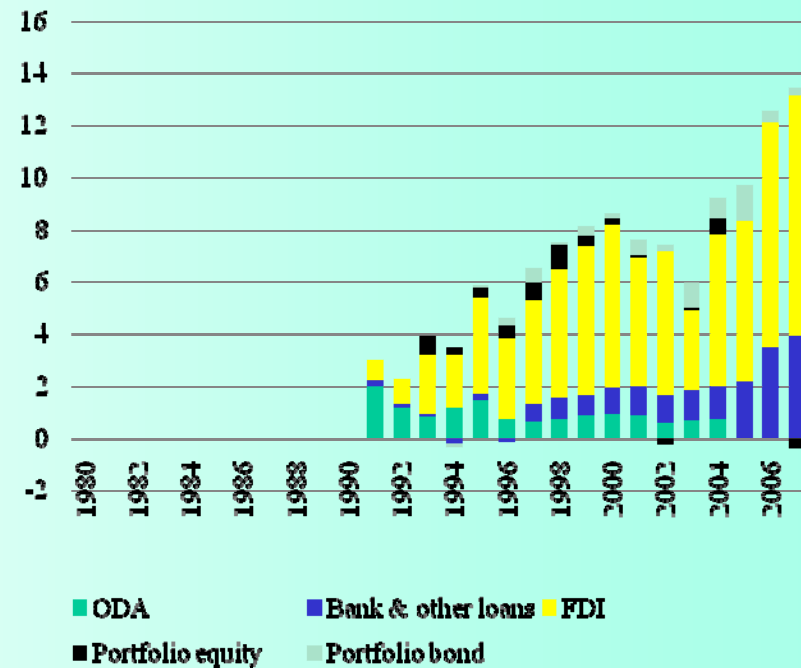


(continued)

**Financial Inflows to EM:  
Latin America (% of GDP)**

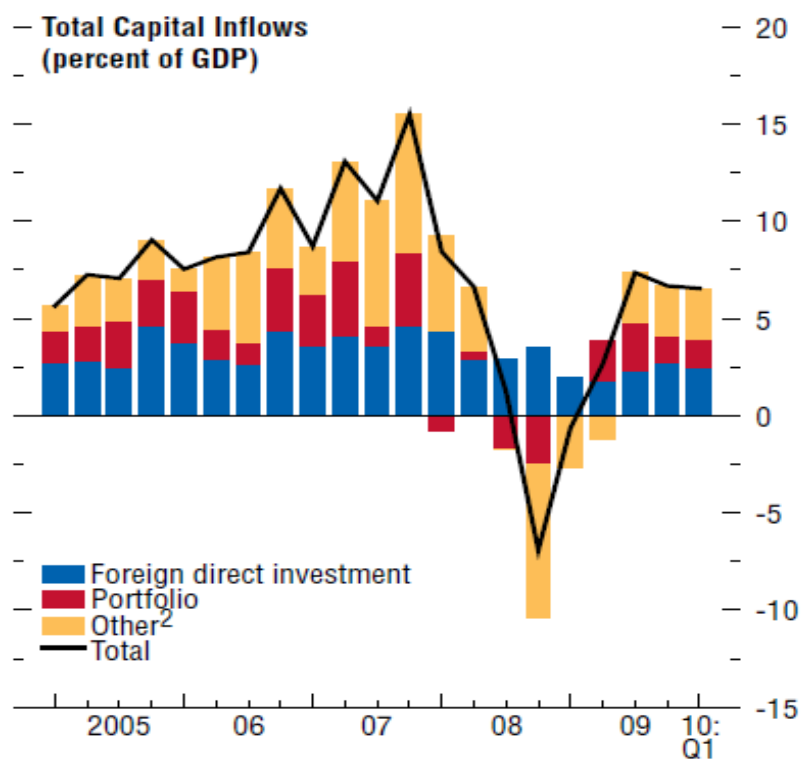


**Financial Inflows to EM:  
Central Europe (% of GDP)**

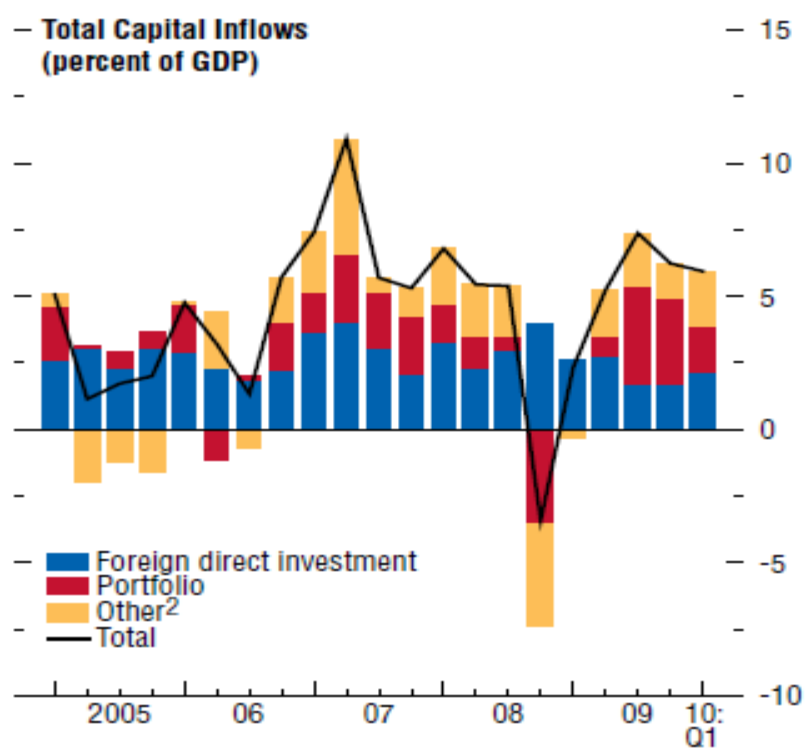


# Recent Financial Flows

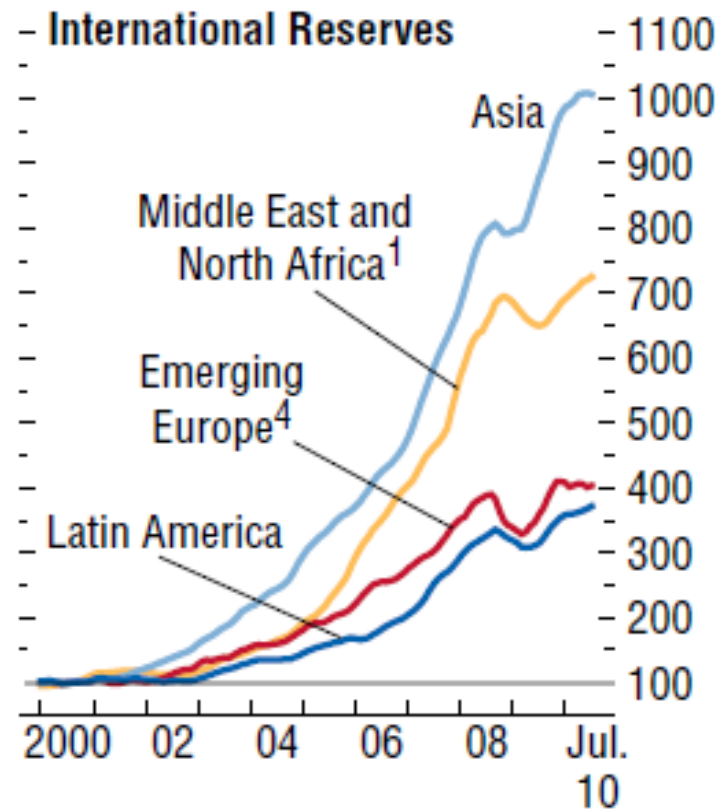
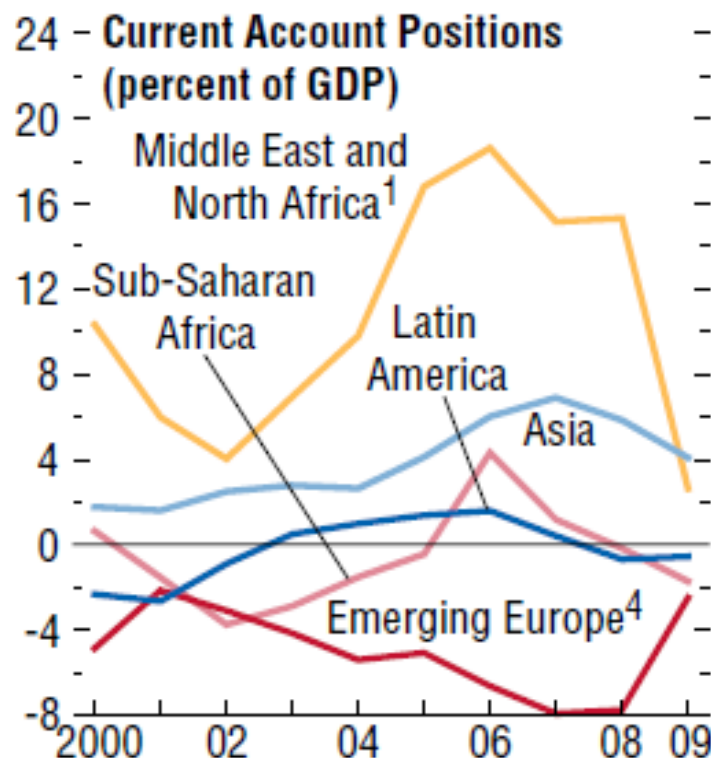
**Emerging Asia: Recent Experience with Capital Inflows<sup>1</sup>**



**LA-5: Handling the Capital Inflows Bonanza<sup>1</sup>**



# Outward Financial Flows: International Reserves





# Changing Nature of International Capital Flows in East Asia

1. **FDI** levels stable: more intra-regional investors.  
Factors: liberalization policy, investment openness.
2. **Other flows** volatile: pull factor: policy, market.  
push factor: interest costs, liquidity.
3. Accumulation of **foreign exchange reserves**, but intra-regional risk sharing limited.

# Geographic Breakdown of Portfolio Equity Investment: (mil US\$)

Investment in:	Investment from:	Year-End 2008				
		Total value of investment	Emerging East Asia	EU15	Japan	United States
China, P.R.		226,873	107,792	49,161	5,499	53,269
Hong Kong SAR of China		165,473	22,091	56,900	8,915	61,483
Japan		626,077	16,713	197,226	-	347,600
Korea, Republic of		112,278	7,591	39,259	6,799	45,287
Malaysia		25,278	7,173	7,162	529	6,673
Philippines		7,574	717	2,055	165	4,279
Singapore		60,188	4,408	20,430	3,074	24,028
Chinese Taipei		79,948	5,546	26,294	1,631	41,195
Thailand		24,211	3,215	8,477	683	6,670
United States		1,486,907	54,476	741,220	159,163	-
Emerging East Asia		701,822	158,533	209,739	27,295	242,884
<b>Total value of investment</b>		9,848,594	484,995	4,214,632	394,678	2,748,428

# Geographical Breakdown of Portfolio Investment: Debt Securities (mil US\$)

Investment from:

Investment in:

Year-End, 2008

	Total value of investment	Emerging East Asia	EU15	Japan	United States
China, P.R.	23,409	14,885	5,441	496	1,633
Hong Kong SAR of China	14,770	4,034	3,685	1,212	3,333
Japan	474,683	28,515	233,389	-	41,472
Korea, Republic of	92,007	34,970	23,998	11,262	10,769
Malaysia	24,579	8,571	7,951	2,171	5,263
Philippines	13,224	1,775	5,974	1,388	2,818
Singapore	26,687	4,851	7,483	3,350	6,453
Chinese Taipei	4,196	1,904	1,960	11	223
Thailand	4,241	1,209	1,407	474	949
United States	4,866,185	94,156	1,435,027	603,262	-
Emerging East Asia	203,113	72,199	57,898	20,364	31,441
<b>Total value of investment</b>	<b>21,023,968</b>	<b>484,154</b>	<b>10,284,764</b>	<b>1,981,928</b>	<b>1,519,437</b>



# Changing Financial Linkages

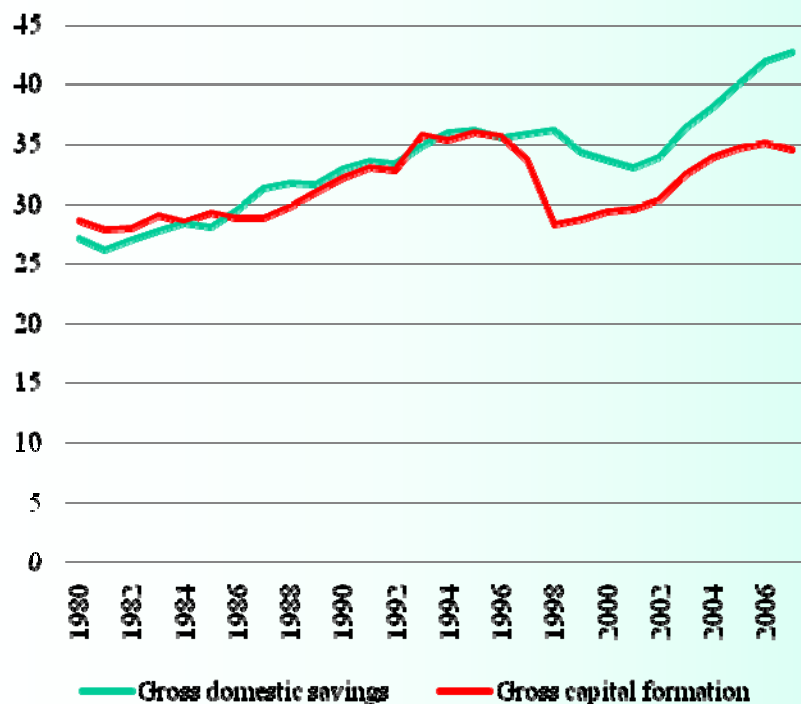
The second Asian crisis is *unlikely*. Low external debt and sufficient foreign exchange reserves.  
(But, European emerging markets?)

Rapidly *increasing regional financial linkages* (FDI, Equity investment). Increasing importance of regional emerging markets as investors.

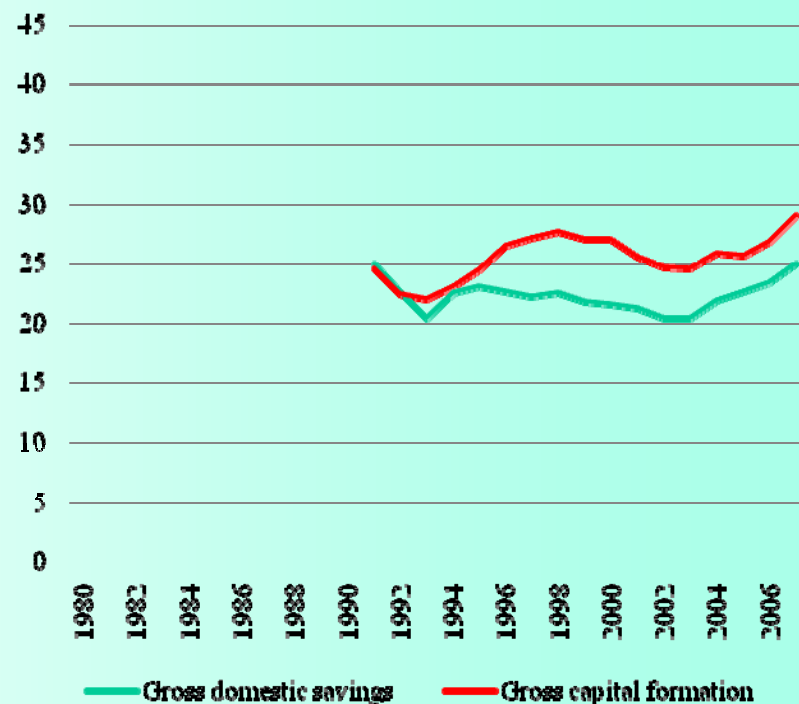
*Then, how foreign financing interacts with domestic financing?*

# 3. Financial Development in Emerging Markets

**Saving & Investment:  
East Asia (% of GDP)**



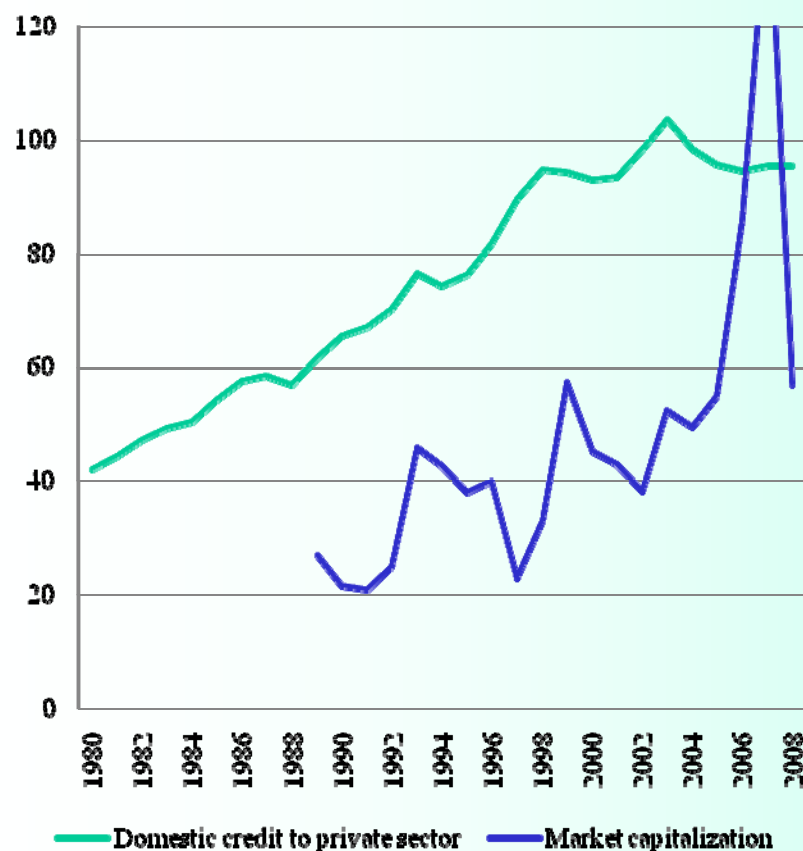
**Saving & Investment:  
Central Europe (% of GDP)**



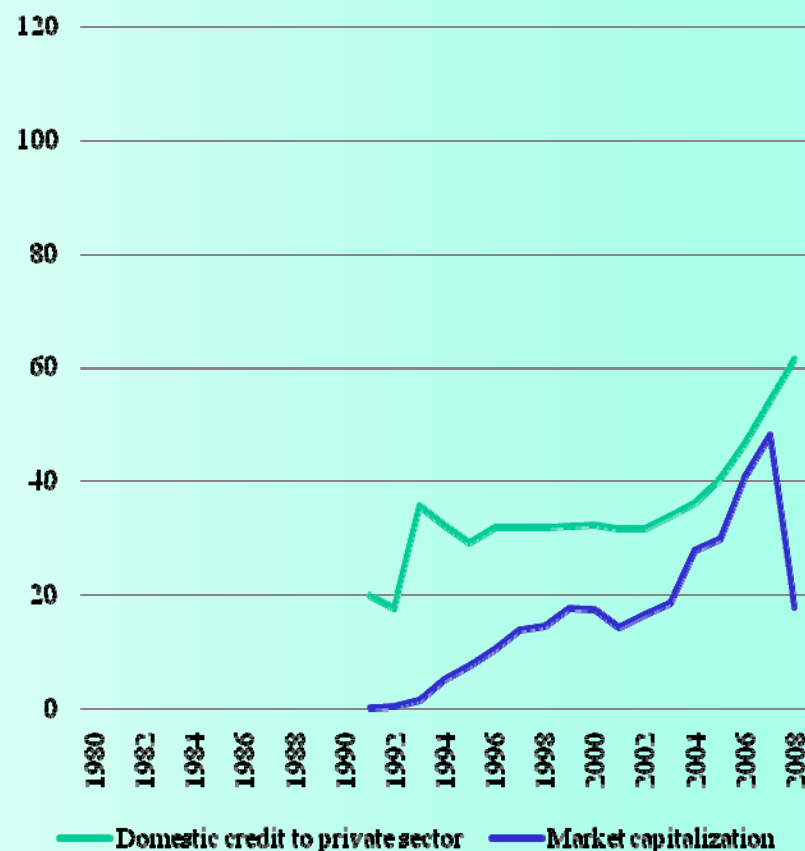


# Financial Depth

**East Asia (% of GDP)**



**Central Europe (% of GDP)**





# **Contrasts between East Asian and European/ Other Emerging Markets**

Dependence on foreign finance

Depth of domestic financial system

Linkages to advanced economies

***But, domestic financial systems resilient?***

## 4. Domestic Financial Markets

■ TABLE 4.5 Financial Markets, Especially Securities Markets, Have Surged Since 1997

Economy	Bank assets				Equity market capitalization				Bonds outstanding			
	US\$ billions		% of GDP		US\$ billions		% of GDP		US\$ billions		% of GDP	
	1997	2005	1997	2005	1997	2005	1997	2005	1997	2005	1997	2005
China	1,125.7	3,692.2	124.6	163.1	101.4	401.9	11.2	17.8	116.4	552.0	12.9	24.4
Indonesia	74.1	140.0	31.1	49.8	29.1	81.4	12.2	28.9	4.5	55.2	1.9	19.6
Korea, Rep. of	196.4	736.1	37.9	93.5	41.9	718.0	8.1	91.2	130.3	599.8	25.2	76.2
Malaysia	100.9	208.5	100.9	159.4	93.2	180.5	93.2	138.0	57.0	115.1	57.0	88.0
Philippines	46.5	62.2	56.1	63.2	31.2	39.8	37.7	40.4	18.5	36.1	22.4	36.7
Thailand	120.3	183.0	79.7	103.6	22.8	123.9	15.1	70.1	10.7	72.1	7.1	40.8
Hong Kong, China	361.6	790.1	205.1	444.6	413.3	1,055.0	234.5	593.6	45.8	82.9	26.0	46.6
Singapore	117.0	216.4	122.0	185.4	106.3	257.3	110.8	220.4	23.7	79.8	24.7	68.2
Total	2,142.5	6,028.5	94.6	149.5	839.2	2,857.8	37.0	70.9	406.9	1,593.0	18.0	39.5

Sources: International Financial Statistics Database, International Monetary Fund, <http://ifs.apdi.net/imf/>; World Federation of Exchanges (<http://www.world-exchanges.org/WFE/home.Asp>); Bank for International Settlements (<http://www.bis.org/>); Asian Bond Indicators Database, Asian Development Bank, <http://asianbondsonline.adb.org/asiabondindicators/>; World Development Indicators Database, World Bank, <http://www.worldbank.org/data/datapubs/datapubs.html>; World Bank staff calculations.



## Domestic Financial Markets (2)

Significant financial reforms:

Banks restructured and recapitalized.

Businesses de-leveraged and extended to  
consumers

***But, domestic bond markets for risk management  
through volume cut rather than pricing.***

## Financial Structure

Bank credit: overall  
dwindling.

Private bond:  
negligible or slow  
development

Table. Financial Structure: East Asia (Ratio to GDP)					
Country	Year	Private Credit	Private Bond	Public Bond	Stock Market Capitalization
China	1992	0.85	0.03	0.03	0.02
	1997	0.94	0.03	0.04	0.17
	2002	1.19	0.08	0.12	0.34
	2007	1.11	0.15	0.29	1.32
Indonesia	1992	0.44	0.00	0.00	0.07
	1997	0.54	0.02	0.01	0.28
	2002	0.18	0.01	0.26	0.14
	2007	0.23	0.02	0.17	0.41
Korea	1992	0.97	0.34	0.14	0.31
	1997	1.21	0.33	0.10	0.18
	2002	1.29	0.63	0.27	0.43
	2007	1.01	0.59	0.48	1.02
Malaysia	1992	0.89	0.18	0.45	1.29
	1997	1.39	0.40	0.25	2.02
	2002	1.20	0.53	0.35	1.29
	2007	1.01	0.55	0.36	1.56
Philippines	1992	0.22	0.00	0.31	0.25
	1997	0.54	0.00	0.27	0.69
	2002	0.37	0.00	0.33	0.53
	2007	0.28	0.01	0.34	0.60
Thailand	1992	0.89	0.06	0.03	0.42
	1997	1.54	0.08	0.01	0.41
	2002	0.97	0.12	0.21	0.33
	2007	0.83	0.16	0.35	0.69

Source: World Bank, Financial Development and Structure Dataset,  
<http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTRESEARCH/>



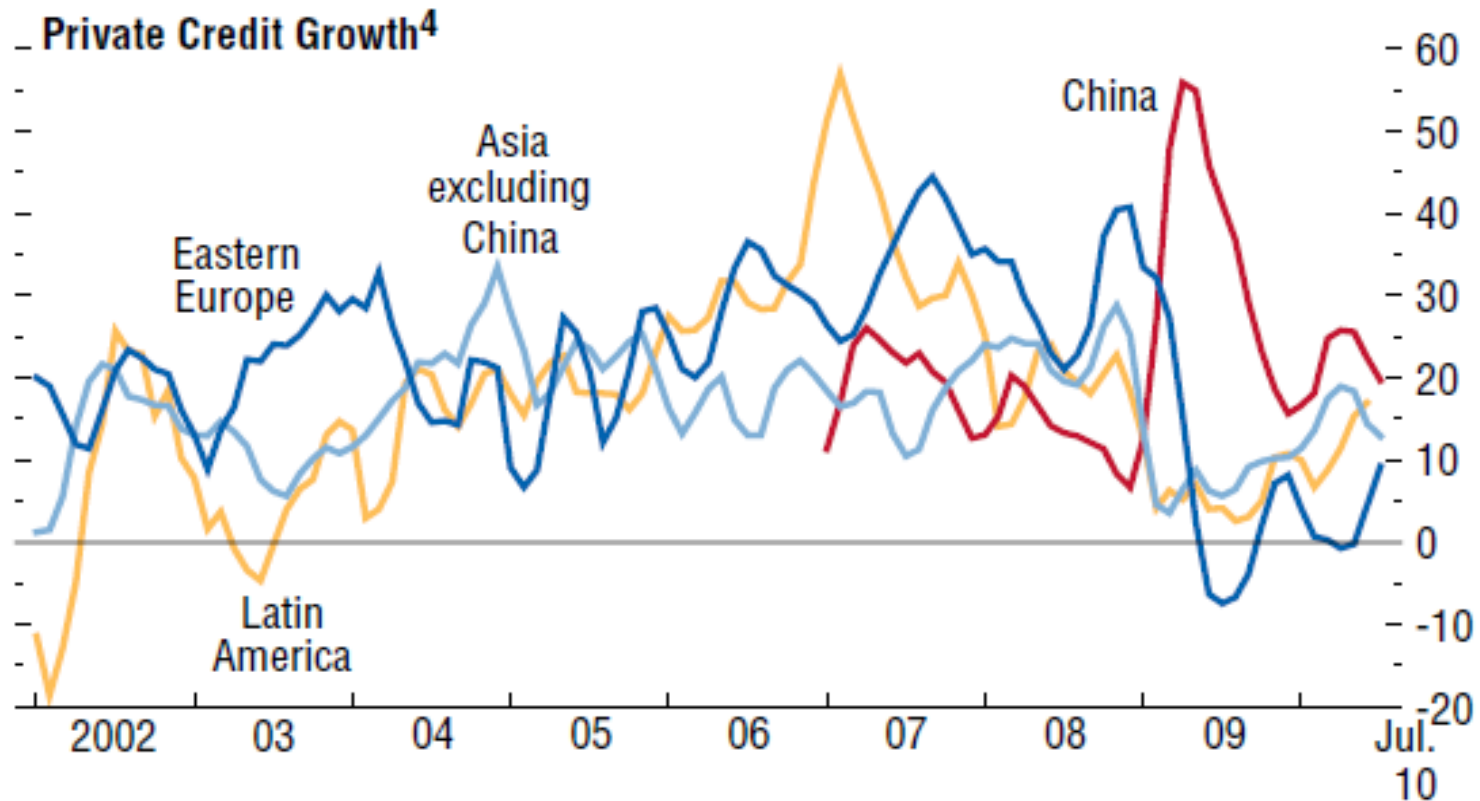
# Domestic Financial System: Preliminary Assessments

The recovery from the Asian Crisis is *not full, but mediocre*.

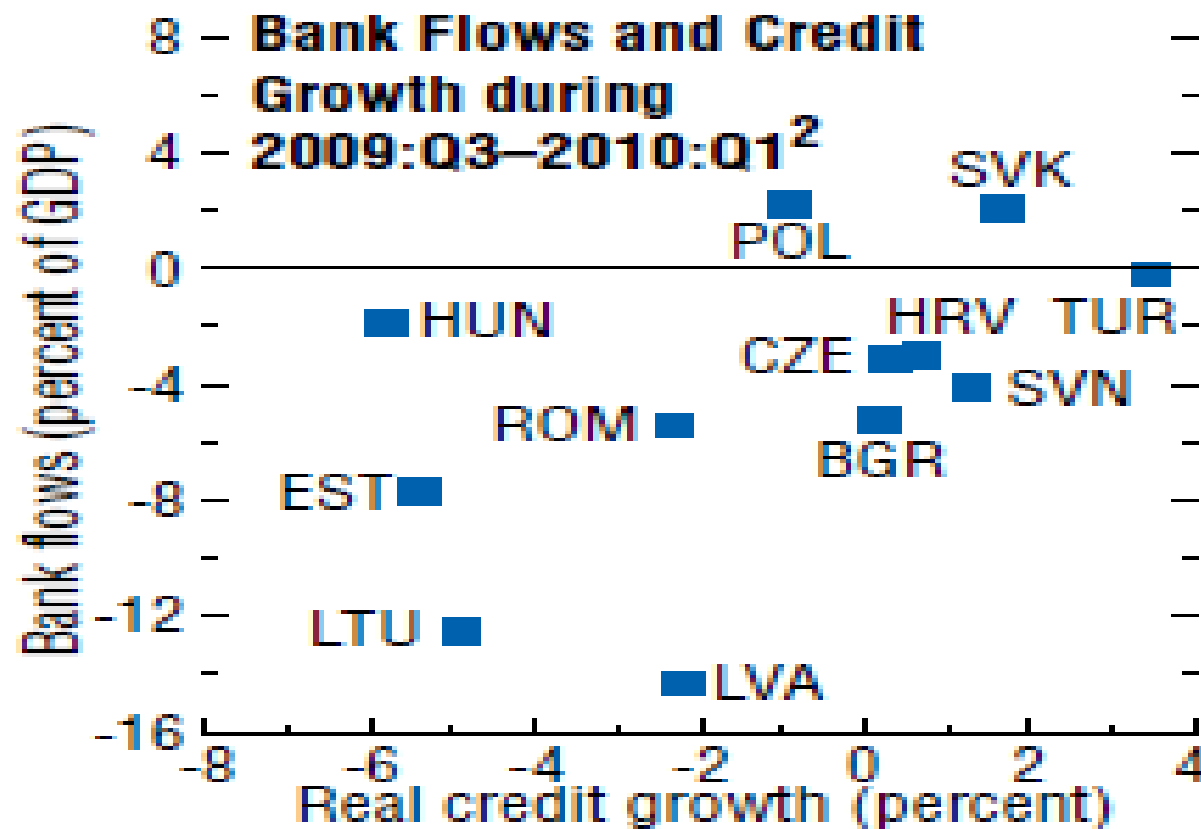
Particularly, stagnant credit growth and slow private bond market development.

Economic growth has been supported by FDI and *internal* finance, not by financial intermediation.

# Credit Squeeze after the Crisis: Emerging Markets



## Both Foreign and Domestic Financial Intermediation in Emerging Europe







# **5. Policy Implications**

## **More Problems than Answers**

Risks/ concerns are on:

1. Immediately: on exchange rates/ financial flows
2. Short-run: global business cycles
3. Medium-run: behind financial disintermediation and high saving rate, slow private consumption/ investment



# Policy Implications 2

Nationally: to cope with volatile exchange rates/ international financial (capital) flows

## 1. Macro-prudential policy

Nominal anchors: ex rate, inflation, asset price or what?

## 2. Reserve accumulation

Insurance against what? Financial flow volatility, exchange rate stability, or what?



# Policy Implications 3

Regionally: to cope with immediate, short- and medium-run financial concerns,

CMI: Unusable swaps as a LLR?

Stability of what exchange rate?

ABMI: regional bond markets

vs. persistent disintermediation



**To Be Continued !**



# Wrap-Up 1

1. Macro-prudential Policy: from simple targeting to more flexible operation needed based on multiple nominal anchors.
2. Reserve accumulation: more scrutiny on its effectiveness needed.

## Wrap-Up 2

Regional financial cooperation (CMI, ABMI, policy dialogue): to be encouraged to ascertain what we can do.

Strategic physical (infrastructure) and human capital investment may help against relatively weak consumption/ investment.