

Liberalisation and Regulation of Capital Flows: Lessons for Emerging Market Economies

Rakesh Mohan
Distinguished Consulting Professor
Stanford Centre for International
Development
Stanford University

Scheme of Presentation

- ➔ **Capital Flows to All EMEs and Asian EMEs: Stylised Facts**
- Capital Account Liberalisation
 - Theory and Evidence
- Managing the Capital Account
 - Need, Sequencing, Capital Controls
- Asian EMEs: The Record
- Conclusions

Capital Flows: Stylised Facts (1)

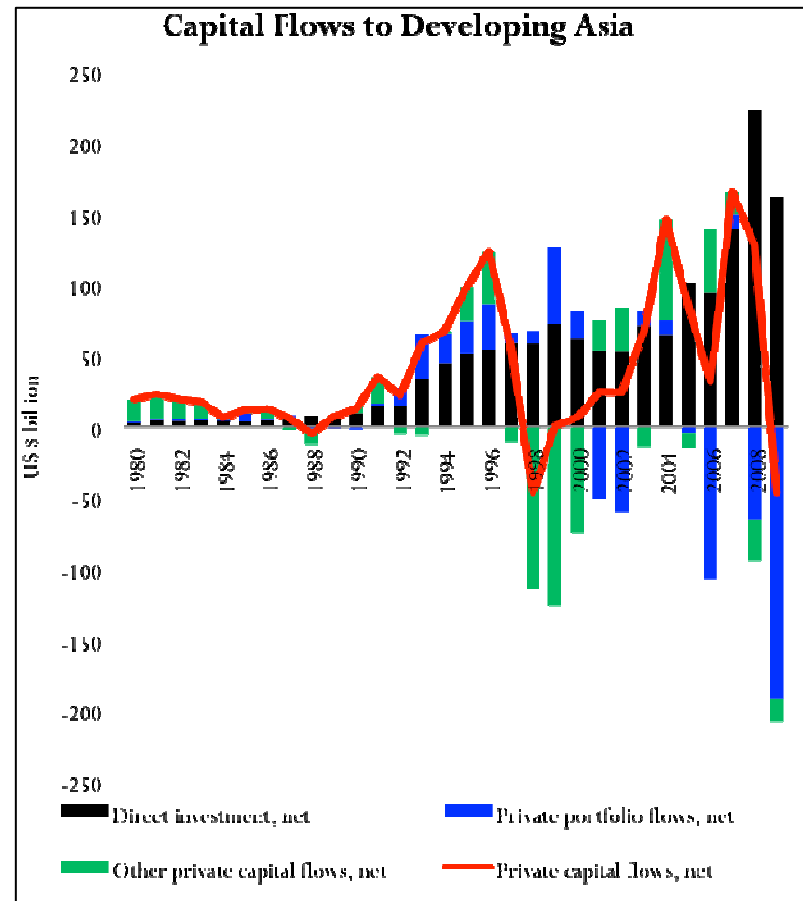
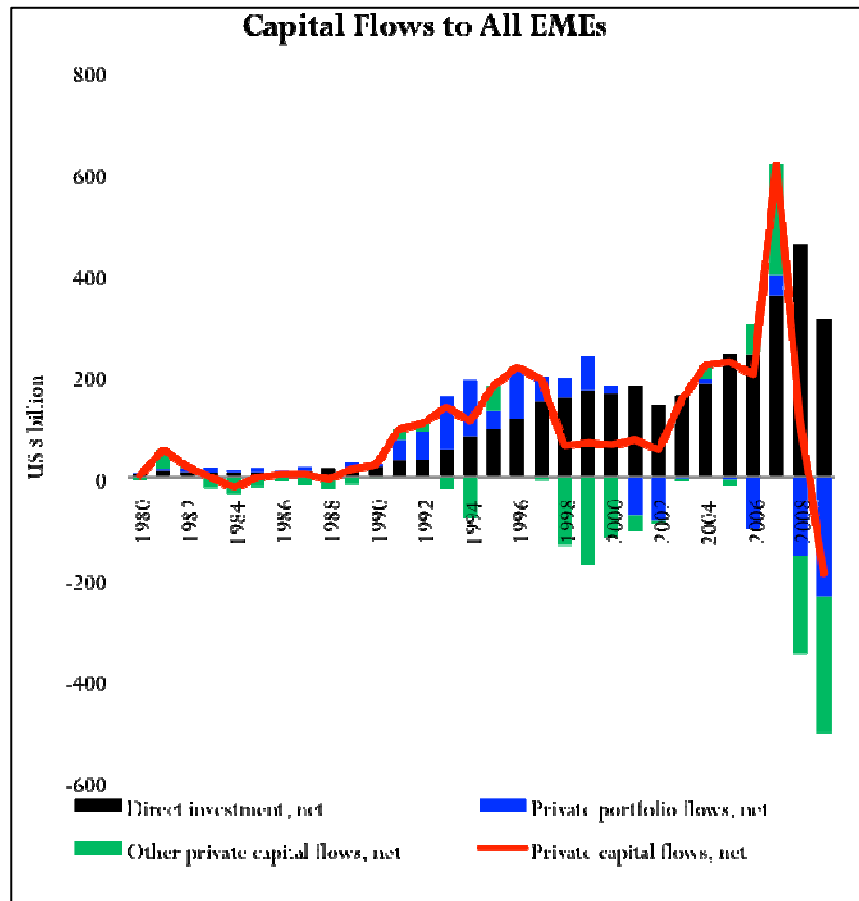
Capital Flows to Emerging Market Economies

(US \$ billion)

Item	1980s	1990-97	1998-2002	2003-06	2007	2008	2009
1	2	3	4	5	6	7	8
All Emerging and developing economies							
Current account balance	-28	-82	20	364	633	714	262
Current account balance (%/GDP)	-0.7	-1.6	0.3	3.4	4.1	3.8	1.6
Private capital flows, net	8	133	64	201	617	109	-190
Direct investment, net	12	72	163	208	359	459	313
Private portfolio flows, net	6	63	-8	-25	39	-155	-235
Other private capital flows, net	-9	-2	-92	19	219	-195	-268
Official flows, net	n.a.	n.a.	8	-90	-101	-60	58
Increase in reserves	10	62	119	550	1258	866	266
Developing Asia							
Current account balance	-15	-19	46	154	406	422	481
Current account balance (%/GDP)	-1.7	-1.3	2.0	3.8	6.9	5.8	6.4
Private capital flows, net	12	59	2	82	165	128	-47
Direct investment, net	5	35	60	83	138	223	162
Private portfolio flows, net	1	16	-6	-23	11	-66	-192
Other private capital flows, net	6	8	-52	23	15	-29	-16
Official flows, net	6	2	-1	-19	-37	-13	-11
Increase in reserves	11	37	89	309	673	634	514

Capital Flows: Stylised Facts (2)

Capital Flows to All EMEs and Developing Asia (billion \$)



Private capital flows (net) to developing Asia in 2007 only slightly higher than the previous peak (1996). But, large rise to other EME regions

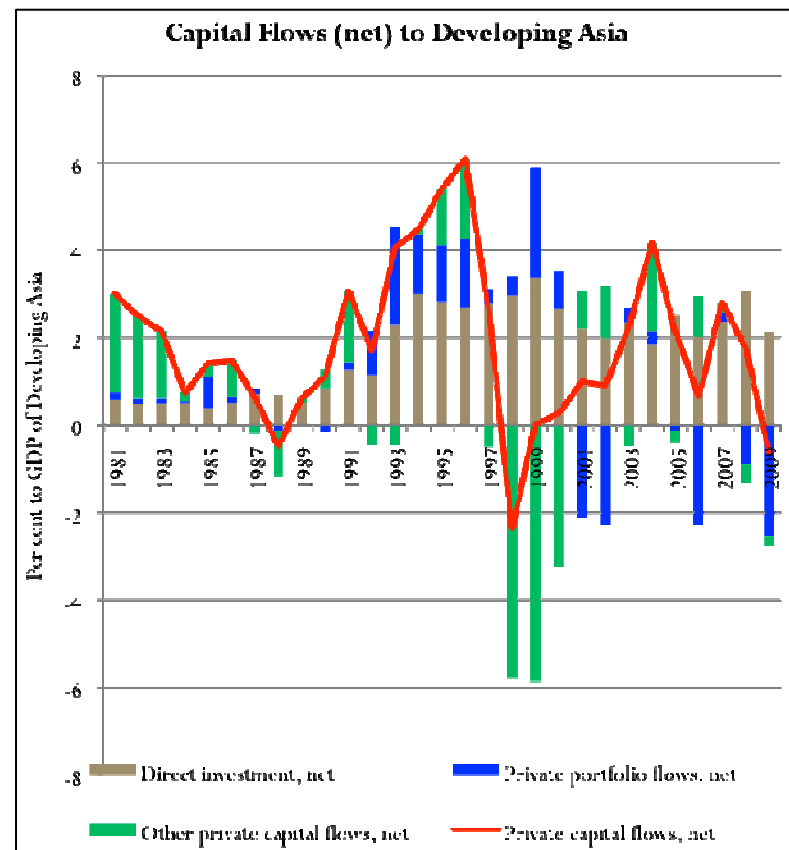
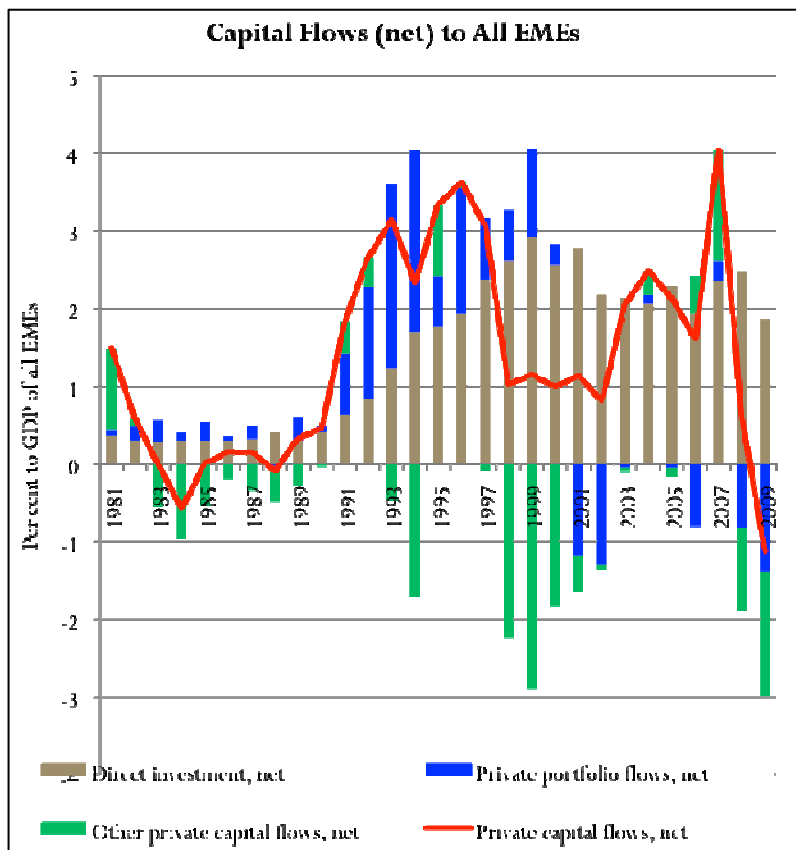
Capital Flows: Stylised Facts (3)

Capital Flows to Emerging Market Economies

Item	1980s	1990-96	1997-02	2003-06	2007	2008	2009
1	2	3	4	5	6	7	8
Capital Flows (net) to All EMEs (per cent to GDP of All EMEs)							
Private capital flows, net	0.2	2.5	1.4	2.1	4.0	0.6	-1.1
Direct investment	0.3	1.2	2.6	2.1	2.3	2.5	1.9
Private portfolio flows	0.1	1.3	0.1	-0.2	0.3	-0.8	-1.4
Other private capital flows	-0.2	-0.1	-1.3	0.2	1.4	-1.0	-1.6
Official flows	--	-0.2	0.1	-0.9	-0.7	-0.3	0.3
Change in reserves	-0.3	-1.2	-1.8	-5.5	-8.2	-4.7	-1.6
Capital Flows (net) to Developing Asia (per cent to GDP of Developing Asia)							
Private capital flows, net	1.5	3.7	0.4	2.3	2.8	1.8	-0.6
Direct investment	0.5	2.0	2.7	2.2	2.4	3.1	2.1
Private portfolio flows	0.1	1.1	0	-0.4	0.2	-0.9	-2.5
Other private capital flows	0.8	0.6	-2.2	0.6	0.3	-0.4	-0.2
Official flows	0.7	0.1	0.1	-0.5	-0.6	-0.2	-0.1
Change in reserves	-1.2	-2.5	-3.4	-8.2	-11.5	-8.8	-6.8

Capital Flows: Stylised Facts (4)

Capital Flows to EMES and Developing Asia (% of GDP)



As per cent to GDP, capital flows (net) to Developing Asia in 2005-2007 well below their 1996 peak - But, 2007 was a new peak for all EMES

Capital Flows: Stylised Facts (5)

Capital Flows: Inflows and Outflows

	Avg. 1998–2000	2001	2002	2003	2004	2005	2006	2007	2008
US \$ billion									
Emerging and developing economies									
Private capital flows, net	108	69	54	150	220	223	203	617	109
Inflow	222	170	167	419	667	842	1314	2130	754
Outflow	113	101	113	269	447	619	1112	1513	645
Emerging Asia									
Private capital flows, net	-15	19	24	63	144	83	32	164	128
Inflow	57	58	81	215	355	392	558	931	327
Outflow	71	39	57	153	212	309	527	767	199

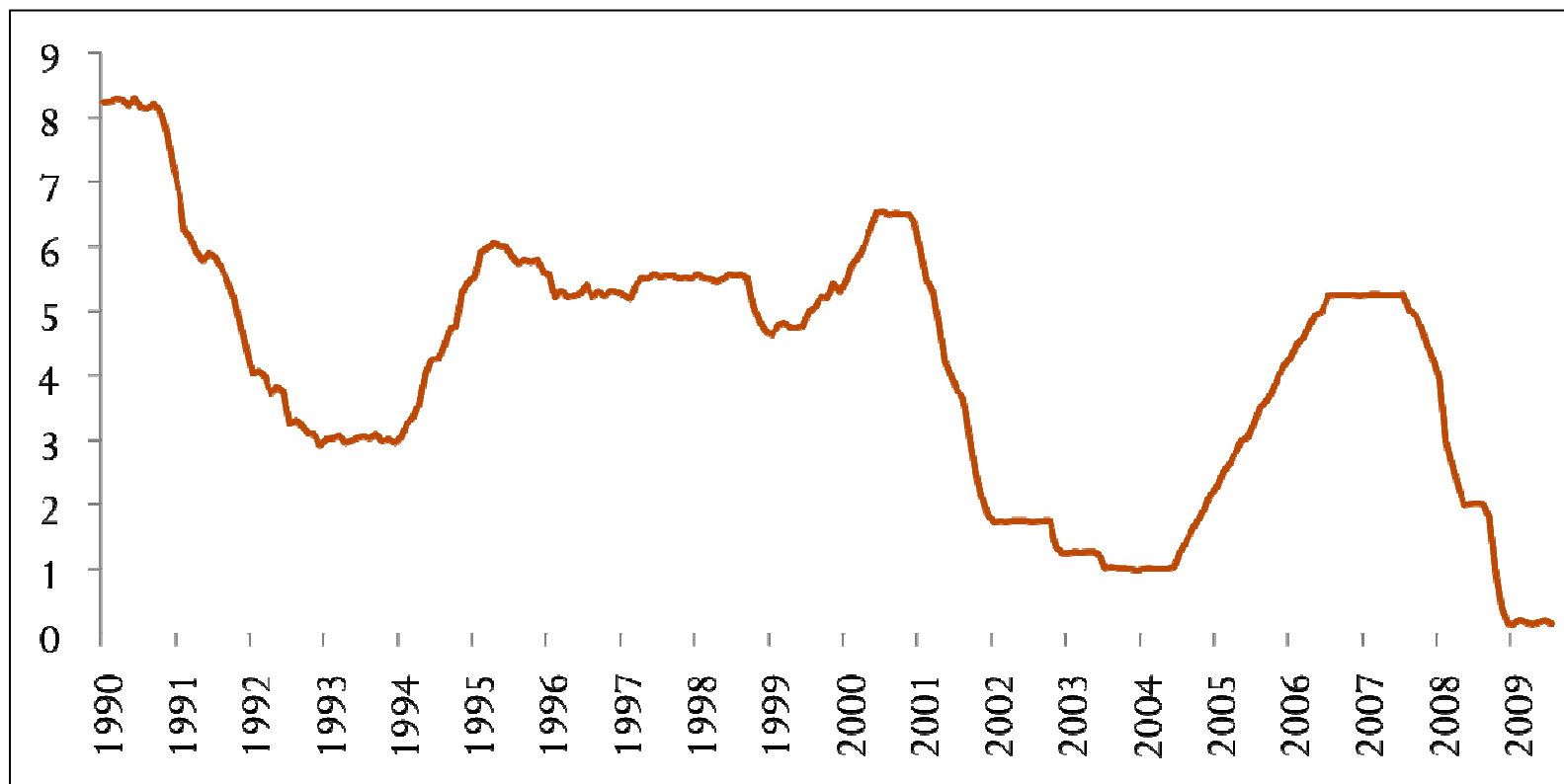
Per cent to respective regional GDP

Emerging and developing economies									
Private capital flows, net		1.1	0.8	2.0	2.5	2.1	1.6	4.0	0.6
Inflow		2.6	2.5	5.6	7.5	7.9	10.5	13.9	4.1
Outflow		1.6	1.7	3.6	5.0	5.8	8.9	9.9	3.5
Emerging Asia									
Private capital flows, net		0.8	0.9	2.1	4.1	2.1	0.7	2.8	1.8
Inflow		2.4	3.0	7.2	10.2	9.8	11.9	15.9	4.5
Outflow		1.6	2.1	5.1	6.1	7.7	11.2	13.1	2.8

Capital Flows: Stylised Facts (6)

US Monetary Policy (1)

Effective Federal Fund Rate in the US



- Volatility in monetary policy in advanced economies
- Again very loose MP in US – likely surge in capital flows to EMEs?

Capital Flows: Stylised Facts (7)

US Monetary Policy (2)



US Monetary policy too loose during 2002-04; aggregate demand exceeded output; large current a/c deficit; mirrored in large surpluses in China and elsewhere

Capital Flows: Stylised Facts (8)

Asian EMEs: Capital Flows, net

	1990-96	1997-02	2003-06	2007	2008
Amounts in US \$ billion					
China	21	15	56	70	
India	7	10	25	108	9
Indonesia	7	-5	0	3	-2
Korea	10	3	13	9	-51
Malaysia	6	-3	-5	-11	
Philippines	5	3	0	3	-5
Thailand	13	-8	4	-3	13
Per cent to GDP					
China	3.2	1.2	2.9	2.1	
India	2.1	2.1	3.3	9.2	0.8
Indonesia	3.7	-3.9	-0.2	0.7	-0.4
Korea	2.3	0.5	1.7	0.8	-5.4
Malaysia	9.3	-3.9	-3.4	-5.8	
Philippines	7.4	3.2	0.3	2.1	-2.7
Thailand	10.3	-6.8	2.1	-1.2	4.7

Capital Flows: Stylised Facts (9)

Asian EMEs: Current Account Balance

	1990-96	1997-02	2003-06	2007	2008
Amounts in US \$ billion					
China	5	27	132	372	
India	-4	-4	-2	-17	-30
Indonesia	-4	5	5	10	1
Korea	-7	14	15	6	-9
Malaysia	-4	7	19	29	
Philippines	-2	-2	2	7	4
Thailand	-9	7	1	14	0
Per cent to GDP					
China	1.1	2.4	5.8	11.0	
India	-1.4	-0.4	-0.1	-1.5	-2.6
Indonesia	-2.3	3.1	1.8	2.4	0.1
Korea	-1.5	3.3	2.0	0.6	-0.7
Malaysia	-5.5	7.8	13.7	15.5	
Philippines	-4.0	-2.1	2.2	4.4	2.5
Thailand	-7.0	6.1	0.4	6.4	-0.1

Capital Flows: Stylised Facts (10)

Asian EMEs: Investment Rates (per cent)

	1990	1995	1996	1997-02	2003-06	2007
China	36.1	41.9	40.4	36.8	43.1	44.2
India	26.0	26.2	24.0	24.5	33.0	38.4
Indonesia	30.7	31.9	30.7	20.9	24.7	24.9
Korea	37.5	37.7	38.9	29.9	30.1	29.4
Malaysia	32.4	43.6	41.5	28.0	21.7	21.9
Philippines	24.2	22.5	24.0	20.3	15.7	15.3
Thailand	41.4	42.1	41.8	24.2	27.9	26.8

Investment levels still substantially below pre-crisis periods in East Asian EMEs - Indonesia, Korea, Malaysia, Philippines and Thailand

Capital Flows: Stylised Facts (11)

Asian EMEs: Growth Rates (per cent)

Country	1990-96	1997-02	2003-06	2007	2008
1	2	3	4	5	6
China	10.8	8.4	10.5	13.0	9.0
India	5.5	5.3	8.4	9.3	7.3
Indonesia	7.3	1.0	5.3	6.3	6.0
Korea	7.9	4.5	4.1	5.1	2.2
Malaysia	9.5	3.4	5.9	6.3	4.6
Philippines	2.8	3.4	5.4	7.2	4.6
Thailand	8.6	0.8	5.8	4.9	2.6

Shift in growth drivers: from East Asia to China and India since the crisis

Capital Flows: Stylised Facts (12)

Asian EMEs: Exchange Rate Movements

	China	India	Indonesia	Korea	Malaysia	Philippines	Thailand
Nominal effective exchange rates (change, %)							
January 2003 to April 2009	11.8	-14.3	-28.6	-22.0	-4.8	0.9	8.2
January 2003 to July 2007	-3.5	2.0	-14.1	15.5	-1.5	6.5	14.2
July 2007 to April 2009	16.0	-15.9	-16.9	-32.5	-3.3	-5.3	-5.3
Real effective exchange rates (change, %)							
January 2003 to April 2009	15.6	-0.1	0.4	-17.8	-3.7	25.0	13.7
January 2003 to July 2007	-1.1	15.8	10.7	18.5	-1.7	23.1	20.3
July 2007 to April 2009	16.8	-13.7	-9.3	-30.6	-2.0	1.6	-5.5

Note: Positive value indicates appreciation and negative depreciation of the index
Source: BIS

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Capital Account Liberalization (1)

Theory

- Theory
 - Efficient allocation of resources
 - Flow of capital from rich countries (capital abundant, low productivity of capital) to poor countries (capital scarce, high productivity)
 - Efficient markets
 - Growth Enhancing
 - Consumption smoothing – reduction of volatility

Capital Account Liberalization (2)

Evidence (1)

Empirical Evidence

- No correlation between volume of capital inflows and growth
- Real appreciations rather than real depreciations, generally, cause of worry
- EMEs constrained by domestic investment opportunities— not savings constrained
 - In this environment, excess capital inflows: real appreciation – constrain investment

CGFS, Obstfeld, Rodrik and Subramanian, Henry etc.

Capital Account Liberalization (3)

Evidence (2)

Empirical Evidence (contd...)

- CAL often followed by financial crisis
 - Large capital inflows – booms, real appreciation, current account deficits
 - Loss of confidence - Capital outflows – financial instability
- Indirect benefits – collateral benefits?
 - No impact on growth, but positive impact on productivity growth?

Capital Account Liberalization (4)

Evidence (3)

Empirical Evidence (contd...)

- Distinction between debt and equity
 - Equity flows – beneficial
 - Is the beneficial effect due to some other complementary reforms?
 - Debt flows
 - Negative impact
 - More caution needed
 - Certain thresholds – domestic financial market development, domestic macroeconomic stability

Capital Account Liberalization (5)

Evidence (4)

Empirical Evidence (contd...)

- Exchange rate volatility in countries with less developed financial sectors
 - Labour-intensive, low-margin exports – extremely sensitive to large exchange rate movements
 - Significant adverse impact on productivity

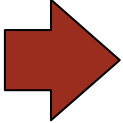
Capital Account Liberalization (6)

Evidence (5)

Empirical Evidence (contd...)

- Capital inflows: 10% of GDP or more even for large economies like India
 - Will developed financial markets help?
 - Can they absorb such large, persistent capital inflows?
 - Impact on current account deficit; real appreciation
 - Credit booms, asset price booms, large financial imbalances
 - Limited capacity even for advanced economies to absorb such large flows – the current crisis (Bernanke, IMF)

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Managing the Capital Account (1)

- Capital flows reflect both push and pull factors
 - Pull factors
 - Domestic macroeconomic fundamentals
 - Reasonably stable
 - Push factors
 - Advanced economies monetary policy stance
 - Large swings
 - Extreme volatility in capital flows to EMEs
- Overall Empirical Evidence
 - No beneficial impact of capital account liberalisation on growth
- Therefore, need to manage capital inflows
 - Policy framework in regard to inflows and outflows – sequencing - as discussed earlier
 - Managing the volatility

Managing the Capital Account (2)

Sequencing

- Inflows v/s outflows
- Inflows
 - Some case for liberalisation of equity inflows
 - Greater caution in debt inflows
 - Growth and inflation differentials and, hence, interest rate differentials favour EMEs on a structured and sustained basis
 - Risks of speculative hot money

Managing the Capital Account (3)

Sequencing

- Inflows
 - Local currency v/s foreign currency flows
 - Corporates v/s Financial intermediaries
- Outflows
 - Corporates
 - Institutional investors
 - Individuals

Managing the Capital Account (4)

Capital Controls

- Active management of the capital account by many EMEs, including those in Asia
- Some academic and empirical evidence questions the efficacy of capital controls
- A recent IMF Working Paper (Cardarelli, Elekdag and Kose, 2009) concludes
 - Resisting nominal exchange rate appreciation through sterilisation is likely to be ineffective when the influx of capital flows is persistent
 - Tightening capital controls is not generally associated with better outcomes
 - Keeping expenditure growth steady is helpful in limiting currency appreciation and fosters better growth

Managing the Capital Account (5)

Capital Controls

- Fiscal restraint
 - Practical limitations
 - Long inside lags
 - May boost confidence and attract more capital flows
- Nature of Capital flows: permanent v/s temporary
 - Difficult to determine ex-ante
- No attempt to prevent nominal appreciation
 - Growing flexibility in the region – two-way movements
- Capital controls – conceptual and measurement issues

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Asian EMEs: The Record (1)

- Management of Capital flows by Asian EMEs
 - Flexibility in use of controls on inflows and outflows
 - Flexibility in exchange rates – but with central bank intervention
 - Sterilisation
 - Reserve requirements

Asian EMEs: The Record (2)

- Management of Large Capital Inflows: Recent steps by Asian EMEs
 - URR (2006) (Thailand)
 - Modulation of interest rate ceilings on non-resident deposits (India)
 - Residents access to foreign borrowings (Korea, India)
 - Reduction of the nontaxable amount that foreign bank branches can borrow from their parent companies abroad from 6 times capital to 3 (“thin capitalization rule”) (Korea, January 2008)
 - limiting the use of foreign exchange loans by banks to real demand (financing imports and real investment), (Korea, August 2007).
 - Moral suasion (Korea, 2007)

Asian EMEs: The Record (3)

- Management of Large Capital Inflows: Recent steps by Asian EMEs
 - Cash reserve requirements (India, China, Korea)
 - Sterilisation
 - Central bank bills (China)
 - Government securities (Market Stabilisation Scheme) (India)
 - Prudential instruments (India)
 - Countercyclical tightening and rollback of provisioning norms and risk weights for select sectors
 - Minimising Regulatory arbitrage (NBFCs tightening)

Asian EMEs: The Record (4)

Outcomes

Asian EMEs, despite large foreign exchange interventions, able to maintain monetary and price stability

- Overnight market rates generally remained within the corridor set by the policy rates.
- Able to insulate the growth in their monetary aggregates from large purchase of foreign exchange
- Succeeded in containing inflation
 - Despite large reserve accumulation
 - But inflation did rise in many Asian EMEs in 2007/2008
 - Higher food and fuel prices

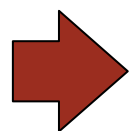
Asian EMEs: The Record (5)

Inflation Rates (per cent)

Country	1990-96	1997-02	2003-06	2007	2008
1	2	3	4	5	6
China	11.0	0.2	2.1	4.8	5.9
India	10.1	6.2	4.5	6.4	8.3
Indonesia	8.5	18.7	9.1	6.0	9.8
Korea	6.4	3.6	3.0	2.5	4.7
Malaysia	3.7	2.6	2.3	2.0	5.4
Philippines	10.7	6.0	5.8	2.8	9.3
Thailand	2.9	3.0	3.4	2.2	5.5

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■ **Conclusions**

Conclusions

- Optimal response to the large and volatile capital flows is a combination of (CGFS, 2009)
 - Sound macroeconomic policies
 - Prudent debt management
 - Exchange rate flexibility
 - Effective management of the capital account
 - Accumulation of appropriate levels of reserves as self-insurance and
 - Development of resilient domestic financial markets
 - Prudential financial regulation
 - Combination is country-specific; no “one size fits all”

Thank You

Managing the Capital Account India (1)

▪ India's Approach to Managing Financial Stability (1)

- Current account: Full, but gradual opening up
- Capital account and financial sector: More calibrated approach towards opening up
 - Equity flows encouraged;
 - debt flows subject to ceilings and some end-use restrictions
 - Capital outflows: progressively liberalized

Managing the Capital Account

India (2)

- **India's Approach to Managing Financial Stability (2)**
 - Financial sector, especially banks, subject to prudential regulation
 - Both liquidity and capital
 - Prudential limits on banks' inter-bank liabilities in relation to their net worth
 - Asset-liability management guidelines take cognizance of both on and off balance sheet items
 - Basel II framework: guidelines issued
 - Dynamic provisioning
 - NBFCs: regulation and supervision tightened – to reduce regulatory arbitrage

Managing the Capital Account India (3)

