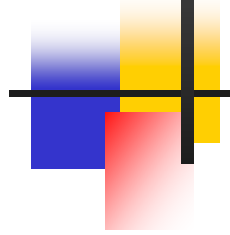
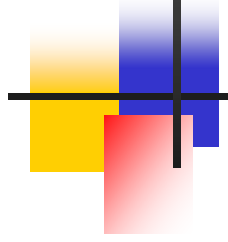


International Finance and Growth in Developing Countries: What Have We Learned?

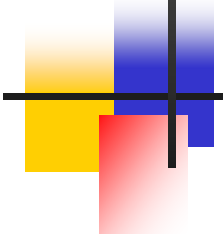


Maurice Obstfeld
University of California, Berkeley
April 9, 2007



Outline of this presentation

- Trends in global financial integration
- Why do countries seem to prefer financial opening?
- The risk of crises
- Evidence on gains from financial opening?
- The critical importance of the institutional setting
- Complementary macroeconomic and exchange-rate policies

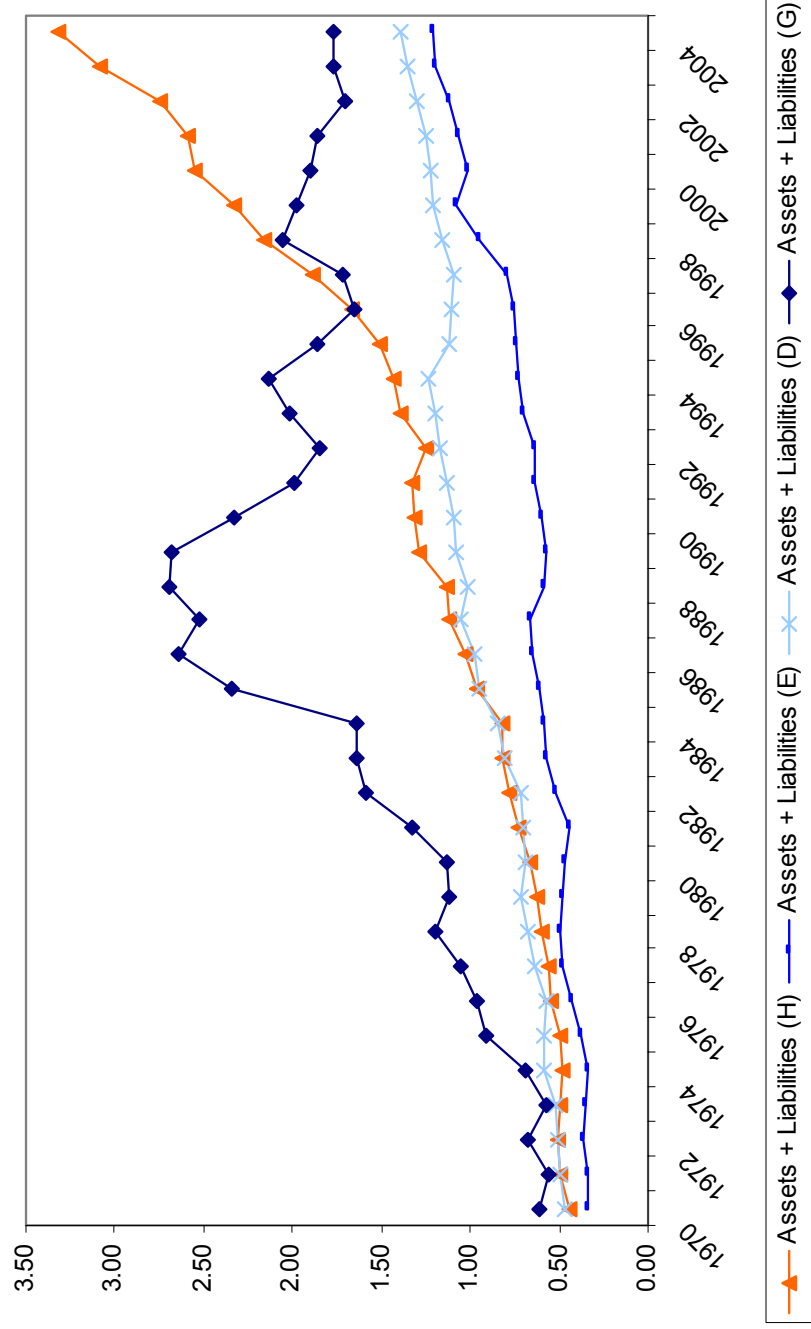


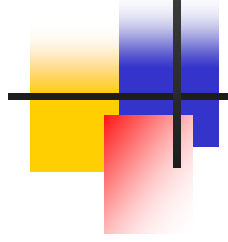
How is financial integration measured?

- De jure measures – e.g., based on explicit regulations recorded in the IMF's *AREAER*
 - Can binding controls be designed?
 - How strict is enforcement?
 - Subjectivity of coding
- De facto measures
 - Price measures
 - Quantity measures (often these are composite P and Q)
 - Asset stocks
 - Saving-investment correlations
 - Volume of financial flows
 - Market capitalization shares (e.g., Edison-Warnock)

Lane – Milesi-Ferretti data on international investment positions

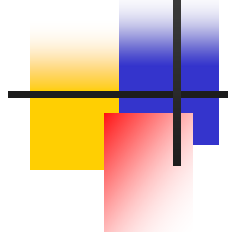
Figure 2: Assets plus liabilities, 1970-2004 (ratio to group GDP)





Stylized facts

- On this measure, financial integration since 1990 has proceeded most rapidly by far for the industrial countries.
- But it has also proceeded relatively quickly for emerging markets.
- Less two-way asset trade for most emerging markets than for high income group.
- No generalized retreat from openness after the 1997-98 crises.
- De jure measures also suggest progressive emerging-market financial opening.



Two recent surges in capital inflows

	1992-97 average	2003-06 average
Current account balance all developing countries	-89.3	335.9
Net external financing all developing countries	289.2	548.1
Increase in reserves all developing countries	66.9	481.2
Current account balance Ex China, Russia, Middle East	-91.0	-3.1
Net external financing Ex China, Russia, Middle East	218.2	272.0
Increase in reserves Ex China, Russia, Middle East	36.9	118.1



Why choose *international*/financial integration? As a complement to *domestic* financial development

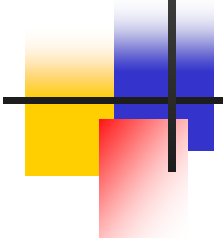
“A growing body of empirical analyses, including firm-level studies, industry-level studies, individual country-studies, time-series studies, panel investigations, and broad cross-country comparisons, demonstrate a strong positive link between the functioning of the financial system and long-run economic growth.”

Ross Levine, *Handbook of Economic Growth* (2005).



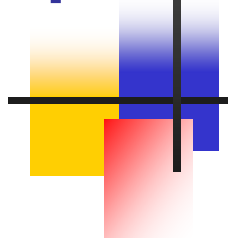
Why is international financial integration complementary to enhanced domestic finance?

- With a more sophisticated domestic financial sector, and expanded international trade, capital controls are harder to enforce
- Opening up financially fosters competition and efficiency in the domestic financial sector
- There is greater pressure to adopt foreign best practice
- Financial opening may weaken the political and economic power of vested interests



Institutional scaffolding matters

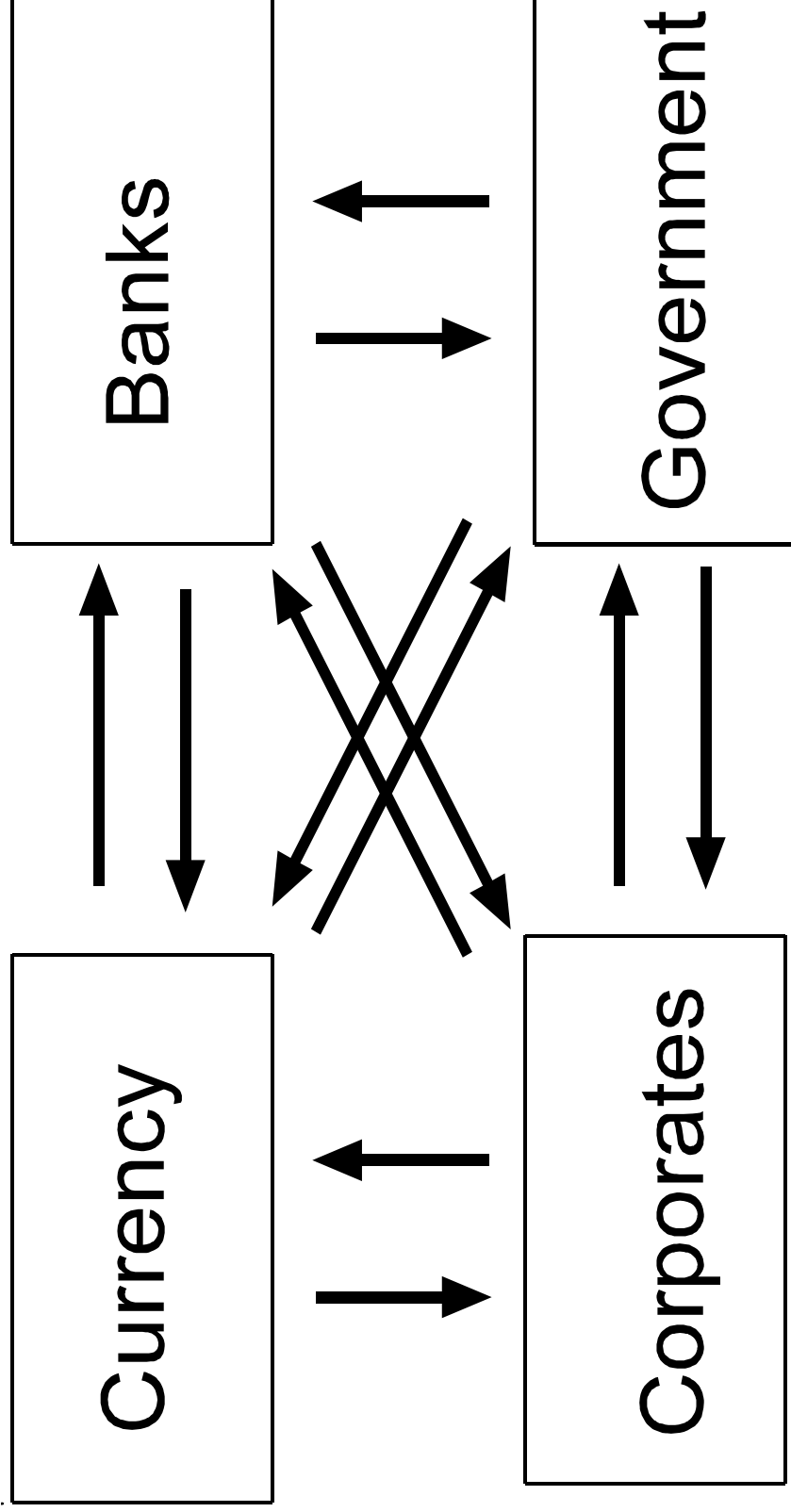
- Expanded domestic finance may be destabilizing absent sound institutions, e.g. those relating to
 - Governance and rule of law
 - Prudential oversight
 - Macroeconomic stability
- These institutions are also necessary to safely embrace financial opening; but we also have
 - Sovereign actors
 - Currencies
 - Regulatory gaps



The crisis problem 1

- Financial opening, under the wrong conditions, can raise the likelihood of crises
- We have learned that volatile capital flows themselves can contribute to crises – in situations where a crisis might not have been otherwise inevitable
- Crises can start with currency, bank sector, corporates, government debt – with multidirectional positive feedback loops

The crisis problem 2





The crisis problem 3

Two key vulnerabilities:

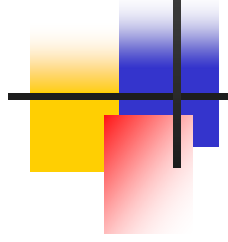
- Maturity mismatch
 - Liabilities short, assets long
 - Implies lower liquidity at all levels, more severe “sudden stop” dynamics
- Currency mismatch
 - Liability dollarization
 - “Original sin” for external liabilities



The crisis problem 4

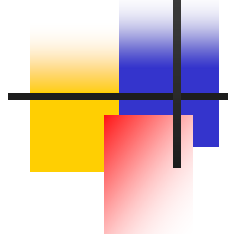
“Devaluation may produce another type of wealth effect when some groups of the country have debts to foreigners expressed in terms of foreign currencies. A devaluation will then increase the value of the debt expressed in domestic currencies and will exert a depressing influence on the expenditures of these groups, especially when the domestic prices they receive for the sale of their products or services do not increase proportionally with the devaluation. When a country has a net foreign debt, this effect will make more likely an improvement in the trade balance and a drop in output following devaluation, especially when the debt is held by the private sector and is concentrated in short-term maturities.”

Carlos F. Díaz-Alejandro, *Exchange-Rate Devaluation in a Semi-Industrialized Country: The Experience of Argentina, 1955-1961* (1965).



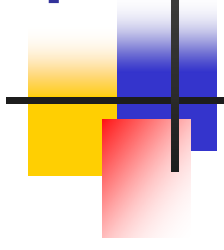
The crisis problem 5

- With currency mismatch, an unexpected depreciation can worsen firm balance sheets, harming investment
- It can hammer bank capital, either directly or by rendering bank borrowers unable to pay debts they owe to banks
- Real government debt rises, directly and due to implicit or explicit bailout guarantees
- This further weakens the currency
- But monetary tightening worsens the plight of short-term borrowers, notably banks



Output in crises

- For a typical industrial country, output bottoms in the year *preceding* a currency crisis
- But for a typical developing country, the trough is the *same* year as the currency crisis
- Hutchison and Noy (2005) put the average cost of an emerging-market currency crisis at a cumulative 5-8% of output, of a banking crisis at a cumulative 10-13%, with the effects additive



The open-economy trilemma

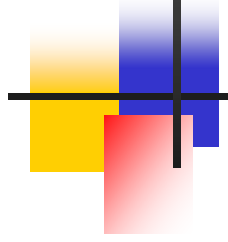
- An open economy can enjoy only two of:
 - exchange stability, capital mobility, domestic orientation of monetary policy (e.g., an inflation target)
- But for emerging markets, currency mismatch makes it difficult to float as freely as industrial countries do
- So there can be “fear of floating,” with free monetary policy compromised



Capital mobility can facilitate crises.

Can we measure its benefits?

- For poorer countries with low saving rates, financial globalization can make scarce capital available, raising welfare and growth
- It can allow risk diversification, lowering the variability of consumption relative to output
- It can discipline policies and transfer various types of know-how, raising TFP ...
- ... in theory, at least



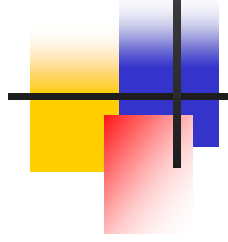
The allocation of rich-country savings

- Not much capital flows from rich to poor countries relative to simple theoretical benchmarks (Lucas)
- Indeed, for developing countries, higher growth is correlated with higher saving and surpluses in the current account (Prasad et al. 2006; Aizenman et al.)
- Allocation puzzle of Gourinchas and Jeanne (2007): the capital that does flow to developing countries tends to end up in low-productivity locales
- FDI, which has the best-documented pro-growth effects on recipient countries, does, however, seem to follow the conventional neoclassical pattern of flowing from richer to poorer countries



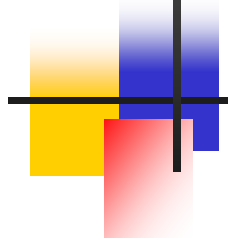
Cross-sectional studies of financial opening and growth

- In general these studies indicate little or no relation between financial openness and growth (see Prasad et al. 2003)
- But they take no account of the timing of liberalization
- Nor is the theoretical basis for the prediction being tested very clear (Henry 2006)



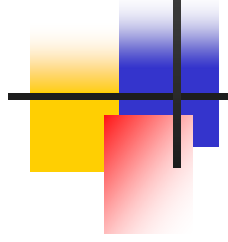
Studies of dynamic effects 1

- Event study approach of Henry suggests positive effects of stock-market liberalizations on cost of capital, equity values, investment
- Bekaert et al. (2005) panel study finds implausibly large positive growth effects from equity-market opening
- Bekaert et al. (2006) find volatility reduction, but only in a broad sample with rich countries
 - Captures the low volatility of industrial countries, which mostly were open in the sample period?



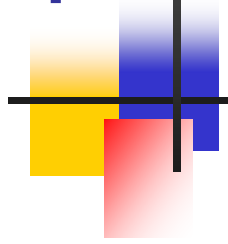
Studies of dynamic effects 2

- Some major problems:
 - How to measure liberalization date
 - Typically financial opening is accompanied by a package of other reforms – raises the identification problem
 - Financial liberalization may occur when future economic conditions look favorable
- Latter two issues reflect that financial liberalization is an *endogenous* decision



Micro-level studies

- This approach holds promise for solving the identification problem
- If firms face same macro conditions, but only some gain financial-market access, we have treatment and control groups of enterprises
- But we need the identifying condition of random selection into the two groups
- Mitton (2006) finds positive effects using data with firm-specific dates for access to foreign equity investors



The structural setting 1

- The empirical record suggests limited net *direct* gains for developing countries
- Theoretically, one can relate this finding to structural shortcomings such as low shareholder/creditor protection, weak rule of law, etc.; for example, see Stulz (2005)
- There is strong evidence, much of it anecdotal, that institutional or structural imperfections contributed to generating crises
 - for example, chaebol influence and faulty liberalization in the Korean late-1990s case



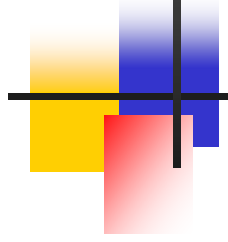
The structural setting 2

- Arguably, fixed or heavily managed exchange rates were a problem
- There is some econometric evidence that a stronger institutional scaffolding raises the net benefits from financial opening
- Kose et al. (2006) suggest four structural areas where improvements can enhance the net benefits of capital inflows:



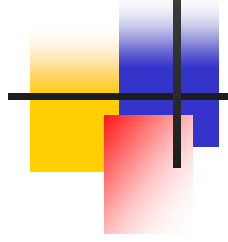
The structural setting 3

1. Financial-sector development and regulation
2. General institutional quality (impartial judiciary, respect for contracts and property rights, low corruption, limited bailouts, etc.)
3. A macro-policy framework delivering monetary and fiscal stability, including a stable and viable exchange-rate regime
4. Openness to trade in goods and services



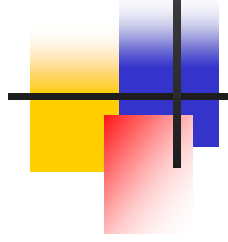
Endogeneity of institutions 1

- Kose et al. (2006) argue that better institutions are a “collateral benefit” of financial opening, which thus raises TFP
- They infer that countries need not await thorough institutional reform in order to open up to global finance
- If true, this is comforting, because there is no foolproof recipe for attaining institutional reform ex ante that will apply to all countries (Sometimes a crisis or two will contribute)



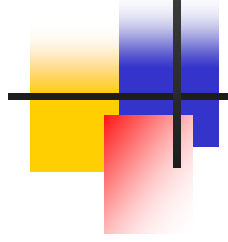
Endogeneity of institutions 2

- Hard econometric evidence for this “discipline” channel is scant
- There are some persuasive theoretical arguments, e.g., see Rajan and Zingales (2003) and Stulz (2005)
- We do see forward progress in some countries
- In the meantime, liberalization should be gradual – starting with FDI and portfolio equity opening, trade openness, and macro stability



Local bond-market development

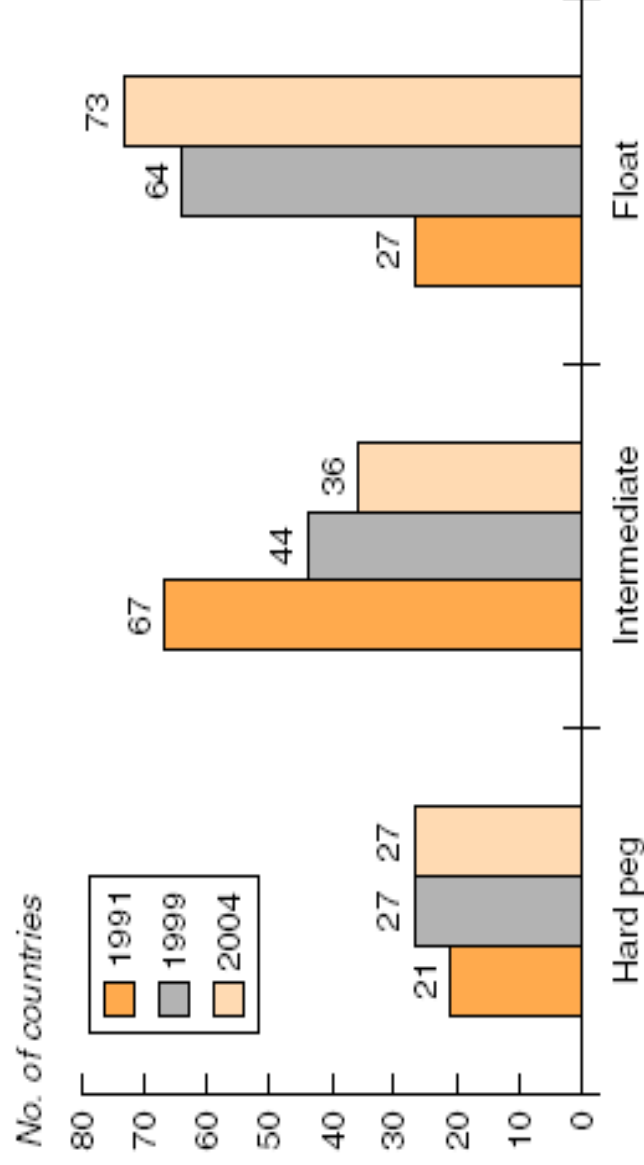
- A sound, well-regulated domestic financial system is also critical
- Especially important are measures to limit currency mismatch
- For this reason (and for others, such as conduct of monetary policy), development of the domestic bond market, as in Asia, helps
- Evidence suggests that this development is strongly influenced by inflation performance



The exchange rate regime 1

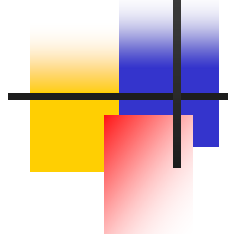
- Fixed but adjustable systems are crisis-prone when capital is mobile: if you draw a line in the sand, you'd better throw the sand in the wheels
- Countries seem to be moving toward the poles of currency union (full dollarization or the euro zone) or substantial discretionary flexibility, avoiding lines in the sand
- Greater domestic financial development facilitates having market-determined rates

The exchange rate regime 2



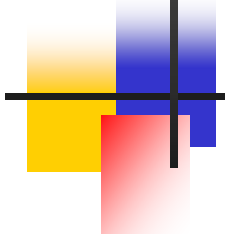
Sources: IMF Annual Report on Exchange Arrangements and Exchange Restrictions and World Bank staff estimates.

(Figure taken from World Bank 2006)



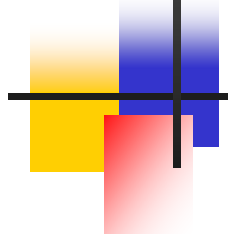
The exchange rate regime 3

- If financial opening is a goal, a system such as Goldstein's (2002) "managed floating plus" is desirable; it combines:
 - Exchange-rate flexibility, reducing crisis vulnerability and allowing shock absorption
 - Measures to limit currency mismatch
 - Credible inflation targeting by monetary policy, which may itself reduce dollarization
- With controls still in place and low financial development (China), a basket, band, crawl (BBC) *à la* Williamson may be appropriate



Conclusion 1

- Emerging-market policymakers show a revealed preference for financial opening
- Domestic financial liberalization, which is widely viewed as pro-growth if done right, makes external liberalization both less optional and more likely to deliver net gains
- “Doing it right” implies putting in place preconditions that will also enhance the benefits from financial globalization – and then the extra specific problems of the international margin should be attacked at source



Conclusion 2

- Financial opening should be gradual and phased, however
- Even though globalization may, itself, yield collateral institutional benefits, we have little evidence on the speed and reliability of such effects
- The benefits of external opening are most likely to be realized when it complements other pro-growth reforms and an appropriate macro-monetary framework