Lecture 10: International banking

The sessions so far have focused on banking in a domestic context. In this lecture we are going to look at the issues which arise from the internationalisation of banking, which has been a growing trend since the 1960s. After looking at the nature of international banking and reasons for its growth, we shall focus on risks. The most important risks are the problem of sovereign risk and the behaviour of the international interbank market (IIBM), although exchange rate risk can also pose difficulties.

Definition of international banking

Banking transactions crossing national boundaries

International lending:

- all claims of domestic banks offices on foreign residents
- claims of foreign bank offices on local residents
- claims of domestic bank offices on domestic residents in foreign currency
 Deposits similarly classified (by residence of bank or depositor, or currency)

Eurocurrency deposits – placed with banks outside the country whose currency the deposits are denominated in (not necessarily in euros!)

Features of international banking

Key aspects: currency risk and complexity of credit risk besides typical banking risks

Competition for market share among banks (typically spreads very narrow) Cyclical nature, with periodic crises

Competition for bank loans from the international bond market (close substitutes for loans)

Importance of international interbank market (IIBM) as source of liquidity and funding for banks, and risks arising

Role of risk management activities (swaps, options, futures)

Historical evolution:

Origin in Renaissance (lending to kings) Active international lending and bond market in the 19th century (also trade financing)

Decline in 20s and 30s as governments restricted international trade and financing

Growth of trade and multinationals (MNEs) postwar
Development of euromarkets in the 1960s (owing to regulatory differences)
Abolition of capital controls after breakdown of Bretton Woods
Waves of lending to EMEs (such as Latin America in 1970s, Asia in 1990s)

Reasons for international banking

Migration of domestic customers, notably MNEs growing foreign activities Effects of regulatory differences (structural and prudential) Input cost differences (e.g. in cost of domestic funding) - Japanese in the past Comparative advantages in retail banking (Citibank)

Development of major **financial centres** offering benefits to banks:

- Business contacts
- Location of customers
- Pool of skilled labour
- Trades and professions
- Liquidity and efficiency of markets (thick market externalities)
- Interrelation of markets (e.g. derivatives and underlying)

Potential for increasing returns to scale and self sustaining growth of centres

Main financing activities:

Key feature is nationality of issuer and investor differs

- (1) **Syndicated lending** credit facility offered simultaneously by a number of banks from more than one country who sign same loan agreement and stand equally in right of repayment. Lead manager does credit assessment and (delegated) monitoring. Unsecured but extensive covenants Use in finance of projects and mergers.
- (2) **Eurobond** issuance and trading bearer bonds issued in markets other than the country of issue. Unsecured and few covenants except negative pledge (no future borrowing at higher seniority), and usually call provisions
- (3) Euronotes, international equity, international interbank market see below

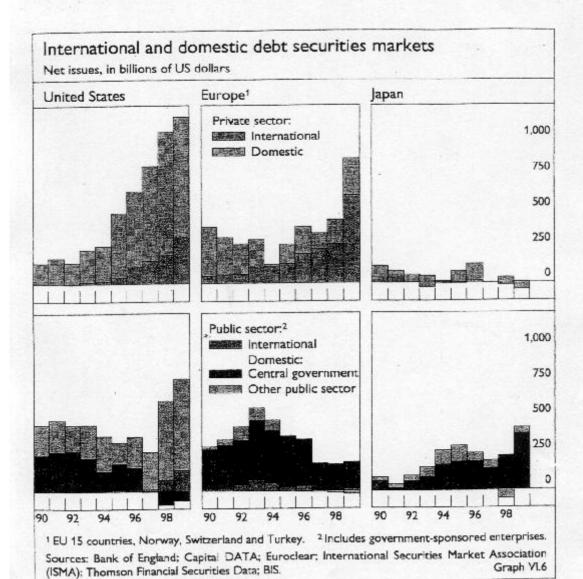
	1998 Year	1999 Year	1998 Q4	1999				Stocks at			
				Q1	Q2	Q3	Q4	end-Dec 1999			
	In billions of US dollars										
Claims on developed countries	567.3	449.9	61.2	94.2	56.8	193.9	105.0	7,562.9			
Interbank loans	288.7	29.9	-16.6	- 15.4	- 82.2	123.5	4.1	4,416,7			
Loans to non-banks	24.2	103.4	14.1	6.9	66.8	5.4	24.3	1,319.0			
Debt securities ²	254.4	316.6	63.8	102.8	72.3	65.0	76.6	1,827.3			
Claims on offshore centres	-178.0	-105.6	-72.5	- 68.9	- 45.0	-26.4	34.7	1,207,9			
Interbank loans	-172.0	-139.3	-24.2	- 77.0	- 51.8	-47.7	37.2	858.4			
Loans to non-banks	- 27.1	6.3	-50.2	2.1	0.9	12.7	-9.3	224.8			
Debt securities ²	21.0	27.4	2.2	6.1	5.9	8.6	6.7	124.7			
Claims on developing countries3	- 83.0	- 71.2	-25.6	- 9.4	- 20.7	-34.6	-6.5	857.1			
Interbank loans	- 63.9	- 61.6	- 8.5	- 11,3	- 19.7	-22.3	-8.3	340.5			
Loans to non-banks	12.4	- 14.6	-12.2	24	- 3.6	-12.4	-1.0	389.9			
Debt securities ²	- 6.8	4.9	- 4.9	- 0.5	2.6	0.1	2.8	126.8			
Unallocated	- 33.9	- 20.0	-10.2	3.0	- 0.3	-13.4	-3.3	195.6			
Total	272.4	253,1	-47.1	13.0	- 9.2	119.5	129.9	9,823.5			
Interbank loans	28,1	-219.9	-55.4	-111.2	-153.5	34.7	10.1	5,684.0			
Loans to non-banks	- 26,9	92.2	-58.8	- 0.7	61.5	5.0	26.4	1,966.8			
Debt securities ²	271.2	380.7	67.1	124.9	82.7	79.8	93.4	2,172.7			
Memorandum:							THE				
Syndicated credits ⁴	902.0	957.1	219.8	172.5	271.1	264.3	249.2				

¹ Changes in amounts outstanding excluding exchange rate valuation effects. ² Partly estimated. The data also include other assets, which account for less than 5% of the total claims outstanding. ³ Including eastern European countries. ⁴ Announced new facilities.

1	1994	1995	1996	1997	1998	1999	Stocks a end-Dec				
		in billions of US dollars									
Total net issues	251.8	260.6	532.0	563.2	680.9	1,225.2	5,365.5				
Money market instruments ²	4.5	18.7	39.9	14.8	9.8	68.6	260.0				
Bonds and notes ²	247.3	241.9	492.0	548.4	671.1	1,156.6	5,105.5				
Developed countries	203.1	226.9	404.2	439.0	574.8	1,149.4	4,503.0				
United States	22.9	55.4	130.2	176.0	280.3	484.5	1,310.8				
Euro area	126.5	132.1	177.3	172.0	210.7	494.0	1,746.5				
Japan	-6.9	-3.8	17.1	-1.3	-17.4	4.1	338.3				
Offshore centres	7.2	0.7	17.1	13.9	10.0	15.7	74.7				
Other countries	32.5	22.0	87.7	89.1	40.1	35.5	408.0				
International institutions	8.9	11.0	23.0	21.2	56.0	24.6	379.8				
US dollar *-	64.4	68.4	259.1	331.6	410.4	546.2	2,512,2				
Euro area currencies	80.6	84.2	134.5	133.9	223.6	576.2	1,561.2				
Yen	85.3	79,8	85.7	33.4	-26.8	-5.8	536.8				
Other currencies	21.4	28.2	52.7	64.4	73.7	108.7	755.4				
Financial institutions ³	134.8	167.0	342,3	355.6	369.5	659.1	2,581.4				
Public sector	103.4	72.6	118.9	85.4	178.2	213.5	1,436.3				
Central government	50.1	37,3	53.5	31.6	45.1	40.4	459.0				
Corporate Issuers	13.5	21.1	70.7	122.3	133.2	352.7	1,347.8				

¹ International Issues include all issues except those by residents in domestic currency not targeted to non-resident investors. Flow data for international bonds; for money market instruments and notes, changes in amounts outstanding excluding exchange rate valuation effects. ¹ Excluding notes issued by non-residents in the domestic market. ¹ Commercial banks and other financial institutions. ⁴ Governments, state agencies and international institutions.

Sources: Bank of England; Capital DATA; Euroclean; ISMA; Thomson Financial Securities Data; BIS.



Sovereign risks 1

Can occur for Eurobonds (Argentina 2001) or Syndicated credits (Latin America 1982, see below)
Solvency and liquidity concepts blurred – cannot seize assets "countries don't go bankrupt"

Repeated relationship gives borrower leverage to bargain and restructure

Lesser enforceability due to both borrower and lender behaviour – lender dependent on "willingness" and not "ability" to repay, dependent in turn on:

- Penalties for violation
- Lender's resolve to impose penalties
- (All) lenders willingness to lend in future

Sovereign risks 2

Information asymmetry (e.g. on overall indebtedness and susceptibility to penalties) and hence adverse selection

Moral hazard and rationing – sovereign forces borrower to extend more credit than is optimal

Possible international rescues and further moral hazard

Free rider problems in resolution of crises – never in individual bank's interests to forgive debt. Issue of "holdouts" in restructuring a particular problem when debts are securitised.

The LDC debt crisis 1982-

cut ability to service

High and volatile inflation and interest rates in 1970s, and shifts in wealth holding due to rise in commodity prices Increase in payment imbalances, financed by syndicated credits, which lowered sunk costs of entry to international bank lending Rise in public debt and leverage, often in foreign currency Wide range of banks participated, with fine spreads Short maturity of loans may have encouraged banks to believe they could easily exit the market Some encouragement by authorities Banks' focus on balance sheet growth, possible moral hazard, misunderstanding of sovereign risks Oil shock raised needs for financing and

Shock of Mexican default in 1982 led to cutoff in lending (although interbank market continued to function with government support)

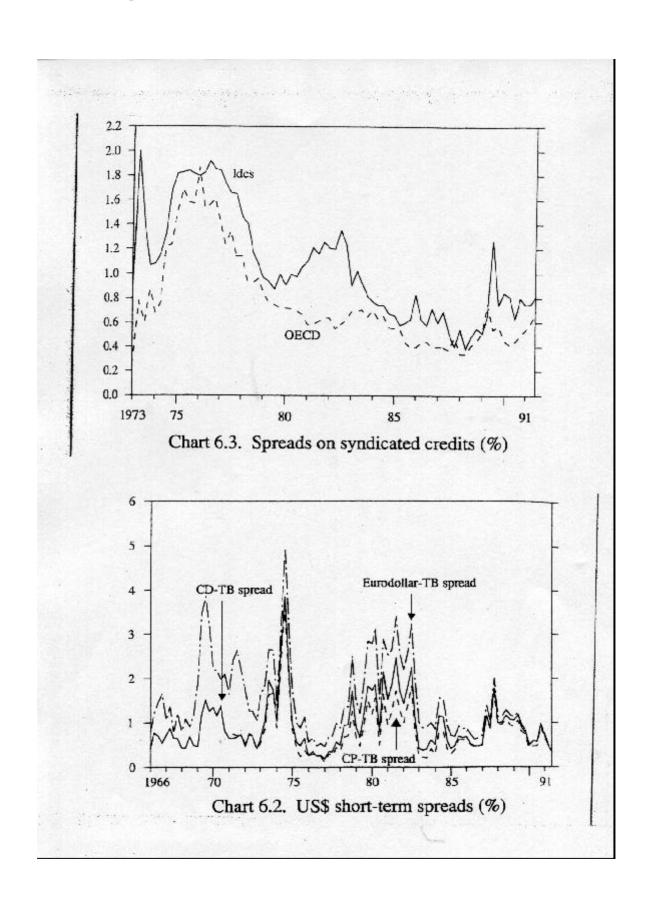
After crisis, banks would only lend to countries which rescheduled and/or seen as best risks

Resolution took many years – banks technically insolvent and ldcs suffered fiscal austerity and slower growth to correct imbalances and recover credit standing

Banks lost out to securities markets as had to rebuild capital

Variety of international efforts (such as "Brady Plan") contributed to resolution

Indicators of risk in international banking



International interbank market

Market in short term placement of deposits at fixed rate between banks in different countries

Initial function liquidity adjustment – improve allocation of deposits

Additional functions risk management via derivatives, and funding per se

Encouraged by low capital charges on lending to banks (Basel 1 set 20%)

Structural current account surplus in some OECD countries

Link to central banks and belief in availability of support (Basel concordat), giving less incentive to monitor

Risks in the international interbank market 1 (Bernard and Bisignano 2001)

Lack of security (collateral) and low levels of information-gathering Link to moral hazard due to implicit guarantees by central banks Growing need for liquidity owing to growth in international trading and transactions (notably OTC derivatives can give rise to unexpected liquidity demands)

Increase in backup lines of credit requiring funding if called Existence may lead banks to under invest in liquidity

Range of banks with low credit quality (e.g. East Asia) so long as lenders believe in implicit guarantee

Risks in the international interbank market 2

- Subject to quantity and not price rationing due to low levels of information on credit risk, unlike even domestic interbank markets
- Short maturity making withdrawal easy
- Subject to sudden increases in credit rationing during periods of stress, due to asymmetric information and resultant adverse selection and moral hazard
- Potential for contagion and global transmission of shocks

The Asian crisis 1997-

Strong economic growth, profit opportunities, overinvestment, diminishing marginal returns, property booms

Rise in private debt and leverage, often in foreign currency, notably by local banks

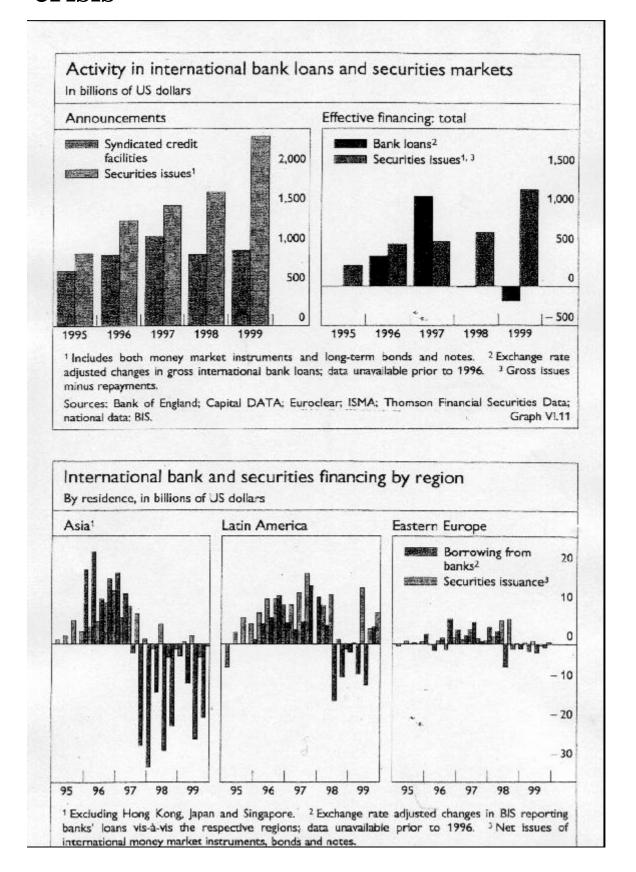
Belief domestic governments would protect their own banks allowed them to operate in IIBM, while Mexican rescue of 1994 encouraged belief in international safety net for Asian countries

Fixed exchange rate regime – and sound fiscal positions - gave confidence that such borrowing was sustainable Regime shift to an open economy may have led to errors in credit assessment by domestic banks

Foreign banks (e.g. Japanese and Continental) may have sought market

entry at loss leading prices, while IIBM saw declining spreads, plentiful liquidity Growing current account deficits and inflation made pegs less sustainable Concentration of risk in few large borrowers and "crony capitalism" Potential correlations within and between countries ignored Cyclical weakening and speculation led to collapse of currency pegs, and monetary tightening to compensate Domino effect on a range of countries – like contagious bank run Reversal of international lending flows, bank runs, severe macroeconomic effects Key role of IIBM - \$184 bn cut in net private flows, of which \$149 bn from commercial banks – fall in external finance to 5 most affected countries equal to 5% of GDP IMF rescue operations – and possible further moral hazard

International lending after the Asian crisis



Risks in foreign exchange trading

Cross currency risk
Risks of dealing and taking positions
Losses due to improper employee actions
Risks of default by counterparty

Example of risk of default by counterparty (Herstatt) 1974

- Regime shift of end of Bretton Woods led to growth in forex trading
- Accompanied by rapid expansion of international interbank market
- Inadequate internal controls due to lack of experience
- Banks caught out by depreciation of some currencies and tightening of US monetary policy
- Failure of Franklin National (US) in May and Herstatt in June

- Herstatt Bank was closed abruptly by German authorities and accounts closed by Bundesbank when spot Forex transactions incomplete ("teach speculators a lesson")
- Near-collapse of US financial system and CHIPS payments ceased
- Sharp rise in credit rationing for banks and non banks, collapse in share prices
- Response of G-10 authorities to declare willingness to intervene to maintain stability of international markets (Basel concordat)
- Long term search for security in payments systems against "Herstatt risk"

Regulation of international banking

Issues arising include:

- cross border supervision of banks
- regulation of foreign banks (by home or host supervisor)
- need for international agreements to ensure stability (safety net) without generating moral hazard (also prudential regulation)
- need to keep a "level playing field"
 e.g. via capital adequacy agreements
- regulation of offshore financial centres
- regulation of hedge funds and other offshore vehicles