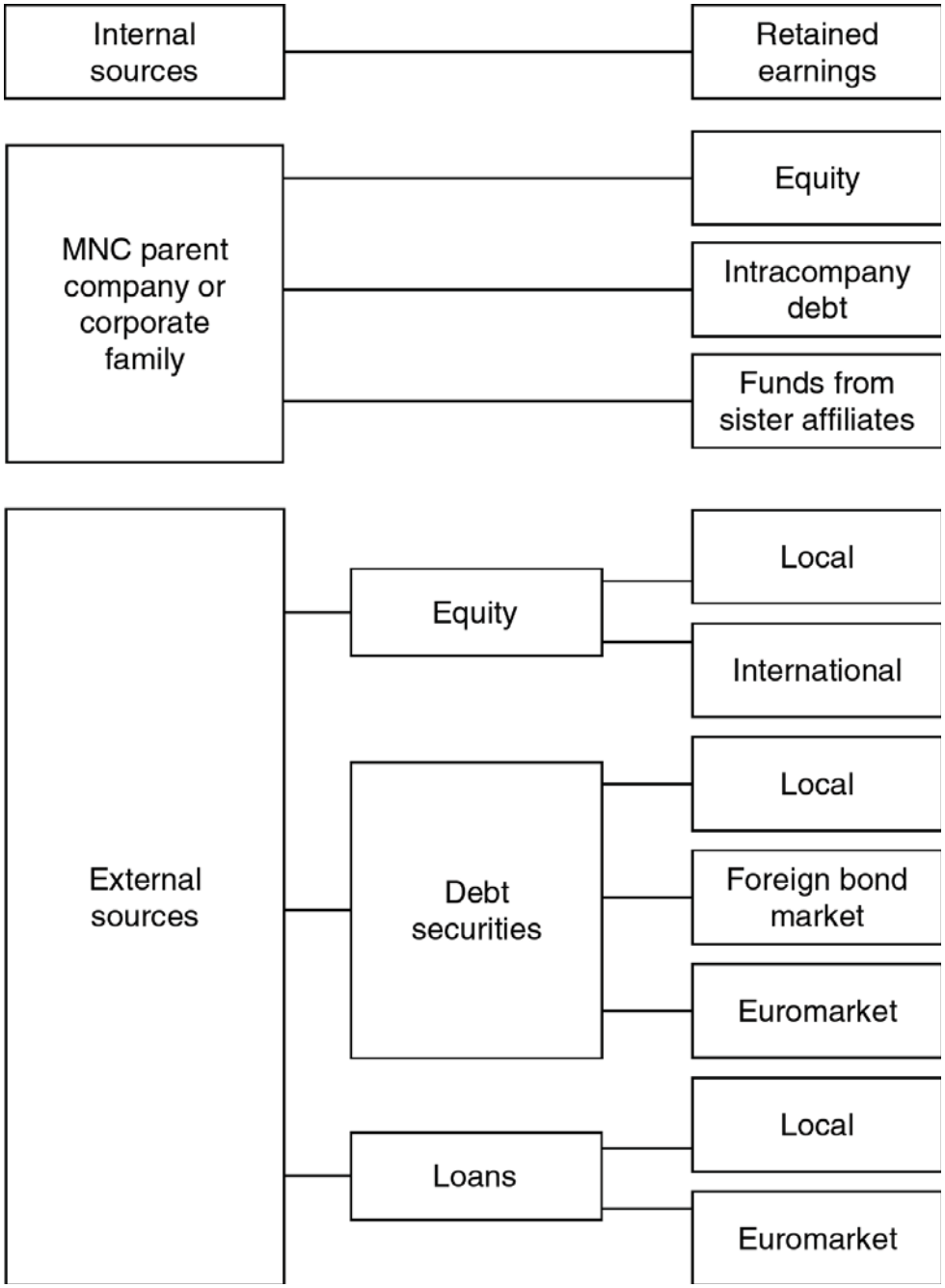
Internal sources
Retained earnings
MNC parent company or corporate family
Equity
Intracompany debt
Funds from sister affiliates
External sources
Equity
Local
International
Debt securities
Local
Foreign bond market
Euromarket
Loans
Local
Euromarket

	2000			1995			1990		
	Equity	**Bond**	**Loan**	**Equity**	**Bond**	**Loan**	**Equity**	**Bond**	**Loan**
United States	45.0	45.9	9.1	36.3	49.5	14.2	27.1	53.8	19.1
Euroland	23.4	26.8	49.8						
Germany				2.1	11.0	86.9	1.8	10.0	88.2
France				17.1	35.3	47.6	15.1	27.6	57.3
Italy				10.5	55.4	34.1	9.3	47.7	43.0
Japan	24.8	43.6	31.6	27.6	37.3	35.2	33.4	29.8	36.8

An MNC seeking to borrow in bond markets must consider:

1. Currency of denomination of debt
2. Centralized or decentralized borrowing within the MNC
3. Interest rates in different markets
4. Fixed vs. floating rate debt (or other more exotic bonds such as bonds convertible into equity, or dual-currency bonds)

These concerns can be expressed as:

1. Expected cost of borrowing
   a. Including currency appreciation/depreciation
   b. Calculated using “all-in” cost
2. Risk diversification
   a. Borrowing in the currency in which your firm receives revenues is a “natural hedge”

Bonds

Domestic bonds – Issued in MNCs headquarter's country.

- Subject to regulations of domestic governments. In the US, registration with SEC is required

Foreign bonds – Issued by nonresidents in the domestic capital market

- In the US, foreign borrowers must register with SEC
- There is a sort of preregistration called "shelf registration"

Eurobond market – bonds issued simulatenously in the capital markets of several countries

- Usually do not have same regulations as domestic issues
- Primary issues often come through a syndicate with a lead manager investment bank
- The secondary market is over the counter

International banking:

- Correspondent banks – relationship with a foreign bank to assist multinational corporations
- Representative office – small service facility to assist clients of parent bank in foreign countries
- Foreign branch – legally part of parent bank, but operates like a local bank. Subject to regulations of both countries.
- Subsidiary bank – wholly or partly owned by parent bank, controlled by parent bank, but incorporated abroad
- Affiliate bank – partly owned but not controlled by parent bank
- Offshore banking center – Bahamas, etc.
- Edge act bank and IBFs – domestic subsidiaries of parent bank engaging in international banking activities

Basel Accord

Sets capital requirements for banks. How much capital must be held as a percentage of assets owned by banks.

The capital requirement varied by category of assets. Riskier assets required more capital (8%). Very low risk assets, such as U.S. Treasuries, require zero capital.

Recent adjustments to the Accord allow banks to use internally developed models to assess risk.

Equity markets

Firms may raise capital by selling equity in foreign equity markets.

(Alternatively, they may undertake joint ventures with a foreign company.)

	Market Capitalization (in millions of U.S. dollars)						Turnover		
	1991 (% of world total)		2000 (% of world total)		2005 (% of world total)		1991	2000	2005
Australia	148,511	1.31%	372,794	1.16%	804,015	1.81%	0.32	0.61	0.84
Austria	7,689	0.07%	29,935	0.09%	126,309	0.28%	0.92	0.31	0.37
Belgium	71,319	0.63%	182,481	0.57%	269,834	0.61%	0.09	0.21	0.38
Bermuda		0.00%	2,146	0.01%	2,125	0.00%		0.06	0.03
Canada	266,874	2.35%	841,385	2.61%	1,482,185	3.33%	0.29	0.75	0.61
Cayman Islands		0.00%	250	0.00%	2,217	0.00%		0.00	
Cyprus	1,290	0.01%	11,516	0.04%	5,853	0.01%	0.05	0.80	0.26
Denmark	44,841	0.40%	107,666	0.33%	162,732	0.37%	0.21	0.85	0.65
Finland	14,271	0.13%	293,635	0.91%	198,652	0.45%	0.11	0.70	1.26
France	348,083	3.07%	1,446,634	4.48%	1,667,652	3.75%	0.33	0.75	0.76
Germany	393,454	3.47%	1,270,243	3.94%	1,221,106	2.75%	0.96	0.84	1.57
Hong Kong	121,986	1.08%	623,398	1.93%	1,054,999	2.37%	0.32	0.61	0.44
Iceland		0.00%	4,439	0.01%	27,799	0.06%		0.54	0.68
Ireland		0.00%	81,882	0.25%	114,086	0.26%		0.18	0.59
Italy	158,865	1.40%	768,364	2.38%	798,073	1.80%	0.16	1.01	1.62
Japan	3,130,863	27.60%	3,157,222	9.79%	7,542,716	16.97%	0.32	0.85	0.62
Kuwait		0.00%	20,772	0.06%	294,058	0.66%		0.20	0.18
Luxembourg	11,308	0.10%	34,016	0.11%	51,248	0.12%	0.01	0.04	0.01
The Netherlands	136,158	1.20%	640,456	1.99%	542,679	1.22%	0.29	1.06	1.06
New Zealand	14,336	0.13%	18,613	0.06%	40,592	0.09%	0.20	0.58	0.51
Norway	22,043	0.19%	65,034	0.20%	190,952	0.43%	0.53	0.92	1.23
Portugal	9,613	0.08%	60,681	0.19%	70,743	0.16%	0.29	0.90	0.50
Singapore	47,367	0.42%	152,827	0.47%	257,341	0.58%	0.38	0.60	0.45
Spain	147,928	1.30%	504,219	1.56%	959,910	2.16%	0.27	1.96	1.63
Sweden	100,913	0.89%	328,339	1.02%	366,053	0.82%	0.21	1.18	1.11
Switzerland	173,881	1.53%	792,316	2.46%	935,448	2.10%	0.40	0.77	1.04
U.A.E.		0.00%	23,262	0.07%	132,413	0.30%		0.01	0.22
UK	987,952	8.71%	2,567,992	7.99%	3,058,182	6.88%	0.32	0.71	1.86
U.S.	4,087,660	36.03%	15,104,037	46.82%	17,000,864	38.24%	0.53	2.11	1.46
World Total	**11,345,733**		**32,260,433**		**44,459,895**				

Developed Markets	
Australia	113.59
Austria	41.09
Belgium	72.51
Canada	131.22
Denmark	63.60
Finland	102.47
France	78.78
Germany	43.59
Greece	64.25
Hong Kong	593.62
Ireland	57.05
Italy	46.17
Japan	161.54
Luxembourg	160.83
The Netherlands	86.96
New Zealand	37.41
Norway	64.54
Portugal	38.52
Singapore	220.37
Spain	85.25
Sweden	102.53
Switzerland	254.92
UK	138.96
U.S.	136.15

Emerging Markets	
Argentina	62.71
Brazil	59.63
Chile	118.43
China	17.19
Colombia	34.75
Czech Republic	28.51
Egypt	85.66
Hungary	29.84
India	133.58
Indonesia	28.95
Iran	22.30
Israel	99.30
Korea	105.64
Malaysia	138.24
Malta	77.02
Mexico	31.12
Morocco	52.32
Pakistan	41.19
Peru	35.17
Philippines	40.77
Poland	31.06
Russia	79.13
Slovenia	24.54
South Africa	229.33
Sri Lanka	28.52
Taiwan	130.21
Thailand	70.15
Turkey	44.55
Venezuela	5.02

Trading practices of stock markets

- Price-driven system
  - Market maker stands ready to buy at their bid prices and sell at their ask prices. NASDAQ is an example

- Order-driven system
  - Orders are batched together and a price is found to clear the market
  - The NYSE is a combination of price-driven and order-driven. A specialist can trade on his own account or simply quote a price to match orders from floor brokers and his limit order book

Transactions costs

- Brokerage commission or fee
- Bid-ask spread
- Market impact
  - In small equity markets which are not highly liquid, a large order can influence the price. This can be considered a cost of issuing equity.

	Large-Cap Stocks			Small-Cap Stocks			Alternative Marketwide Estimate
	Bid/Ask	Market Impact	Total	Bid/Ask	Market Impact	Total	
Australia	19	18	37	52	12	64	54.7
Austria	28	27	55	37	14	51	43.8
Belgium	27	19	46	59	18	77	35.0
Canada	23	21	44	63	17	80	52.4
Denmark	54	42	96	82	14	96	40.7
Finland	9	10	19	68	17	85	43.4
France	10	7	17	33	10	43	29.5
Germany	35	8	43	43	33	76	37.7
Greece	25	58	83	56	39	95	65.5
Hong Kong	45	27	72	63	28	91	59.8
Ireland	48	139	187	120	48	168	130.7
Italy	15	11	26	26	11	37	34.8
Japan	20	17	37	21	19	40	41.3
The Netherlands	9	5	14	20	6	26	42.2
New Zealand	53	42	95	60	33	93	47.2
Norway	32	32	64	59	32	91	44.6
Portugal	12	20	32	26	7	33	62.7
Singapore	44	34	78	63	35	98	77.5
Spain	8	7	15	21	9	30	41.9
Sweden	18	14	32	48	11	59	35.8
Switzerland	7	5	12	27	7	34	38.5
UK	27	9	36	79	9	88	54.5
U.S.	11	8	19	27	10	37	38.1
Average	**25**	**25**	**50**	**50**	**19**	**69**	**50.1**

How to issue equity in a foreign country:

1. Global Registered Share (GRS) – an ordinary share of a company that trades freely across ountries.

2. American Depository Receipts (ADR) – a specific number of shares that are held in custody in a U.S. depositary bank

3. Global Depository Receipts (GDR) – similar to ADRs but trade across many markets

While GRSs are simpler, the ADR market may be more liquid and allow more coordination between market of issuance and American market.

What are the benefits of cross-listing? (Studies have asked why foreign firms list in US market…)

1. Liquidity
2. Wider shareholder base – may increase stock price
3. Market integration – more accessibility to foreign investors
4. Corporate governance signal
5. Capital needs – companies may have outgrown local markets
6. Other benefits – advertising effect, etc.