Chapter 20

International Capital

International Debt

Topics to be Covered

- International Capital Mobility
- International Debt
- IMF and IMF Conditionality
- Country Risk Analysis
- Eurozone sovereign debt crisis

International capital mobility

- Reasons for international asset trade:

Consumption "smoothing"

- Over time (borrowing-lending)
- Example: Poor countries borrowing from rich due to different expected long term growth

- Across states of nature (risk sharing): Portfolio diversification
- Example: CH residents buying US securities

Implications of global markets

- a) Law of one price (people in different countries face the same asset prices)
- b) Consumption smoothing (people in different countries can pool national consumption risks)

Implication: Positive consumption comovement across countries

- c) The efficient international allocation of investment (new savings, regardless of where it originates, is allocated to the country with the most productive investment opportunities)

Implications:

1. Capital should flow from the rich to the LDCs
2. Free capital mobility implies that domestic investment is not related to domestic savings: can do I without S and vice versa

The international debt problem

- Economic theory implies that LDCs should be intl borrowers
- They have been. But often they have not paid back
- A well known case: The 1980s. Large capital inflows into the LDCs in the seventies.
- Reason:
- Demand side (borrow to finance growth)
- Supply side (petrodollars)

- Result: Inability to pay back. Partial default (forgiveness). Bail outs.

Int’l debt

- What went wrong?

- Bad shocks (domestic and world)
- Bad use of the funds
- Type of foreign investment (loans vs equity)

Int'l Debt

- Basics
- What is the optimal size of international loans? How are funds priced?
- *Full commitment to repay:* Full consumption insurance
- *Imperfect commitment to repay:* Partial Insurance
- Benefits from default: Not paying back
- Cost of default: Direct sanctions, reputation (exclusion from future borrowing)
- *The greater the possible sanctions the better off is the borrower ex ante (more funds) !*
- But worse off ex post in case that default occurs!
- Mafia example

Int'l Debt

- Debt overhang

- **Debt Reduction Schemes**

1. Unilateral (partial) forgiveness

It may increase debt repayments. How?

Example: Owe 100; cost of default 80

If forgiven 21 then it repays. If not, it defaults

The Free Rider Problem In Debt Forgiveness

Need coordination by some agency (IMF, US govt,..)

Int'l debt

2. Debt buyback

- Own

- Third-party debt buy-backs

- Equity-debt swaps
- **Swap**—involves an exchange of a developing country's debt for an ownership or equity position in a business in the debtor country.

Some comparisons

- Debt-to-GNP ratios and Country Premiums Among Defaulters

Country	Aver. Debt/GNP	D/GNP Def. year	Av. Spread
Argentina	37.1	54.4	1756
Brazil	30.7	50.1	845
Chile	58.4	63.7	186
Colombia	33.6		649
Egypt	70.6	112	442
Mexico	38.2	46.7	593
Philippine	55.2	70.6	464
Turkey	31.5	21	663
Venezuela	41.3	46.3	1021
Average	44.1	58.1	638

IMF Conditionality

- The **International Monetary Fund (IMF)** has been an important source of funding for debtor countries with repayment problems.
- IMF Conditionality refers to the IMF pre-conditions which require borrowers to adjust their economic policies to reduce balance of payments deficits and improve the chance of debt repayment. These conditions involve macroeconomic targets such as money supply growth and the budget deficit.

IMF

- The IMF is a multinational organization of over 180 countries.
- Its objective is to provide short-term loans to countries with temporary balance of payments disequilibria (if the countries agree to certain IMF conditions).
- IMF policy is determined by member countries' votes. Voting power is based on a country's quota or financial contribution to the IMF.
- The U.S. has the most votes since its quota accounts for almost 18% of the total fund.

Country Risk Analysis

- **Country Risk**—refers to the overall political and financial situation in a country and how these conditions may affect the ability of the country to repay its debts.
- **Country risk analysis** involves the evaluation of both qualitative and quantitative factors.

Qualitative or Political Risk Factors

- Splits between different language, ethnic, and religious groups that undermine stability.
- Extreme nationalism and aversion to foreigners that may lead to preferential treatment of local interests and nationalization of foreign holdings.
- Unfavorable social conditions, including extremes of wealth.
- Conflicts in society evidenced by demonstrations, violence, and guerilla war.
- The strength and organization of radical groups.

TABLE 20.5 Country-Risk Rankings

Rank September 2008	Country	Rank September 2008	Country
1	Luxembourg	48	Hungary
2	Norway	49	Malaysia
3	Switzerland	50	China
4	Finland	51	Mexico
5	Denmark	52	Lithuania
6	Netherlands	53	Russia
7	Sweden	54	South Africa
8	Ireland	55	Mauritius
9	Austria	56	India
10	United States	57	Croatia
11	Germany	58	Romania
12	Canada	59	Latvia
13	United Kingdom	60	Brazil
14	Australia	61	Thailand
15	Singapore	62	Bulgaria
16	France	63	Morocco
17	Belgium	64	Tunisia
18	Japan	65	Trinidad & Tobago
19	Iceland	66	Peru
20	New Zealand	67	Panama
21	Hong Kong	68	Egypt
22	Spain	69	Kazakhstan
23	Italy	70	Costa Rica
24	Portugal	71	Azerbaijan
25	Kuwait	72	Macau
26	Slovenia	73	Colombia
27	Greece	74	Antigua & Barbuda
28	United Arab Emirates	75	Jordan
29	Cyprus	76	Turkey
30	Bahrain	77	Vietnam
31	Malta	78	Indonesia
32	Qatar	79	Philippines
33	Bermuda	80	Macedonia (FYR)
34	Taiwan	81	Ukraine
35	Israel	82	Guatemala
36	Bahamas	83	El Salvador
37	Saudi Arabia	84	Albania
38	Czech Republic	85	Armenia
39	Slovak Republic	86	Mongolia
40	Brunei	87	Dominican Republic
41	South Korea	88	Georgia
42	Oman	89	Ghana
43	Poland	90	Nigeria
44	Chile	91	St Lucia
45	Botswana	92	Honduras
46	Barbados	93	Angola
47	Estonia	94	Uruguay

(Continued)

TABLE 20.5 Country-Risk Rankings *(cont.)*

Rank September 2008	*Country*	*Rank* September 2008	*Country*
95	Belarus	141	Nepal
96	Maldives	142	New Caledonia
97	Papua New Guinea	143	Iran
98	Montenegro	144	Djibouti
99	Venezuela	145	Senegal
100	Sri Lanka	146	Solomon Islands
101	Cape Verde	147	Turkmenistan
102	Lesotho	148	Cameroon
103	Mozambique	149	Kyrgyz Republic
104	Swaziland	150	Niger
105	Vanuatu	151	Gambia
106	Bosnia-Herzegovina	152	Sudan
107	Zambia	153	Samoa
108	Tanzania	154	Nicaragua
109	Jamaica	155	Congo
110	Yemen	156	Libya
111	Argentina	157	Guyana
112	Pakistan	158	Sierra Leone
113	Uganda	159	Côte d'Ivoire
114	Algeria	160	Bhutan
115	Syria	161	Uzbekistan
116	Fiji	162	Tajikistan
117	Cambodia	163	Burkina Faso
118	Paraguay	164	Togo
119	St Vincent & the Grenadines	165	Mauritania
		166	Laos
120	Tonga	167	Malawi
121	Bangladesh	168	Haiti
122	Seychelles	169	Dem. Rep. of the Congo
123	Madagascar	170	Sao Tome & Principe
124	Kenya	171	Guinea
125	Benin	172	Liberia
126	Serbia	173	Chad
127	Grenada	174	Guinea-Bissau
128	Moldova	175	Burundi
129	Mali	176	Myanmar
130	Equatorial Guinea	177	Central African Republic
131	Bolivia		
132	Belize	178	Eritrea
133	Rwanda	179	Afghanistan
134	Lebanon	180	Somalia
135	Dominica	181	Micronesia
136	Ethiopia	182	Cuba
137	Namibia	183	Zimbabwe
138	Gabon	184	Marshall Islands
139	Ecuador	185	North Korea
140	Suriname	186	Iraq

SOURCE: *Euromoney* (September 2008).

Euro crisis

- Greece's participation in the EMU has an arduous history.

Entry: Optimum Currency Area (OCA) criteria

  - Labour mobility
  - Similarity in production structure
  - The degree of commodity diversification
  - The openness and size of an economy
  - Fiscal integration

- **Greece did not satisfy the criteria**

Greece is a closed economy

- Exports as a % of GDP in EU countries approximately Greece's population size, 2008-2012 average

Austria	55.4
Belgium	81.4
Czech	68.2
Greece	23.4
Hungary	85
Portugal	33.2
Sweden	50

Greece

- Greece also has a lower share of intra vs extra EU-27 trade

- **Implications of not satisfying the criteria**
- Giving up the exchange rate instrument was costly
- But Greece also suffered from policy credibility problems. Inflation was too high

Greece

- Pre-EMU inflation differences vs Germany

	FRANCE	ITALY	GREECE	SPAIN	NETHERLA
1960-98	2.44	4.91	8.46	5.78	0.99
1970-95	3.15	6.77	12.49	7.21	0.75
1970-90	4.08	7.68	12.27	8.21	1.01
1980-90	4.13	7.89	16.69	7.04	-0.05

- With such a large inflation bias it made sense for Greece to delegate monetary policy to the Bundesbank

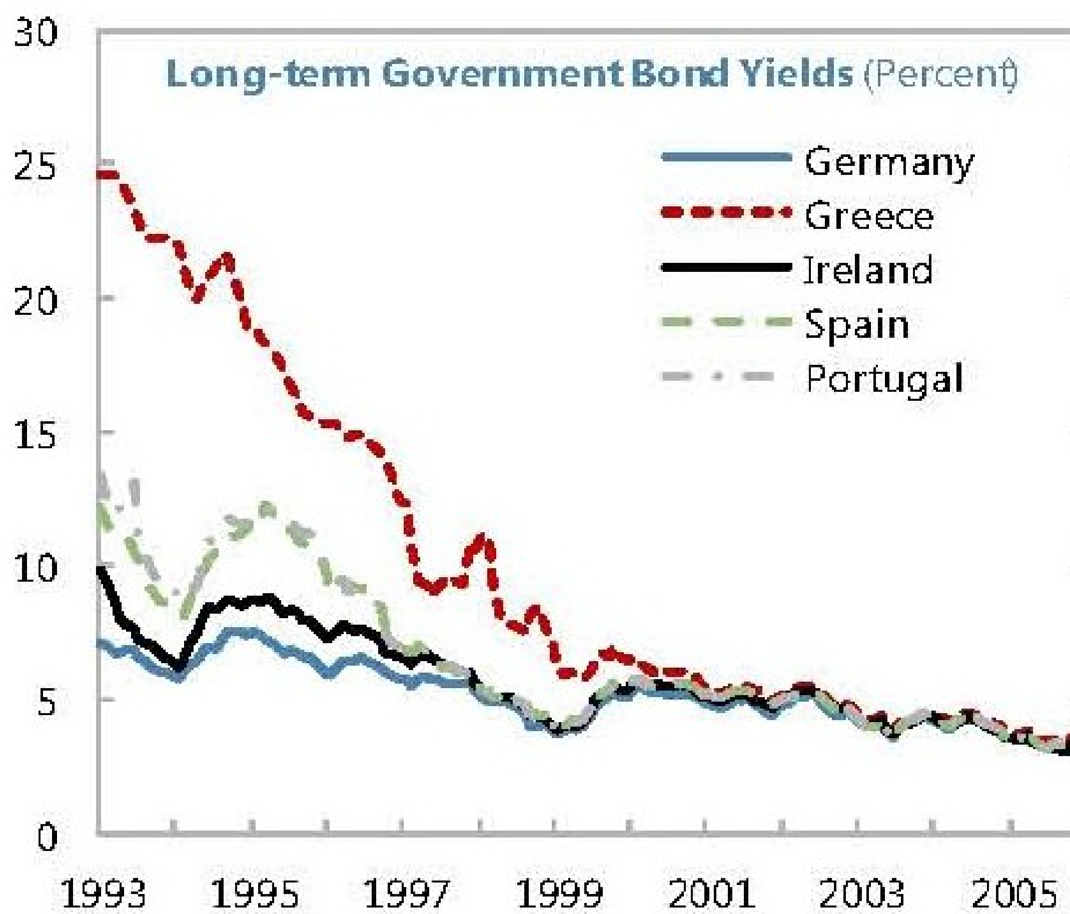
Greece; The crisis

	Def/GDP	Debt/GDP	CA/GDP	INF-GR	INF-EU15	GDP gr
2001	-4.5	103.7	-7.23	3.7	2.4	4.2
2002	-4.8	101.7	-6.52	3.9	2.3	3.4
2003	-5.6	97.4	-6.53	3.4	2.1	5.9
2004	-7.5	98.6	-5.78	3	2.2	4.4
2005	-5.2	100	-7.64	3.5	2.2	2.3
2006	-5.7	106.1	-11.39	3.3	2.2	5.5
2007	-6.5	107.4	-14.61	3	2.1	3.5
2008	-9.8	112.9	-14.92	4.2	3.3	-0.2
2009	-15.6	129.7	-11.17	1.3	0.3	-3.1
2010	-10.7	148.3	-10.13	4.7	1.6	-4.9
2011	-9.5	170.3	-9.89	3.1	2.7	-7.1
2012	-10	156.9	-3.37	1	2.5	-6.4

Greek Default

- Greece defaulted in 2010
- Questions:
- How could Greece borrow so much?
- Moral hazard: Investors expecting Germany to take care
  - Either by applying the Stability and Growth Pact (3% def, 60% Debt/GDP ratio; sanctions)
  - Or, by bailing Greece out

Greek debt was too cheap



Reasons

- Reasons for Greece's default
- 1. Lack of international competitiveness: Need to generate trade surpluses to pay external debt (most of Greece's public debt was held externally)
- Greece entered with an overvalued parity
- Low productivity
- 2. The borrowed funds were wasted (public sector expansion, higher wages)
- 3. Greek statistics (under-reporting debt-deficits)

Labor Productivity

- GDP per Hour, in 1990 USD

	2000	2006	2012
Greece	14.17	16.8	15.83
Germany	27.16	30.12	30.97
Italy	25.43	25.8	25.8
Spain	22.5	23.22	25.7
Portugal	14.53	15.38	16.25

Other countries

- Why did the Eurozone countries bail Greece out?
  - Much of Greek debt was held by French and German banks
  - Fear of contagion to the European banking system

- What was the problem with the other countries (Spain, Ireland, Portugal)?
  - Troubled banking sector (Spain, Ireland) that caused the fiscal crisis (the govt had to borrow to bail out the banks).
  - Unlike Greece where the govt debt crisis led to a banking crisis.