CHAPTER 8

BOND MARKETS

Capital Markets

- Economic purpose -- brings together long-term (over 1 year) borrowers and long-term investors.
- Major Issuers (borrowers)
  - Households - mortgages.
  - Business – bonds and stock
  - Governments -- federal, state, and local bonds.
- Major Investors
  - Households (directly or indirectly through financial intermediaries).
  - Foreign investors.

Exhibit 8.1 Economic Sectors

EXHIBIT 8.1

Net Financial Positions of Major Sectors of the Economy, December 2001 ($ in Billions)

Sector	Financial Assets	Financial Liabilities	Net Financial Position	
			Surplus	Deficit
Households	$32,097.5	$8,083.1	$21,014.4	
Nonfinancial business	9,892.4	12,022.6		$2,130.2
State and local government	1,406.4	2,047.2		640.8
Federal government	609.2	4,269.9		3,660.7
Financial institutions	32,557.6	32,101.7	455.9	
Remainder	8,874.8	4,743.7	4131.1	
Total	$85,437.9	$63,268.2	$28,601.4	$6,431.7

Households are the largest supplier of funds in financial markets. To no one's surprise, the federal government has a large deficit position.

Source: Board of Governors, Federal Reserve System. *Flow of Funds Accounts of the United States,* March 7, 2002.

Exhibit 8.2 Capital Market Instruments Outstanding

EXHIBIT 8.2
Capital Market Instruments Outstanding ($ in Billions)

Instrument	1970	1980	1990	2000	2001	Annual Growth Rate (percent)
Treasury debt (over 1 year)	$124	$407	$1,668	$2,320	$2,156	9.6
Federal agency debt (over 1 year)	44	277	1,446	4,345	4,970	16.5
Municipal bonds (over 1 year)	144	350	956	1,223	1,306	7.4
Corporate bonds	202	495	1,706	5,050	5,662	11.4
Corporate stock (at market value)	906	1,634	3,543	17,566	15,186	9.5
Mortgages	470	1,449	3,808	6,934	7,657	9.4
Total	$1,890	$4,612	$13,127	$37,438	$36,937	10.1

In recent years, federal agency debt has been the fastest growing sector of the capital markets. Much of this growth can be attributed to growth by government sponsored entities, such as Fannie Mae and Freddie Mac.

Source: Board of Governors, Federal Reserve System, *Flow of Funds Accounts of the United States,* various issues, and Bureau of the Public Debt, *Monthly Statement of the Public Debt of the United States,* various issues.

Types of Capital Market Claims

- Corporate stock
- Bonds
- Mortgages

U.S. Treasury and Agency Securities

- U.S. Government Issues -- Notes and Bonds
  - Coupon issues.
  - Notes -- one to ten-year maturity.
  - Bonds -- over ten-year maturity.
  - Sold by auction by the Federal Reserve banks.
  - Trend is toward more money market financing and less capital market financing.

Corporate Bonds

- Debt contracts (indenture) requiring borrower to make periodic payments of interest and repay principal, usually $1,000, at maturity date.
- Types of ownership record
  - Bearer bonds -- coupon bond owned by bearer.
  - Registered bonds -- owner noted by records.
- Maturity
  - Term bonds -- all bonds mature at future date.
  - Serial bonds -- bonds mature at varying future dates.

The Bond Indenture

- Collateral
  - Mortgage bond -- real assets pledged.
  - Equipment trust certificates -- specific, titled, or identifiable equipment.
  - Collateral bonds -- secured by financial assets.
  - Debentures -- unsecured bonds.
- Claim on assets
  - Senior debt -- first priority to general assets.
  - Subordinated -- asset claim ranking of unsecured debentures below senior or specific general creditors.

The Bond Indenture (concluded)

- Means of principal payment
  - Sinking fund –
    - building a sum for retirement
    - the periodic retirement of a number of bonds selected randomly.
  - Call provision -- borrower right to retire bond before maturity.

Investors in Corporate Bonds

- Major investors include:
  - Life insurance companies.
  - Pension funds.
  - Households.
  - Foreign Investors.
- Investor requirements:
  - Long-term investment horizon.
  - Liquidity not always needed -- hold to maturity.
  - Safety -- investment grade.
  - Tax considerations.

Market for Corporate Bonds

- Public sale -- open to all interested buyers.
  - Competitive sale -- public auction among underwriters.
  - Negotiated sale -- underwriting contract signed with specific underwriters.
- Most secondary trading of corporate bonds occurs through dealers vs. exchanges.
  - the volume of trading is low--a thin market, thus there is a wide bid/ask differential in the market.
  - corporate bonds are less marketable than money market instruments.

Market for Corporate Bonds

- Private placement -- sold to limited number of sophisticated buyers, avoiding SEC registration.
  - private placements have increased relative to public sale.
  - when interest rates are high and/or when capital market conditions are unstable, private placements increase.
  - SEC Rule 144a (1990) liberalized the regulation of private placements. It allows secondary market trading of private placements.

Junk bond issuance was very popular in the late 1990's

- Junk bonds are low rated (high default risk) corporate bonds.
- Development of the junk bond primary market was enhanced by the secondary market maintained by Drexel, Burnham and Lambert in the early 1980s.
- Higher risk firms found they could issue longer term, more flexible securities in the high-yield market rather than borrowing from commercial banks.

State and Local Government Bonds
-- Municipal Bonds

- Types of Municipal Bonds
  - General obligation -- backed by taxing power of political entity.
  - Revenue -- financed and paid back from a specific project.
  - Industrial development bonds (IDB) -- public financing of private business.

State and Local Government Bonds
-- Municipal Bonds, cont.

- The Market for Municipal Bonds
  - Primary market.
    - Many individual smaller issuers.
    - Underwritten by investment bankers--from local to national markets.
  - Secondary market not well-developed -- OTC market made by dealers.

The Role of Financial Guarantees

- Cover the payment of principal and interest in the event of default.
- Substitutes the credit standing of the guarantor for that of the security issuer.
- Provided for a fee by
  - Commercial banks - letters of credit to back commercial paper or swaps.
  - Insurance companies - insurance policies to back bond issues.