



# Financial Markets & Institutions FINC 011



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Lecture notes- 3  
**The Mutual Fund Industry**



**Topics include:**

- The Growth of Mutual Funds
- Mutual Fund Structure
- Investment Objective Classes
- Fee Structure of Investment Funds
- Hedge Funds

**Reference: Ch.20**



# Mutual Funds

- Suppose you wanted to start savings for retirement, but you can only afford to invest \$100 / month. How do you develop a diversified portfolio? Mutual funds are one potential answer. Mutual funds pool funds under a professional manager who then chooses the securities to invest in.
- Mutual funds pool the resources of many small investors by selling them shares and using the proceeds to buy securities.



# The Benefits of Mutual Funds

- There are five principal benefits of mutual funds:
  1. Liquidity intermediation: investors can quickly convert investments into cash while still allowing the fund to invest for the long term.
  2. Denomination intermediation: investors can participate in equity and debt offerings that, individually, require more capital than they possess.
  3. Diversification: investors immediately realize the benefits of diversification even for small investments.



# The Benefits of Mutual Funds

- There are five principal benefits of mutual funds:
  4. Cost advantages: the mutual fund can negotiate lower transaction fees than would be available to the individual investor.
  5. Managerial expertise: many investors prefer to rely on professional money managers to select their investments.



# Mutual Fund Structure

- Investment companies usually offer a number of different types of mutual funds.
- Investors can often move investments among these funds without penalty.
- The complexes often issue consolidated statements.

Mutual fund fact book

[http://www.ici.org/aboutfunds/factbook\\_toc.html](http://www.ici.org/aboutfunds/factbook_toc.html)



# Mutual Fund Structure

- Closed-End Fund: a **fixed number of nonredeemable shares** are sold through an **initial offering** and are then traded in the **OTC** market. Price for the shares is determined by supply and demand forces.
- Closed-end fund usually sells no additional shares of its own stock after the initial public offering. Therefore their capitalizations are fixed unless a new public offering is made. The shares trade in the secondary markets like any other stock.



# Mutual Fund Structure

- The problem with the Closed-End Fund is that once shares have been sold, the fund cannot take any more investment dollars. Thus to grow the fund managers must start a whole new fund.
- The advantage of Closed-end funds to managers is that investors cannot make withdrawals, the only way investors have of getting money out of their investment in the fund is to sell shares.





# Mutual Fund Structure

- Open-End Fund: investors may buy or redeem shares at any point, where the price is determined by the **net asset value** of the fund.
- Open-End Funds continue to sell shares to investors after the initial sale of shares that starts the fund. The capitalization of an open-end investment company is continually changing, as new investors buy additional shares and some existing shareholders cash in by selling their shares back to the company.



# Mutual Fund Structure

- Open-End Funds increases the number of shares outstanding, also the fund agrees to buy back the shares from investors at any time.
- Each day the fund's net asset value is computed base don the number of shares outstanding and the net assets of the fund.



# Calculating a Mutual Fund's Net Asset Value

## ■ *Net Asset Value (NAV)*

- *Definition:* Total value of the mutual fund's stocks, bonds, cash, and other assets minus any liabilities such as accrued fees, divided by the number of shares outstanding

Stocks	\$35,000,000
Bonds	\$15,000,000
Cash	\$3,000,000
Total value of assets	\$53,000,000
Liabilities	-\$800,000
Net worth	\$52,200,000
Outstanding shares	15 million

$$\text{NAV} = \$52,200,000 / 15,000,000 = \$3.48$$

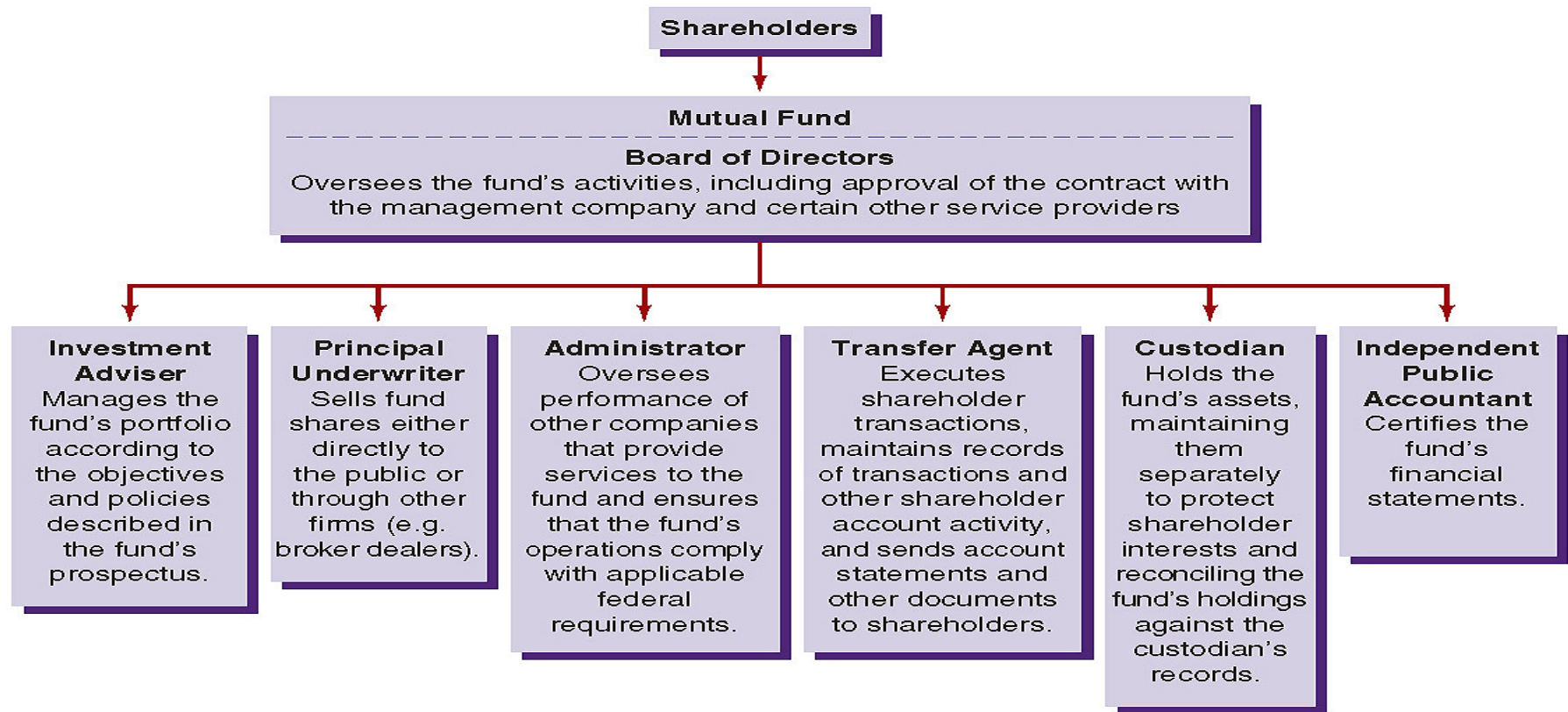


# Mutual Fund Structure: the Organization

- The shareholders, or owners, of the mutual fund are the investors.
- The board of directors oversees the fund's activities, hires the investment advisor, an underwriter, etc., to manage the day to day operations of the fund.



# Mutual Fund Structure: the Organization



**FIGURE 20.3** The Organizational Structure of a Mutual Fund

Source: Investment Company Institute, *2010 Investment Company Fact Book*, 50th Ed. (Washington DC: ICI). Reprinted with permission.



# Investment Objective Classes

- There are four primary classes of mutual funds available to investors:
  1. Stock (equity) funds
  2. Bond funds
  3. Hybrid funds
  4. Money market funds
- A **mutual fund prospectus** is a formal document published by the fund to include the investment objectives and strategies of a particular fund or group of funds, past performance, managers and financial information.



# Investment Objective Classes

## ■ Stock Funds

Other than investing in common equity, the stated objective of any particular fund can vary dramatically.

—**Capital Appreciation Funds** seek rapid increase in share price, not being concerned about dividends. It is the largest, with about 39% of all mutual funds assets. These funds are relatively risky as they seek rapid growth (e.g. invest heavily in high technology and internet stock).





# Investment Objective Classes

## ■ Stock Funds

- **Total Return Funds** seek a combination of current income and capital appreciation. It represents 28% of total mutual fund assets. They will include mature firms that pay dividends and growth companies that are expected to post large stock price increases. Total return funds are expected to be less risky than capital appreciation funds since they will include more large established firms.





# Investment Objective Classes

## ■ Stock Funds

- **World Equity Funds** invest primarily in foreign firms. They allow investors easy access to international diversification. Financial planners recommend that investors hold at least a small portion of their investments in foreign stocks.
- Other types in Value, Growth, a particular industry, etc.



# Investment Objective Classes

## ■ Bond Funds

- *Bonds funds* concentrate on various types of bonds to generate **high current income with minimal risk**. Management strategies can differ ranging from buy and hold to extensive trading of the portfolio bonds.
- Bonds are not risky as stocks, so investors **diversify** across a large number of different bonds.
- Additionally, it is relatively **easy to buy and sell** bonds through the secondary market.
  - Strategic Income Funds invest primarily in U.S. corporate bonds, seeking a high level of current income.
  - Government Bond Funds invest in U.S. Treasury, as well as state and local government bonds.
  - Others include World Bond Funds, etc.



# Investment Objective Classes

## ■ Hybrid Funds

- Combine stocks and bonds into a single fund to provide diversification across different types of securities as well as across different issuers of a particular type of security.
- Account for about 5% of all mutual fund accounts.



# Investment Objective Classes

## ■ Money Market Mutual Funds

- Open-end funds that invest only in money market securities. They Provide **current income, safety of principal, and liquidity** by investing in diversified portfolios of short term securities. They can be divided into taxable funds and tax-exempt funds.
- ***Taxable money market funds*** seek to maintain a stable net asset value. These funds invest in the short term high grade securities sold in the money market, such as Treasury Bills, CD, commercial papers.
- ***Tax-exempt Money market funds*** seek income that is not taxed by the federal government with minimum risk. They invest in municipal securities with relatively short maturities.



# Fee Structure of Investment Funds

- **Load** funds (class A shares) charge an upfront fee for buying the shares. **No-load** funds do not charge this fee.
- **Deferred load** (class B shares) funds charge a fee when the shares are redeemed.
- If the particular fund charges no front or back end fees, it is referred to as class C shares.



# Fee Structure of Investment Funds

- Other fees charges by mutual funds include:
  - contingent deferred sales charge: a back end fee that may disappear altogether after a specific period.
  - redemption fee: another name for a back end load
  - exchange fee: a fee (usually low) for transferring money between funds in the same family.
  - account maintenance fee: charges if the account balance is too low.
  - 12b-1 fee: fee to pay marketing, advertising, and commissions.



# Exercise 1

1. On January 1st, the shares and prices for a mutual fund at 4:00 PM are:

Stock	Shares owned	Price
1	1,000	\$ 1.92
2	5,000	\$ 51.18
3	2,800	\$ 29.08
4	9,200	\$ 67.19
5	3,000	\$ 4.51
cash	n.a.	\$5,353.40

Stock 3 announces record earnings, and the price of stock 3 jumps to \$32.44 in after-market trading. If the fund (illegally) allows investors to buy at the current NAV, how many shares will \$25,000 buy? If the fund waits until the price adjusts, how many shares can be purchased? What is the gain to such illegal trades? Assume 5,000 shares are outstanding.





# Exercise 2

On January 1st, a mutual fund has the following assets and prices at 4:00 p.m.:

Stock	Shares owned	Price
1	1,000	\$ 1.97
2	5,000	\$48.26
3	1,000	\$26.44
4	10,000	\$67.49
5	3,000	\$ 2.59

Calculate the net asset value (NAV) for the fund. Assume that 8,000 shares are outstanding for the fund.