CHAPTER 4

Mutual Funds and Other Investment Companies

4.1 INVESTMENT COMPANIES

Investment Companies

- Administration & record keeping
- Diversification & divisibility
- Professional management
- Reduced transaction costs

Investment Companies: Net Asset Value

- Net Asset Value
  - Used as a basis for valuation of investment company shares
  - Selling new shares
  - Redeeming existing shares

Calculation:

$$\frac{\text{Market Value of Assets - Liabilities}}{\text{Shares Outstanding}}$$

4.2 TYPES OF INVESTMENT COMPANIES

Unit Trusts

- Pools of money fixed for the life of the fund
- Little active management

Managed Investment Companies: Open-End and Closed-End

- Open-End
  - Sold at Net Asset Value (NAV)
  - Changes when new shares are sold or old shares are redeemed
- Closed-End
  - Sold at premium or discount to NAV
  - No change unless new stock is offered

Figure 4.1 Closed-End Mutual Funds

FIGURE 4.1
Closed-end mutual funds

Source: The Wall Street Journal Online, January 16, 2007.

CLOSED-END FUNDS

FUND	NAV	MKT PRICE	PREM/DISC	52 WEEK RETURN %
Adams Express Company (ADX)	15.96	13.85	−13.22	13.84
Advent/Clay Enhncd G & I (LCM)	19.54	19.81	1.38	23.47
Alliance All Mkt Advantg (AMO)	13.51	14.50	7.33	3.92
BlackRock Div Achvrs (BDV)	16.25	15.16	−6.71	19.34
BlackRock S & P 500 Pr Eq (PEFX)	10.08	9.77	−3.08	6.50
BlackRock Str Div Achvr (BDT)	16.55	15.05	−9.06	17.39
Blue Chip Value Fund (BLU)	5.80	6.03	3.97	4.31
Eaton Vance Tax Div Inc (EVT)	28.91	27.11	−6.23	23.82
Equus II Incorporated (EQS)	11.32	8.41	−25.71	23.24

FUND	NAV	MKT PRICE	PREM/DISC	52 WEEK RETURN %
First Tr Val Line 100 (FVL)	16.43	15.25	−7.18	4.79
Gabelli Div & Inc Tr (GDV)	23.31	20.95	−10.12	22.57
Gabelli Equity Trust (GAB)	9.51	9.79	2.94	27.84
General Amer Investors (GAM)	40.78	37.00	−9.27	11.37
Source Capital (SOR)	65.48	66.07	0.90	−5.40
Sunamerica Foc Alpha Gr (FGF)	22.90	20.17	−11.92	20.52
Tri-Continental Corp (TY)	25.91	22.75	−12.20	15.68
Zweig Fund (ZF)	5.97	5.82	−2.51	21.76

Other Investment Organizations

- Commingled funds
- REITs
- Hedge Funds

4.3 MUTUAL FUNDS

Investment Policies

- Described in the prospectus
- Management companies manage a family of mutual funds. Some examples include:
  - Fidelity
  - Vanguard
  - Putnam
  - Dreyfus

Types of Mutual Funds

- Money Market
- Equity
- Specialized Sector
- Bond

Types of Mutual Funds

- Balanced Funds
- Asset Allocation and Flexible
- Indexed
- International

Table 4.1 Mutual Funds by Investment Classification

TABLE 4.1

U.S. mutual funds by investment classification

	Assets ($ billion)	Percent of Total Assets	Number of Funds
Equity funds			
Capital appreciation focus	$ 2,701.0	25.9%	3,070
World/international	1314.1	12.6	915
Total return	1896.5	18.2	785
Total equity funds	$ 5,911.6	56.8%	4,770
Bond funds			
Corporate	$ 272.2	2.6%	289
High yield	156.2	1.5	207
World	59.4	0.6	113
Government	193.0	1.9	309
Strategic income	448.6	4.3	364
Single-state municipal	154.9	1.5	481
National municipal	210.0	2.0	230
Total bond funds	$ 1,494.4	14.4%	1,993
Hybrid (bond/stock) funds	$ 653.1	6.3%	508
Money market funds			
Taxable	$ 1,988.1	19.1%	576
Tax-exempt	366.4	3.5	273
Total money market fund	$ 2354.5	22.6%	849
Total	$10,413.6	100.0%	8,120

Note: Column sums subject to rounding error.

Source: Investment Company Institute, *2007 Investment Company Fact Book*. Copyright © 2007 by the Investment Company Institute.

How Funds Are Sold

- Directly marketed
- Sales force distributed
- Revenue sharing on sales force distributed
  - Potential conflicts of interest
  - It must be disclosed to the investor
- Financial supermarkets

4.4 COSTS OF INVESTING IN MUTUAL FUNDS

Fee Structure

- Fee Structure
  - Front-end load
  - Back-end load
- Operating expenses
- 12 b-1 charges
  - distribution costs paid by the fund
  - Alternative to a load
- Fees and performance

Example 4.1 From Text

EXAMPLE 4.1

Fees for Various Classes (Dreyfus Founders Growth and Income Fund)

Here are fees for different classes of the Dreyfus Founders Growth Fund as of early 2007. Notice the trade-off between the front-end loads versus 12b-1 charges.

	Class A	Class B	Class C	Class T
Front-end load	0–5.75%[a]	0	0	0–4.50%[a]
Back-end load	0	0–4%[b]	0–1%[b]	0
12b-1 fees[c]	.25%	1.0	1.0	.50%
Expense ratio	1.16%	1.35%	1.17%	1.27%

Notes:

[a]Depending on size of investment

[b]Depending on years until holdings are sold

[c]Including service fee of .25%

Fees and Mutual Fund Returns

$$\text{Rate of return} = \frac{NAV_1 - NAV_0 + \text{Income and capital gain distributions}}{NAV_0}$$

Fees and Mutual Fund Returns: An Example

Initial NAV = $20
Income distributions of $.15
Capital gain distributions of $.05
Ending NAV = $20.10:

$$\text{Rate of Return} = \frac{\$20.10 - \$20.00 + \$.15 + \$.05}{\$20.00} = 1.5\%$$

Table 4.2 Impacts of Costs on Investment Performance

table 4.2 Impact of costs on investment performance

	Cumulative Proceeds (all dividends reinvested)		
	Fund A	Fund B	Fund C
Initial investment*	$10,000	$10,000	$ 9,200
5 years	17,234	16,474	15,502
10 years	29,699	27,141	26,123
15 years	51,183	44,713	44,018
20 years	88,206	73,662	74,173

*After front-end load, if any.
Notes:
1. Fund A is no-load with .5% expense ratio.
2. Fund B is no-load with 1.5% total expense ratio.
3. Fund C has an 8% load on purchases and a 1% expense ratio.
4. Gross return on all funds is 12% per year before expenses.

Trading Scandal with Mutual Funds

- Late trading – allowing some investors to purchase or sell after the market closes
- Market timing – allowing investors to buy or sell on stale net asset values
  - International
- Net effect is to transfer value from other shareholders to privileged traders
  - Reduction in the rate of return of the mutual fund

Potential Reforms

- Strict 4:00 PM cutoff with late orders executed the following trading day
- Fair value pricing with net asset values being adjusted for trading in open markets
- Imposition of redemption fees

4.5 TAXATION OF MUTUAL FUND INCOME

Taxation of Mutual Fund Income

- Investor directed portfolios can be structured to take advantage of taxes while mutual funds cannot
- High turnover leads to tax inefficiency
- More disclosure on taxes was required in 2000

4.6 EXCHANGE-TRADED FUNDS

Exchange Traded Funds

- ETF allow investors to trade index portfolios like shares of stock
- Examples – SPDRs, Diamonds, and WEBS
- Potential advantages
  - Trade continuously
  - Lower taxes
  - Lower costs
- Potential disadvantages

4.7 MUTUAL FUND INVESTMENT PERFORMANCE: A FIRST LOOK

Mutual Fund Performance

- Evidence shows that average mutual fund performance is generally less than broad market performance
- Evidence suggests that over certain horizons some persistence in positive performance
  - Evidence is not conclusive
  - Some inconsistencies

Figure 4.2 Diversified Equity Funds Versus Wilshire 5000 Index

FIGURE 4.2
Diversified equity funds versus Dow Jones Wilshire 5000 IndexSM

Source: **www.wilshire.com**. Dow Jones Wilshire, The Dow Jones Wilshire IndexesSM are calculated, distributed, and marketed by Dow Jones & Company, Inc. pursuant to an agreement between Dow Jones and Wilshire Associates Incorporated and have been licensed for use. All content of the Dow Jones Wilshire IndexesSM © 2007 Dow Jones & Company, Inc. & Wilshire Associates Incorporated.

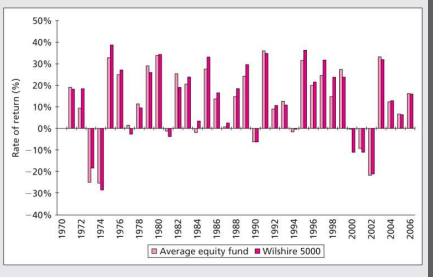

Table 4.4 Consistency of Investment Results

table 4.4
Consistency of investment results

Initial Period Performance	Successive Period Performance: Top Half	Successive Period Performance: Bottom Half
A. Goetzmann and Ibbotson study		
Top half	62.0%	38.0%
Bottom half	36.6%	63.4%
B. Malkiel study, 1970s		
Top half	65.1%	34.9%
Bottom half	35.5%	64.5%
C. Malkiel study, 1980s		
Top half	51.7%	48.3%
Bottom half	47.5%	52.5%

Sources: Panel A: From "Do Winners Repeat?" by William N. Goetzmann and Roger G. Ibbotson, *Journal of Portfolio Management*, Winter 1994, pp. 9–18. Reprinted by permission of Institutional Investor. Panels B and C: From "Returns from Investing in Equity Mutual Funds 1971–1991," by Burton G. Malkiel, *Journal of Finance* 50 (June 1995), pp. 549–72. Reprinted by permission of Blackwell Science, U.K.

4.8 INFORMATION ON MUTUAL FUNDS

Sources of Information

- Wiesenberger's Investment Companies
- Morningstar (www.morningstar.com)
- Yahoo (finance.yahoo.com/funds)
- Investment Company Institute
- Popular press
- Investment services