Gildan Media

Companion PDF

BOGLE ON MUTUAL FUNDS

by

John C. Bogle

TABLE 1–1
The Financial Markets *(December 31, 1871, to December 31, 1992)*

	Annual rate of return	*Final value of $1 initial investment*
Common stocks	+8.8%	$27,710
Long-term bonds	+4.6	240
Cash reserves	+4.2	140

FIGURE 1–1
Cumulative Returns on U.S. Financial Assets *(December 31, 1871, to December 31, 1992)*

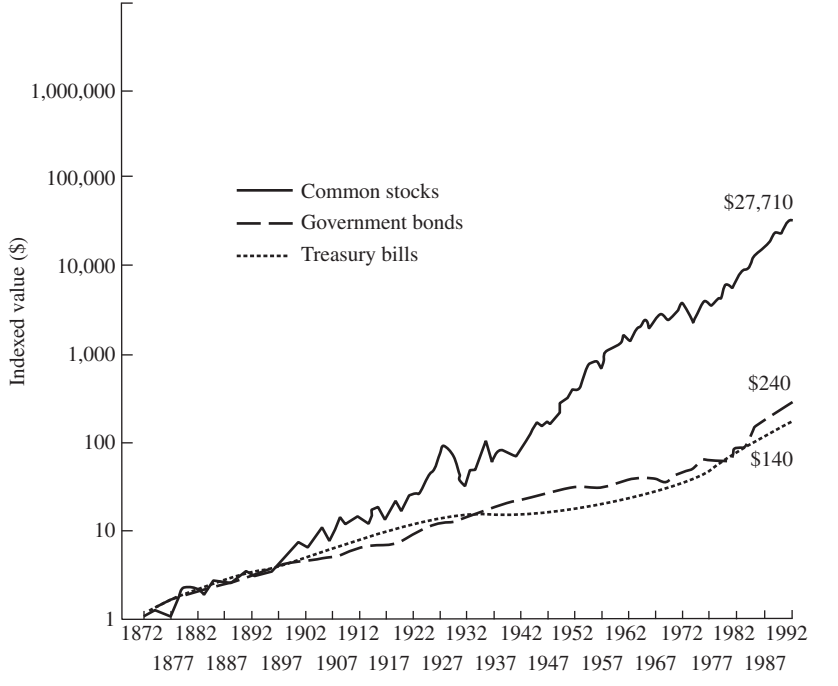
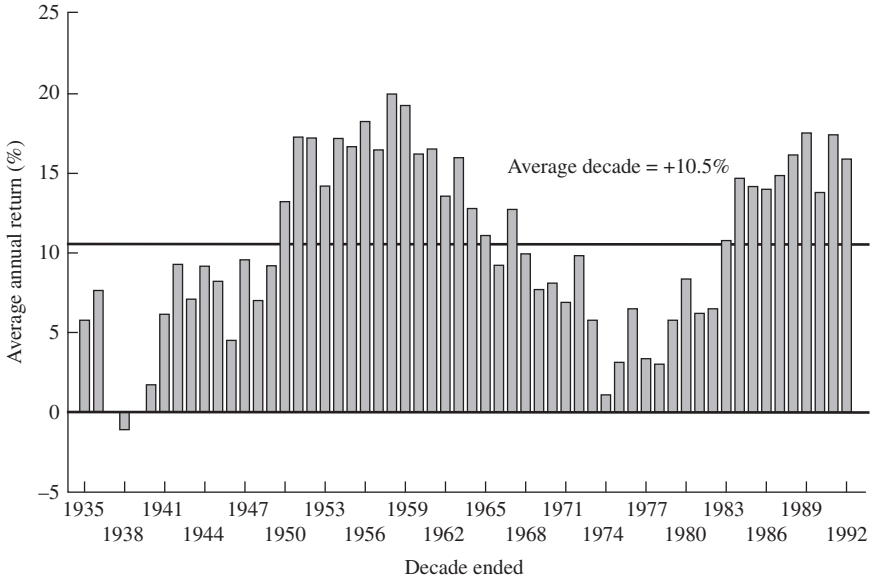


FIGURE 1–2
Common Stock Returns *(Decades Ended 1935–92)*



While the second expectation suggests that dividends need not always be a critical determinant of the returns on stocks, even when a company does not pay a dividend, investors implicitly value the firm's stock based on the presumption of future dividends. When the earnings of a business are retained each year, investors expect that the earnings will increase over time, resulting in future dividends that will be higher than if they had been distributed currently. In sum, while the consideration of stock returns may encompass any number of qualitative and quantitative factors, any valuation judgment must ultimately rely on dividends and earnings.

Since 1926, the average *annual* total return (taking into account both capital appreciation and dividends) on common stocks has been +10.3%. While it is important to know what to expect from the stock market in the long run, you should also consider how stock returns have varied over different periods. Since this book is addressed to the long-term investor, I use a decade as my standard for analysis. Figure 1–2 shows the annualized total return on common stocks for the average decade during the 67-year period ended December 31, 1992, and for each of the 58 "moving decades" within it (1925–35, 1926–36, continuing through 1982–92).

CAVEAT EMPTOR: *The Price-Dividend Multiple*

My shift from the customary concept of price-earnings multiple to the less familiar price-dividend multiple is based largely on the fact that, especially in recent years, wide gaps have opened up between *reported* corporate earnings and *operating* corporate earnings. The difference between the two is accounted for by write-offs of discontinued operations, write-downs of assets such as real estate, and changes in generally accepted accounting principles. As a result, reported price-earnings multiples have soared and, I would argue, have lost touch with reality. This chart reflects the sharp divergence of price-earnings and price-dividend multiples over the past 15 years. If reported earnings are less than operating earnings in any given year, there are two consequences: (1) the current price-earnings ratio rises and (2) the rate of past earnings growth declines. In 1991, for example, reported earnings on the S&P 500 totaled $15.97 per share, compared with operating earnings of $21.61 per share. Thus, the price-earnings ratio was 26.1 times, the highest in the entire period illustrated. If operating earnings were used, a more realistic ratio of 19.3 times would result. Using the reported earnings number results in an annual earnings growth rate of only +0.4% during the decade ended December 31,1991, while operating earnings grew at a rate of +3.5% annually and dividends grew at +6.3% annually. If 1991 were unique, the problem might be ignored, but there were substantial write-offs again in 1992. In the long run, earnings must be generated for dividends to be paid, but the durability of dividends makes them a more solid baseline for analysis.

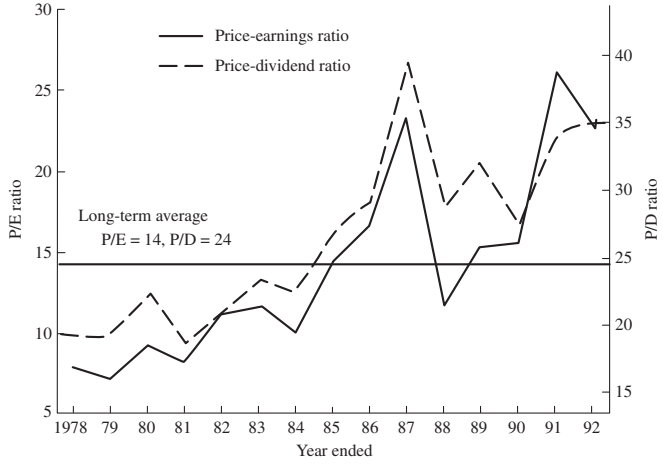


FIGURE 1–3
Price of $1 of Dividends *(1926–92)*

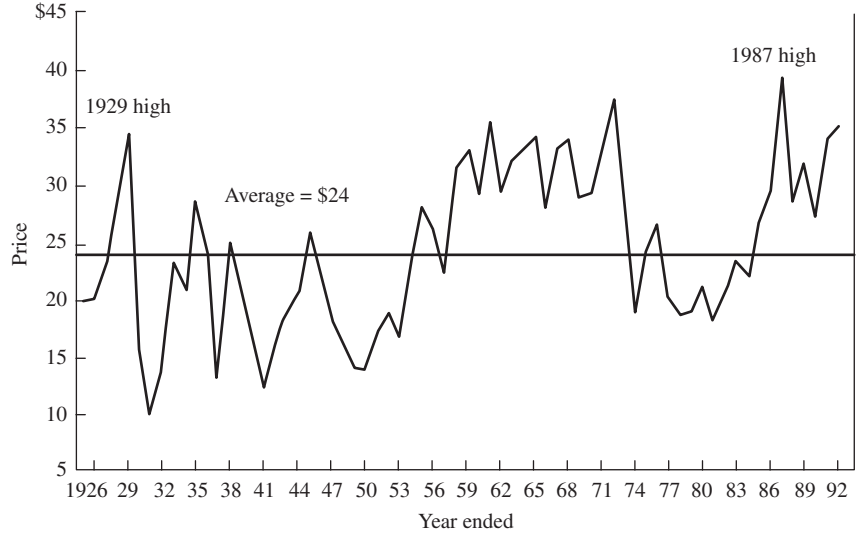


TABLE 1–2
Components of Stock Returns

	Golden decade 1981–91	*Tin decade 1968–78*	*Average decade 1926–92*
Initial dividend yield	+5.4%	+3.0%	+4.7%
Dividend growth rate	+6.3	+5.1	+4.8
Impact of multiple change	+6.3	−5.6	+1.0
Average annual total return	+18.0%	+2.5%	+10.5%

FIGURE 1–4
Long-Term Government Bond Returns *(Decades Ended 1935–92)*

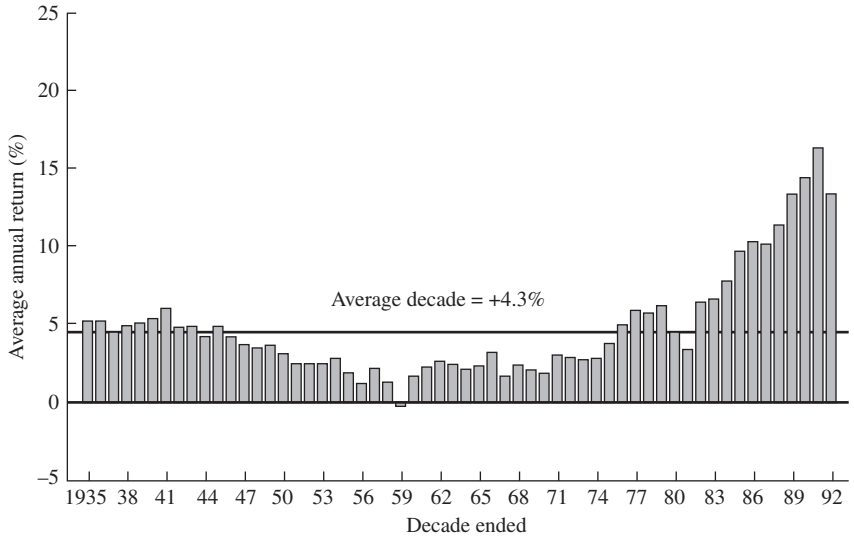


TABLE 1–3
20-Year Government Bond *(8% coupon, $10,000 Initial Investment)*

	Reinvestment Rate		
	6%	*8%*	*10%*
Value at maturity	$10,000	$10,000	$10,000
Cumulative interest coupon	16,000	16,000	16,000
Reinvestment effect	14,200	22,000	32,300
Total value	$40,200	$48,000	$58,300

TABLE 1–4
Components of Bond Returns

	Golden decade 1981–91	*Tin decade 1971–81*	*Average decade 1926–92*
Initial yield	+13.3%	+6.0%	+4.5%
Reinvestment rate	−2.6	+2.4	+0.6
Impact of change in rates	+4.9	−5.6	−0.8
Average annual total return	+15.6%	+2.8%	+4.3%

FIGURE 1–5
Price of $1 of Interest *(1926–92)*

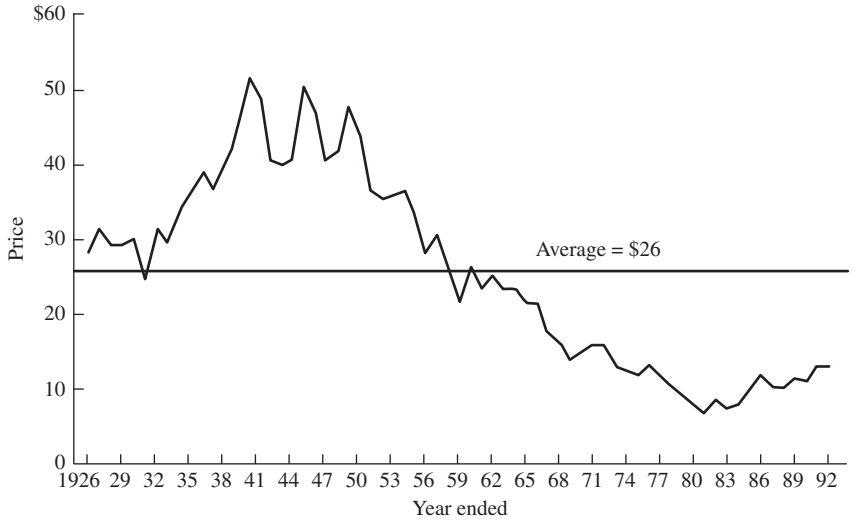


TABLE 1–5
A Shifting Yield Curve

	December 1988		*December 1992*	
Government bond	*Interest rate*	*Price of $1 of interest*	*Interest rate*	*Price of $1 of interest*
Short-term	9.2%	$11	5.1%	$20
Intermediate-term	9.2	11	6.1	16
Long-term	9.2	11	7.3	14

FIGURE 1–6
U.S. Treasury Bill Returns *(Decades Ended 1935–92)*

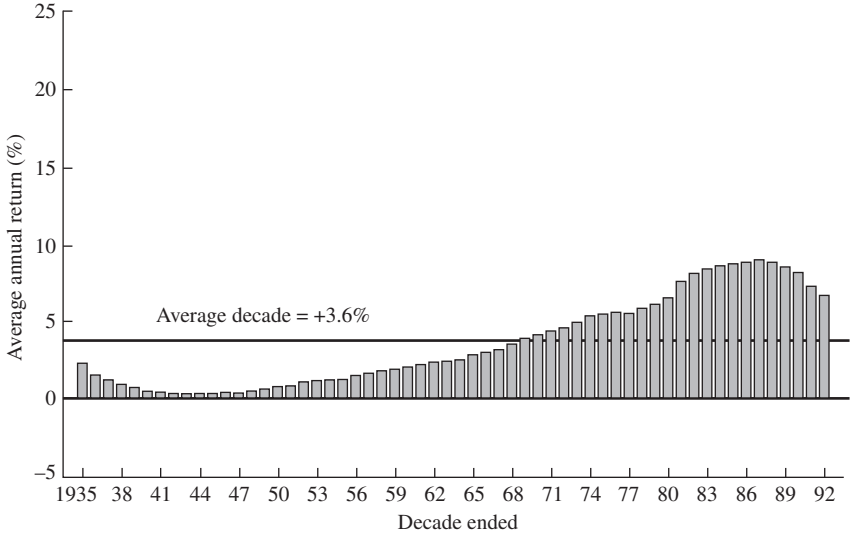


TABLE 1–6
U.S. Treasury Bill Returns

	Golden decade 1977–87	*Tin decade 1932–42*	*Average decade 1926–92*
Average annual total return	+9.2%	+0.1%	+3.6%

TABLE 1–7
Capital Accumulations *(Annual Rates of Return)*

	Initial Investment of $25,000				
Years invested	*4%*	*6%*	*8%*	*10%*	*12%*
1	$26,000	$26,500	$27,000	$27,500	$28,000
5	30,400	33,500	36,700	40,300	44,100
10	37,000	44,800	54,000	64,800	77,600
15	45,000	59,900	79,300	104,400	136,800
20	54,800	80,200	116,500	168,200	241,200
25	66,600	107,300	171,200	270,900	425,000
	Annual Investment of $1,000				
Years invested	*4%*	*6%*	*8%*	*10%*	*12%*
1	$1,040	$1,060	$1,080	$1,100	$1,120
5	5,600	6,000	6,300	6,700	7,100
10	12,500	14,000	15,600	17,500	19,700
15	20,800	24,700	29,300	35,000	41,800
20	31,000	39,000	49,400	63,000	80,700
25	43,300	58,200	79,000	108,200	149,300

TABLE 2–1
The Financial Markets—Average Annual Total Returns
(December 31, 1871, to December 31, 1992)

	Nominal return	*Inflation rate*	*Real return*
Common stocks	+8.8%	−2.3%	+6.5%
Long-term bonds	+4.6	−2.3	+2.3
Cash reserves	+4.2	−2.3	+1.9

TABLE 2–2
The Financial Markets—Average Annual Total Returns

	Nominal return	*Inflation rate*	*Real return*
1872–1925			
Common stocks	+7.0%	−1.2%	+5.8%
Long-term bonds	+4.4	−1.2	+3.2
Cash reserves	+4.7	−1.2	+3.5
1926–92			
Common stocks	+10.3%	−3.1%	+7.2
Long-term bonds	+4.8	−3.1	+1.7
Cash reserves	+3.7	−3.1	+0.6

FIGURE 2–1
Inflation *(U.S. Consumer Price Index 1926–92)*

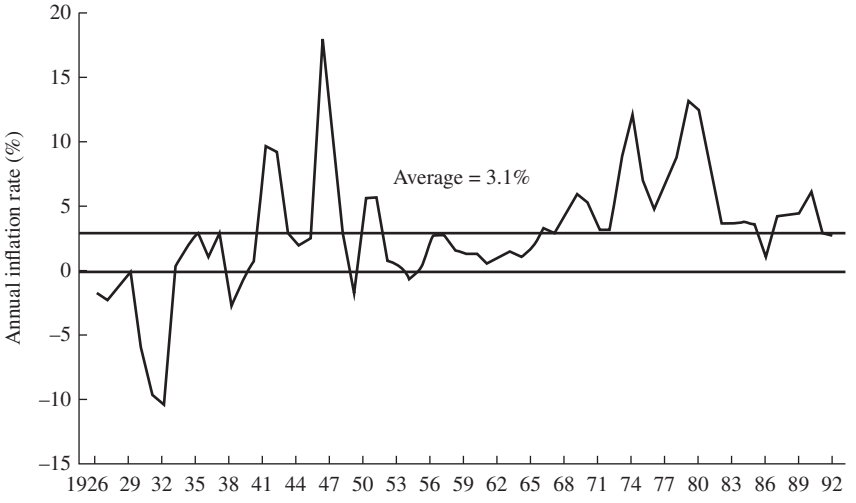


FIGURE 2–2
Common Stocks Returns *(1926–92)*

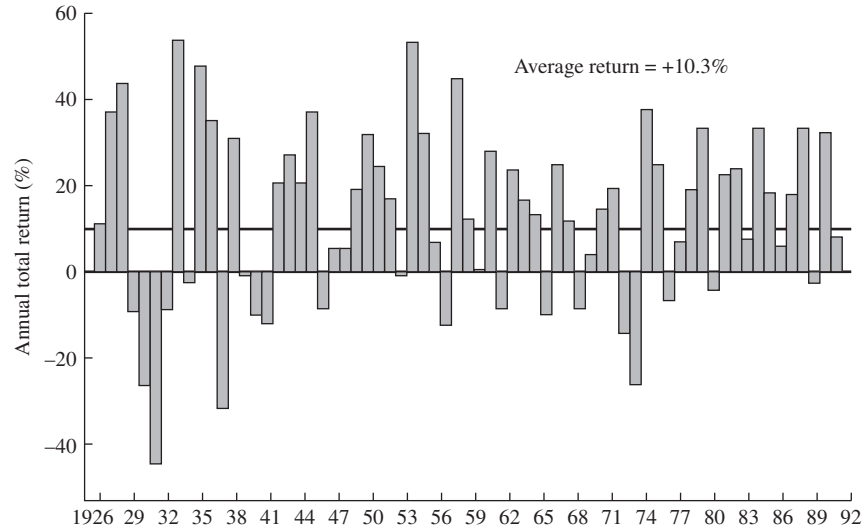


FIGURE 2–3
Range of Returns on Common Stocks *(1926–92)*

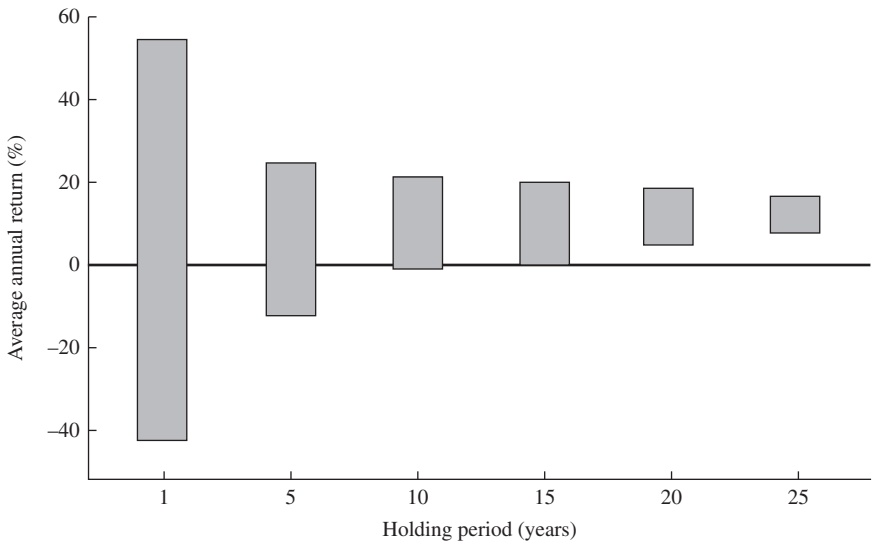


TABLE 2–4
Dollar-Cost Averaging—Annual Rates of Total Return

	Initial investment of $10,000	*Annual investments of $1,000*
Best decade (1948–1958)	+20.1%	+19.2%
Worst decade (1928–1938)	−0.9	+7.0
Range	21.0%	12.2%

TABLE 2–5
$10,000 Investment—Average Decade: 1926–92

	Final value
Principal value	$17,110
Income received	4,700
Total value: no reinvestment	$21,810
Total value: with reinvestment	$27,140

FIGURE 2–4
Dividend Growth versus Inflation *(1950–92)*

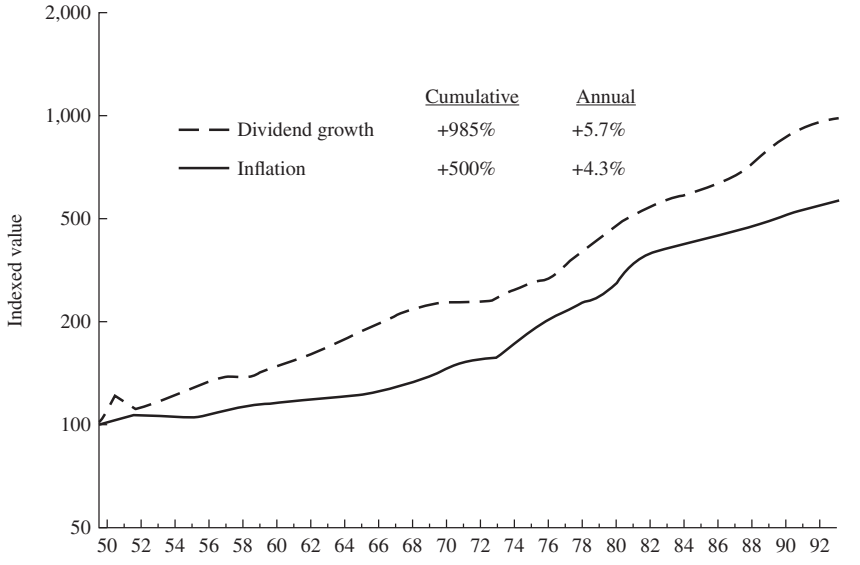
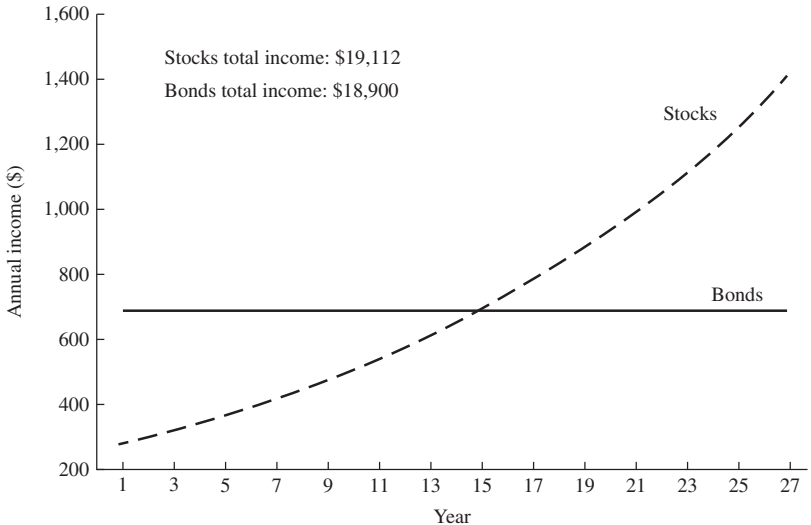


FIGURE 2–5
Investment Income—Stocks versus Bonds



Note: 7% bond coupon; 3% initial stock yield and 6% dividend growth rate.

FIGURE 2–6
Long-Term Government Bond Returns *(1926–92)*

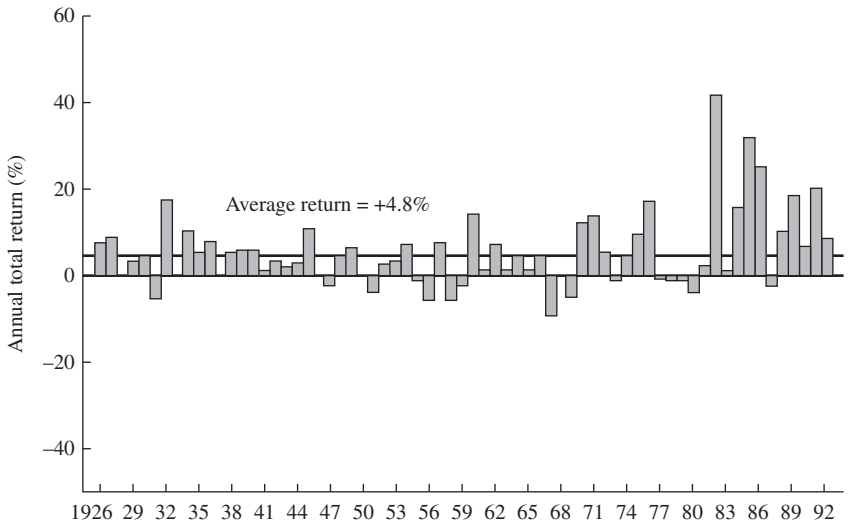


FIGURE 2–7
Range of Returns on Long-Term Government Bonds *(1926–92)*

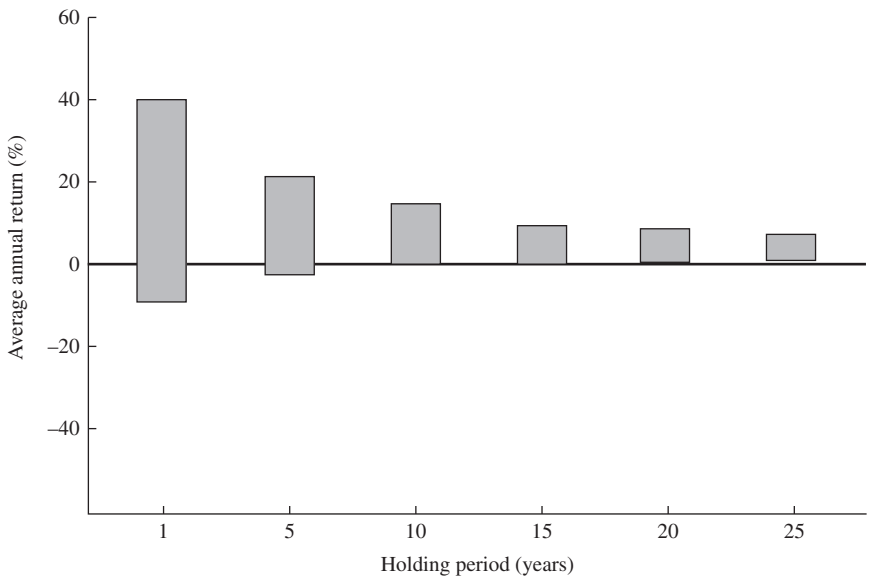


TABLE 2–6
Total Return Volatility—One-Day Total Return

Instantaneous rate change	*5-year bond (7% coupon)*	*20-year bond (7% coupon)*
+3%	−12%	−26%
+2	− 8	−18
+1	− 4	−10
0	0	0
−1	+ 4	+12
−2	+ 9	+25
−3	+13	+41

TABLE 2–7
Total Return Volatility—Simple Average Returns

Instantaneous rate change	*5-year bond (7% coupon)*		*20-year bond (7% coupon)*		
	1 year	*5 years*	*1 year*	*5 years*	*20 years*
+3%	− 3%	+7%	−18%	+ 2%	+7%
+2	0	+7	−11	+ 3	+7
+1	+ 4	+7	−13	+ 5	+7
0	+ 7	+7	+ 7	+ 7	+7
−1	+11	+7	+18	+ 9	+7
−2	+14	+7	+31	+11	+7
−3	+18	+7	+47	+13	+7

FIGURE 2–8
Value of 7% 20-Year Treasury Bond *(When Interest Rates Rise or Fall 2%)*

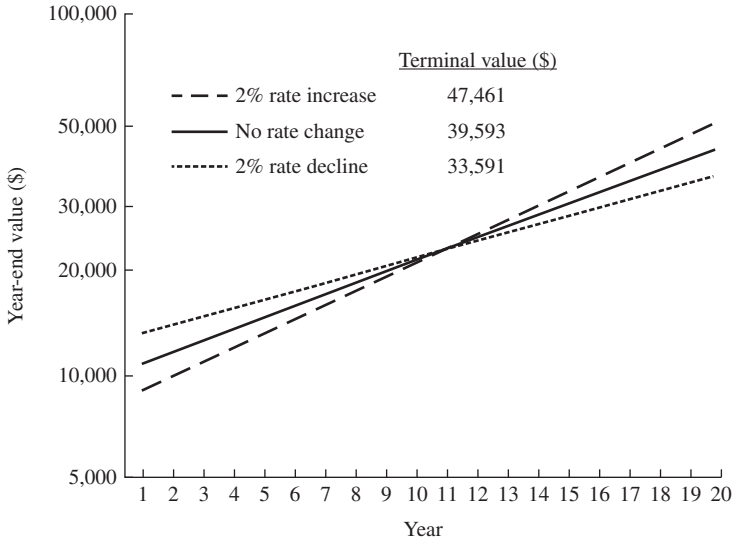


TABLE 2–8
Principal Volatility—Average Annual Capital Return

Instantaneous rate change	*5-year bond (7% coupon)*		*20-year bond (7% coupon)*		
	Instantaneous	*5 years*	*Instantaneous*	*5 years*	*20 years*
+3%	−12%	0%	−26%	−5%	0%
+2	− 8	0	−18	−3	0
+1	− 4	0	−10	−2	0
0	0	0	0	0	0
−1	+ 4	0	+12	+2	0
−2	+ 9	0	+25	+4	0
−3	+13	0	+41	+6	0

FIGURE 2–9
U.S. Treasury Bill Returns *(1926–92)*

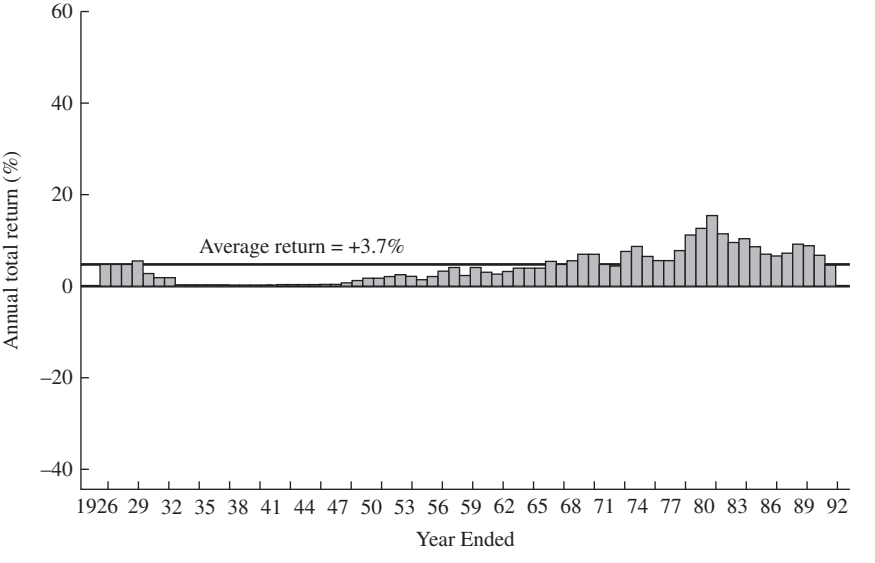


TABLE 2–9
Investment Characteristics of Financial Assets

	Total return	*Principal stability*	*Current yield*	*Income growth*	*Income stability*
Common stocks	A	C	B	A	B
Long-term bonds	B	B	A	C	A
Cash reserves	C	A	C	NA*	C

*Not applicable; U.S. Treasury bill yields may rise or decline.

TABLE 3–1
Mutual Fund Industry *(December 31, 1992)*

	$ billion	*Percent of total*	*Number of funds*
Common Stock Funds			
Growth	$ 136	9%	361
Value	140	9	290
Equity income	40	2	74
Broad-based specialty	113	7	524
Concentrated specialty	34	2	183
Subtotal	$ 463	29%	1,432
Bond Funds			
Investment-grade corporate	$ 57	4%	262
Medium-grade corporate	19	1	74
High-yield corporate	33	2	78
Tax-exempt	198	12	759
Mortgage-backed	94	6	116
U.S. Treasury and government	81	5	272
Global	28	2	101
Subtotal	$ 510	32%	1,662
Money Market Funds			
Prime paper	$ 300	19%	363
Treasury and agency	159	10	292
Tax-exempt	96	6	321
Subtotal	$ 555	35%	976
Balanced Funds			
Traditional	$ 31	2%	95
Income-oriented	9	1	17
Asset allocation	14	1	85
Subtotal	$ 54	4%	197
Total Industry	$ 1,582	100%	4,267

TABLE 3–2
Components of Mutual Fund Returns *(15-years ended December 31, 1992)*

	Rate of Return			*Contribution to Total Return*	
	Total return	*Capital return*	*Income return*	*Capital*	*Income*
Stock funds	+14.6%	+11.4%	+3.2%	78%	22%
Bond funds	+ 8.8	− 0.9	+9.7	−10	110
Money market funds	+ 8.7	0.0	+8.7	0	100
Balanced funds	+13.2	+ 6.0	+7.2	45	55

TABLE 4–1
Growth Funds versus Value Funds *(20 Years Ended December 31, 1992)*

	Average Annual Rate of Return	
5-year periods (inclusive)	*Growth funds*	*Value funds*
1973–77	– 2.9%	+ 1.7%
1978–82	+19.1	+15.9
1983–87	+11.0	+13.5
1988–92	+14.7	+13.6
Total period 1973–92	+10.1%	+11.0%

FIGURE 4–1
Growth Funds versus Value Funds

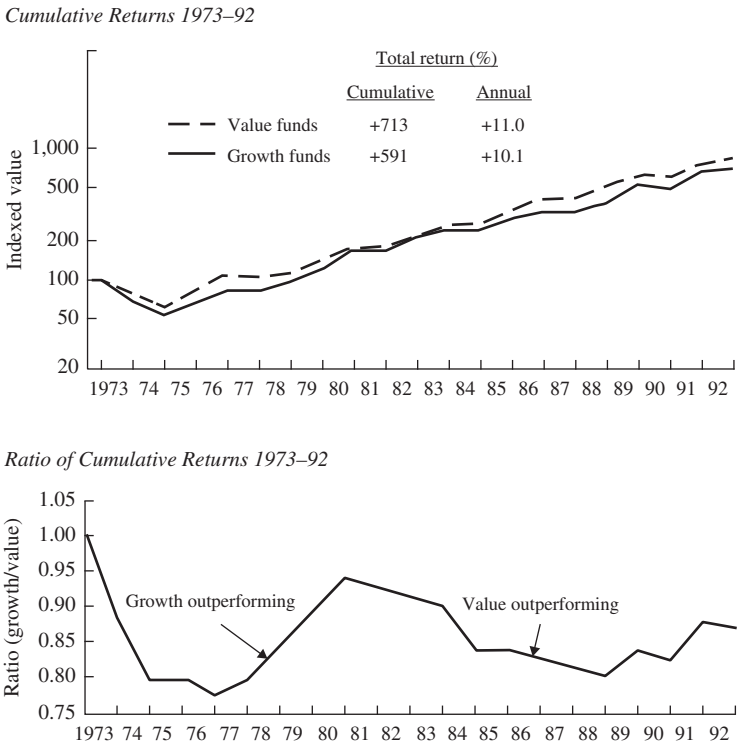
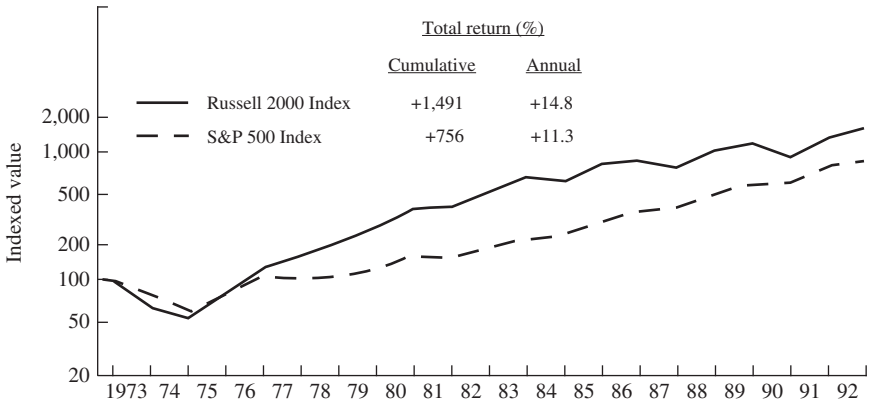


TABLE 4–2
Rank of Equity Holdings *(December 31, 1992)*

	Growth funds	*Value funds*
Philip Morris	1	1
FNMA	2	5
Merck	3	4
PepsiCo	8	16
Pfizer	11	19
American International Group	13	13
Royal Dutch	16	6
General Electric	18	2
Bristol-Myers Squibb	20	12
IBM	21	7

FIGURE 4–2
Small Cap versus Large Cap Stocks *(20 Years Ended December 31, 1992)*

Cumulative Returns 1973–92



Ratio of Cumulative Returns 1973–92

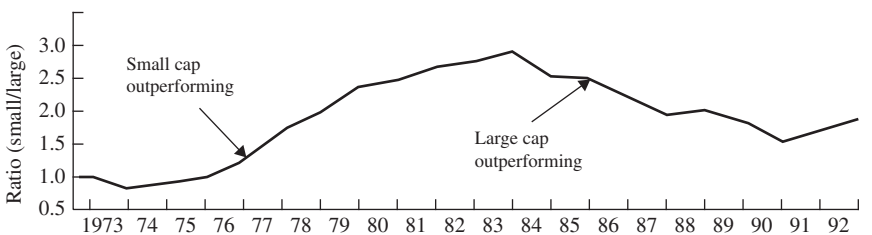


TABLE 4–3
Components of Total Return *(15 Years Ended December 31, 1992)*

Fund type	*Income return*	*Capital return**	*Total return*	*Income as percent of total return*
Equity income	+6.2%	+ 7.8%	+14.0%	44%
Value	+4.3	+ 9.4	+13.7	31
Growth	+2.7	+12.9	+15.6	17
Small company	+1.8	+14.3	+16.1	11
Aggressive growth	+1.2	+12.7	+13.9	9

*Includes increases in net asset value plus reinvested capital gains distributions.

FIGURE 4–3
U.S. versus Foreign Markets

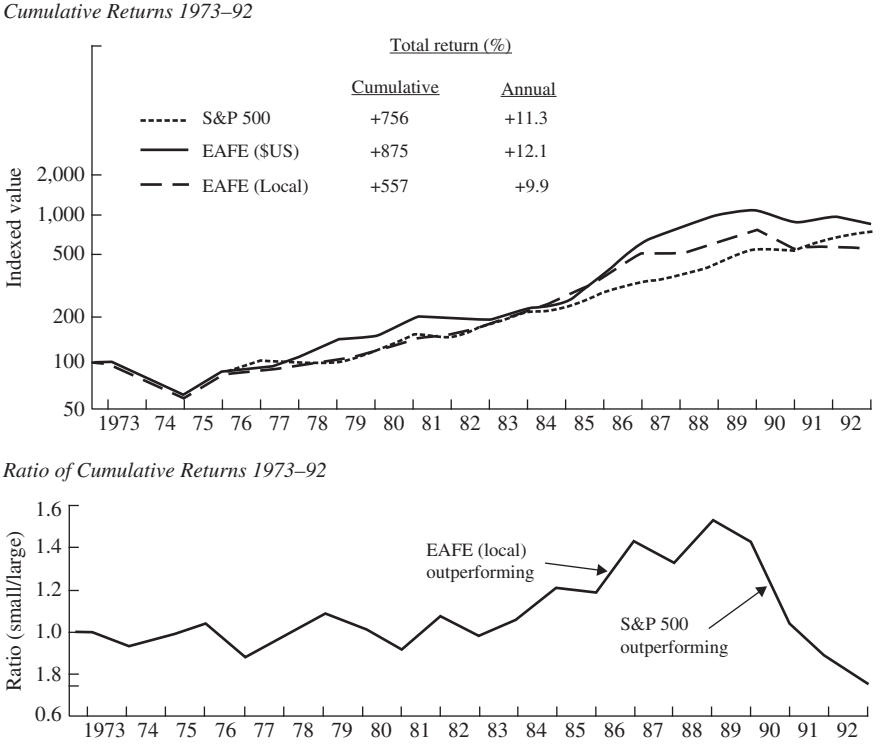


TABLE 4–4
Yield Comparison

	Value fund A	*Growth fund B*
Gross yield	4.0%	2.5%
Expenses	2.0	0.5
Net yield	2.0%	2.0%

TABLE 4–5
Portfolio Statistics Analysis *(December 31, 1992)*

Classification	*ExMark*	*Beta*	*Gross yield*
Growth funds	83%	1.01	2.3%
Value funds	87	0.87	3.7
Equity income funds	87	0.76	5.0
Aggressive growth funds	68	1.19	2.4
Small company funds	69	1.16	1.5
International funds	38	0.65	3.0
Gold funds	0	0.00	2.6
Standard & Poor's 500 Index	100	1.00	**2.8**

TABLE 4–6
Portfolio Statistics Analysis *(December 31, 1992)*

	ExMark	*Beta*	*Gross yield*	*Annual return five years ended December 31, 1992*
Selected value fund	78%	0.70	4.2%	+13.4%
Peer group average	84	0.69	4.4	+12.7
Value fund average	87	0.87	3.7	+13.6
Selected growth fund	91	1.19	1.2	+16.0
Peer group average	90	1.13	1.6	+16.4
Growth fund average	83	1.01	2.3	+14.7

TABLE 4–7
One-Year Rank Order of Top 20 Equity Funds *(1982–92)*

First year rank	*Average rank in subsequent year*	*First year rank*	*Average rank in subsequent year*
1	100	11	310
2	383	12	262
3	231	13	271
4	343	14	207
5	358	15	271
6	239	16	287
7	220	17	332
8	417	18	348
9	242	19	310
10	330	20	226

Average rank of top 20 in subsequent year = 284
Average number of funds = 681

Concentrated specialty and international funds excluded.

TABLE 4–8
Ten-Year Rank Order of Top 20 Equity Funds

Rank 1972–82	*Rank 1982–92*	*Rank 1972–82*	*Rank 1982–92*
1	128	11	222
2	34	12	5
3	148	13	118
4	220	14	228
5	16	15	205
6	2	16	78
7	199	17	209
8	15	18	237
9	177	19	119
10	245	20	242

Average rank of top 20 in subsequent decade = 142
Number of funds = 309

Concentrated specialty and international funds excluded.

TABLE 4–9
Performance of Growth and Value Funds by Quartiles

		1987–92 Ranking				*Five-Year Average*		
		First quartile	*Second quartile*	*Third quartile*	*Fourth quartile*	*Gross return (%)*	*Expense ratio (%)*	*Net return (%)*
1977–87 Ranking	First quartile	14	10	12	8	15.9	0.9	15.0
	Second quartile	8	13	11	12	14.8	0.9	13.9
	Third quartile	13	12	10	9	15.5	1.0	14.5
	Fourth quartile	9	9	11	15	14.6	1.7	12.9

CAVEAT EMPTOR: *Coming Down to Earth*

I noted earlier that regression to the mean is a critically important concept for investors to understand. In the stock market, it means that returns substantially above or below long-term norms are likely to subsequently move down, or up, toward the norm. The same principle applies in equity fund performance. The fund shown below exceeded the returns of the stock market by an average of 20 percentage points a year during the first seven years of the selected 14-year period. But it provided an average margin of only three percentage points during the second seven years. While this margin is indeed healthy, the lessening of superiority shown in the example provides a good illustration of a fund's performance "coming down to earth." It is also a reminder that no fund can consistently sustain exceptionally high relative returns.

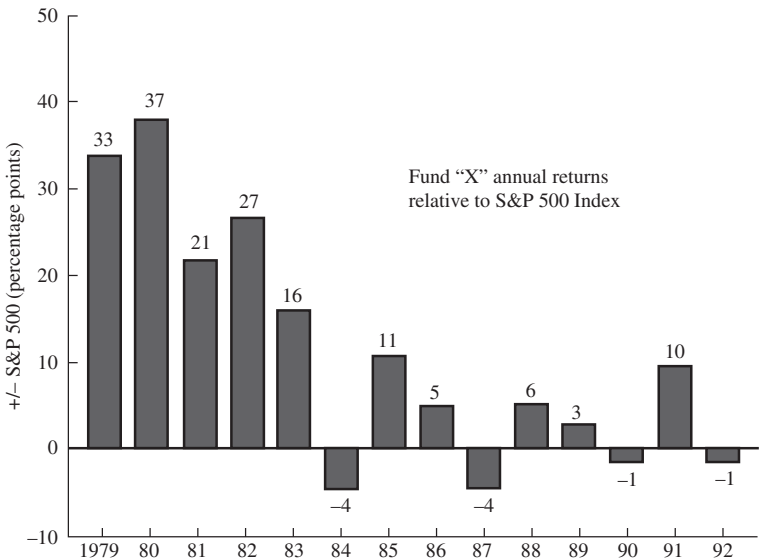
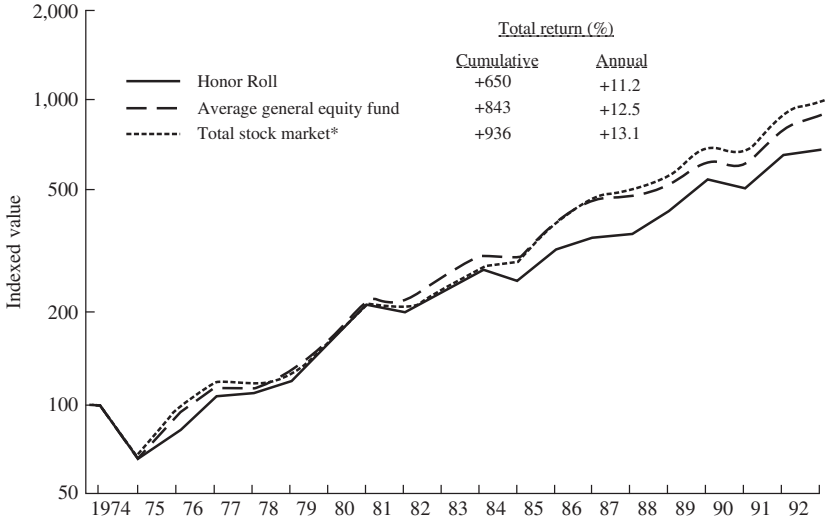


TABLE 4–10
Honor Roll Analysis *(1974–92)*

	Average annual return	*Cumulative return*	*Final value of initial investment of $10,000*
Honor roll funds	+11.2%	+650%	$75,000
Average equity fund	+12.5	+843	94,300
Total stock market*	+13.1	+936	103,600

*Wilshire 5000 Index

FIGURE 4–4
Relative Performance of the Honor Roll *(1974–92)*



*Wilshire 5000 Index (adjusted for annual expenses of 0.20%)

TABLE 5–1
Bond Fund Sectors—Number of Funds *(December 31, 1992)*

	U.S. government	*Mortgage-backed*	*Investment-grade corporate*	*Medium-grade corporate*	*High-yield corporate*	*Investment-grade municipal*	*High-yield municipal*	*Global*	*Total*
Short-term	69	52	73	2	–	20	–	48	264
Intermediate-term	49	64	64	–	78	41	–	–	296
Long-term	154	–	125	72	–	670	28	53	1,102
Total	272	116	262	74	78	731	28	101	1,662

TABLE 5–3
Bond Fund Yields—Impact of Quality and Expenses *(December 31, 1992)*

	Short-term corporate bond fund		*National municipal bond fund*		*California municipal bond fund*	
	High quality	*Medium quality*	*High quality*	*Medium quality*	*High quality*	*Medium quality*
Gross yield	7.7%	7.9%	6.7%	8.0%	6.1%	7.2%
Expenses	−0.3	−0.6	−0.2	−2.1	−0.2	−1.9*
Net yield	7.4%	7.3%	6.5%	5.9%	5.9%	5.3%

*Includes expense ratio of 1 4% and *5%* sales load amortized over ten years.

TABLE 5–4
Price Volatility of Bond Mutual Funds

			Impact of Change in Yield on Net Asset Value			
			Higher rate		*Lower rate*	
	December 31, 1992					
Government issue	*Maturity*	*Yield*	*+2%*	*+1%*	*−1%*	*−2%*
Bills	90 days	3.1%	0%	0%	0%	0%
Short-term bonds	$2^1/_2$ years	4.8	− 4	− 2	+ 2	+ 5
Intermediate-term bonds	10 years	6.7	−13	− 7	+ 7	+16
GNMAs	9 years	6.8	−11	− 5	+ 4	+ 7
Long-term bonds	20 years	7.3	−18	−10	+11	+25

Estimated price changes exclude interest income. GNMA price changes include an estimate of prepayment risk

CAVEAT EMPTOR: *Swapping Principal for Income*

The intelligent investor must take the trouble to look beyond current yields in evaluating short-term bond funds. Today yields can be enhanced, not only by the traditional steps of reducing quality and lengthening maturity, but also by using derivative instruments and CMOs that provide more income return, usually at the expense of capital return. The table shows two apparently similar AA bond funds, both with average maturities of three years. Fund B, however, generated 26% more gross income than Fund A. Despite an expense ratio more than double that of Fund A, Fund B provided 20% more net income return. In this case, it achieved an illusory advantage by holding 16% positions in both GNMA securities and derivative instruments. As interest rates fell during 1992, the piper was paid and the investor's capital in Fund B was impaired. The total return achieved by the lower-yielding Fund A was 33% higher than that of Fund B. Moral: Yields on short-term bond funds are not always what they seem.

Short-Term Bond Funds *(12 months ended December 31, 1992)*

	Fund A	*Fund B*
Gross income return	+6.9%	+8.7%
Expense ratio	−0.3	−0.8
Net income return	+6.6%	+7.9%
Capital return	+0.6	−2.5
Total Return	+7.2%	+5.4%

TABLE 5–5
Corporate Bond Funds *(Six Years Ended December 31, 1992)*

	Average Annual Returns		
	Income return	*Capital return*	*Total return*
Short-term			
First four years	+7.7%	−0.4%	+7.4%
Last two years	+6.5	+1.7	+8.2
Total	+7.4%	+0.3%	+7.7%
Intermediate-term			
First four years	+9.0%	−1.8%	+7.2%
Last two years	+8.1	+2.7	+10.8
Total	+8.7%	−0.3%	+8.4%
Long-term			
First four years	+9.2%	−2.3%	+6.9%
Last two years	+8.5	+3.9	+12.4
Total	+9.0%	−0.3%	+8.7%

TABLE 5–6
Bond Funds—Annual Returns by Expense Level *(Three Years Ended December 31, 1992)*

		Funds with Expense Ratios				
Category	*Average return*	*Less than 0.50%*	*0.50% to 1.00%*	*1.01% to 1.50%*	*Greater than 1.50%*	*Added return of low cost over high*
Government						
Long-term	9.6%	10.6%	10.3%	9.4%	8.5%	+2.1%
Short-term	8.8	9.1	8.7	NA	8.1	+1.0
GNMA	10.5	11.0	10.5	9.9	9.8	+1.2
Corporate						
Long-term high-grade	10.2	10.6	10.1	10.0	8.4	+2.2
Long-term medium-grade	10.6	12.2	10.6	10.5	10.0	+2.2
Short-term high-grade	8.4	8.5	8.3	NA	NA	NA
Municipal						
Long-term AAA	8.8	9.6	9.1	8.1	7.8	+1.8
Long-term AA	8.9	9.6	9.1	8.2	7.8	+1.8
Long-term A	9.0	9.8	9.0	8.6	7.6	+2.2

TABLE 5–7
High-Yield Bond Funds—Average Annual Total Returns *(Six Years Ended December 31, 1992)*

	Income return	*Capital return*	*Total return*
First four years	+12.2%	−11.7%	+ 0.5%
Last two years	+12.4	+15.5	+27.9
Full six years	+12.2%	− 3.3%	+ 8.9%

TABLE 5–8
High-Yield Bond Funds versus Investment-Grade Bond Funds—Average Annual Total Returns *(Six Years Ended December 31, 1992)*

First Four Years	
High-yield bond funds	+ 0.5%
Investment-grade bond funds	+ 7.2
Last Two Years	
High-yield bond funds	+27.9%
Investment-grade bond funds	+10.8
Full Six Years	
High-yield bond funds	+ 8.9%
Investment-grade bond funds	+98.4

TABLE 6–1
Money Market Mutual Funds *(December 31, 1992)*

Fund type	*Number of funds*
Taxable	
Prime instruments*	363
Federal agency notes	160
U.S. Treasury bills	232
Total taxable	655
Tax-Exempt	
National municipal	169
Single-state municipal	252
Total tax-exempt	321
Grand total	976

*Commercial paper, certificates of deposit, and Eurodollar deposits.

FIGURE 6–1
Three-Month Certificates of Deposit—Quarterly Yields *(1972–92)*

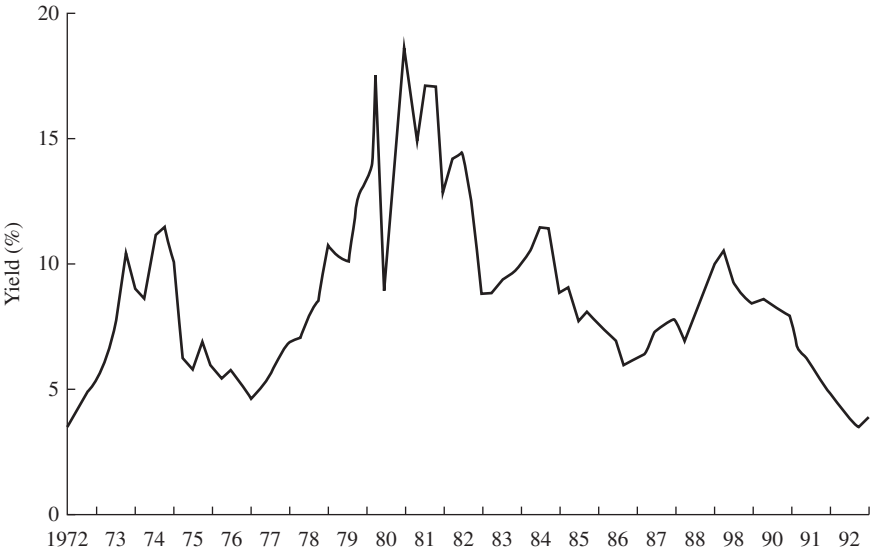


FIGURE 6–2
Money Market Mutual Funds versus MMDAs—7-Day Yields *(1983–92)*

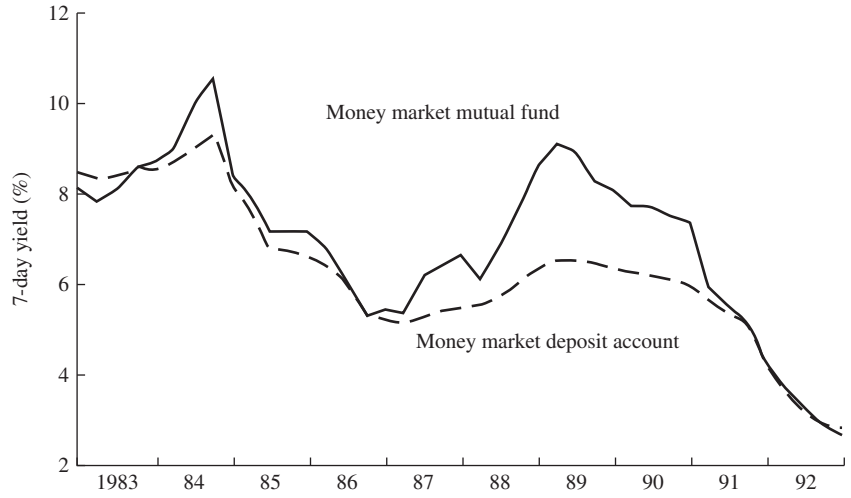


TABLE 6–2
Money Market Fund Yields *(December 31, 1992)*

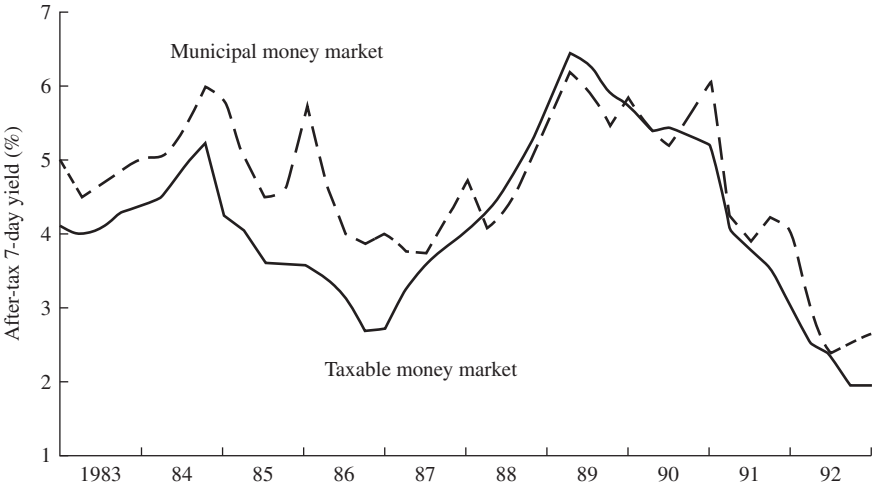
Money market fund	*Percentage of assets rated Al/PI**	*Gross yield*	*Expense ratio*	*Net yield*
Higher quality	100%	3.53%	0.30%	3.23%
Lower quality	90	3.61	0.72	2.89

*Standard & Poor's and Moody's ratings only.

TABLE 6–3
U.S. Treasury Money Market Funds *(December 31, 1992)*

Money fund	*Annualized gross yield*	*Expense ratio*	*Annualized net yield*
A	3.22%	0.30%	2.92%
B	3.17	0.37	2.80
C	3.23	0.46	2.77
D	3.19	0.55	2.64
E	3.31	0.65	2.66
F	3.36	0.85	2.51

FIGURE 6–3
Taxable versus Municipal Money Market Funds—After-Tax 7-Day Yields



Note: Taxable money market yields are adjusted to reflect the prevailing maximum marginal tax rate.

TABLE 6–4
Prime Money Market Funds—Average Total Return and Expense Ratio
(December 31, 1992)

Expense ratio range	*Number of funds*	*Average expense ratio*	*Average 1992 total return*
Below 0.40%	12	0.24%	3.76%
0.40%–0.49%	9	0.45	3.61
0.50%–0.59%	39	0.54	3.45
0.60%–0.69%	36	0.65	3.41
0.70%–0.79%	40	0.75	3.30
0.80%–0.89%	31	0.84	3.14
0.90%–0.99%	20	0.95	3.07
1.00%–1.09%	18	1.02	2.99
1.10% and above	16	1.24	2.81

Only funds in existence for at least two years were included.

FIGURE 6–4
Short-Term Investment-Grade Bond Funds versus Money Market Funds—Cumulative Returns *(1983–92)*

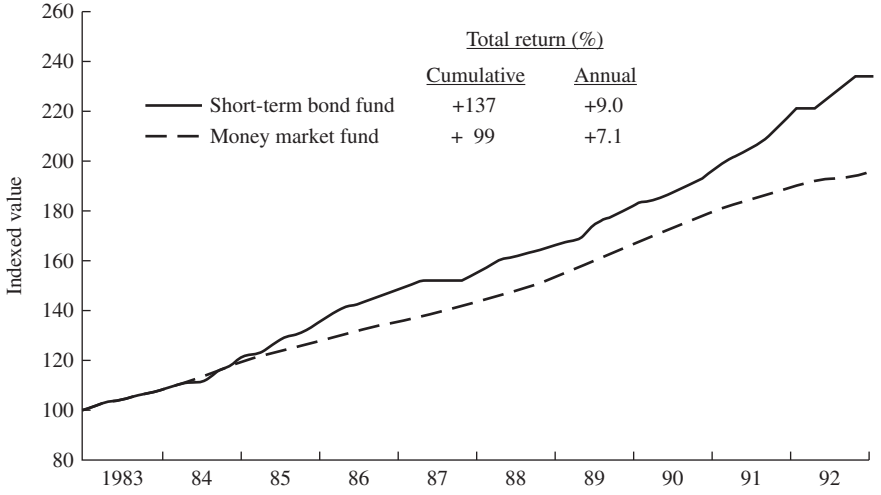


TABLE 7–1
Portfolio Statistics Analysis—Balanced Funds *(December 31, 1992)*

Balanced fund	*ExMark*	*Beta*	*Gross yield*
Equity-oriented	87%	0.64	5.1%
Income-oriented	65	0.42	7.1
Asset allocation	75	0.53	4.8
S&P 500 Index	100%	1.00	2.8%

TABLE 7–2
Variations in Portfolio Characteristics of Balanced Funds

Balanced category	*ExMark*	*Beta*	*Gross yield*
Average equity-oriented fund	87%	0.64	5.1%
Conservative fund	92	0.57	6.2
Aggressive fund	84	0.81	4.4
Average income-oriented fund	65%	0.42	7.1%
Conservative fund	80	0.39	6.2
Aggressive fund	58	0.48	7.4
Average asset allocation fund	75%	0.53	4.8%
Conservative fund	93	0.52	5.3
Aggressive fund	55	0.94	3.5

TABLE 7–4
Balanced Fund Relative Rankings by Decade

1982–92			*1982–92*		
*Annual return**	*Rank*	*1972–82 rank*	*Annual return**	*Rank*	*1972–82 rank*
+ 15.5%	1	15	+ 13.4%	9	3
+ 14.6	2	12	+ 13.1	10	1
+ 14.4	3	9	+ 12.7	11	4
+ 14.3	4	6	+ 12.6	12	8
+ 14.2	5	16	+ 12.3	13	7
+ 14.2	6	13	+ 12.2	14	14
+ 13.9	7	10	+ 12.2	15	2
+ 13.5	8	11	+ 11.8	16	5

*Excludes impact of sales charge.

TABLE 8–1
Fund Expenses

Shareholder Transaction Expenses	
Sales charge on purchases	5.00%
Sales charge on reinvested dividends	None
Redemption fees	None
Exchange fees	None
Annual Fund Operating Expenses	
Management fees	0.89%
12b-l distribution fees	None
Other operating expenses	0.31%
Total operating expenses	1.20%

The following example illustrates the expenses that you would incur on a $1,000 investment over various periods, assuming (1) a 5% annual return and (2) redemption at the end of each period.

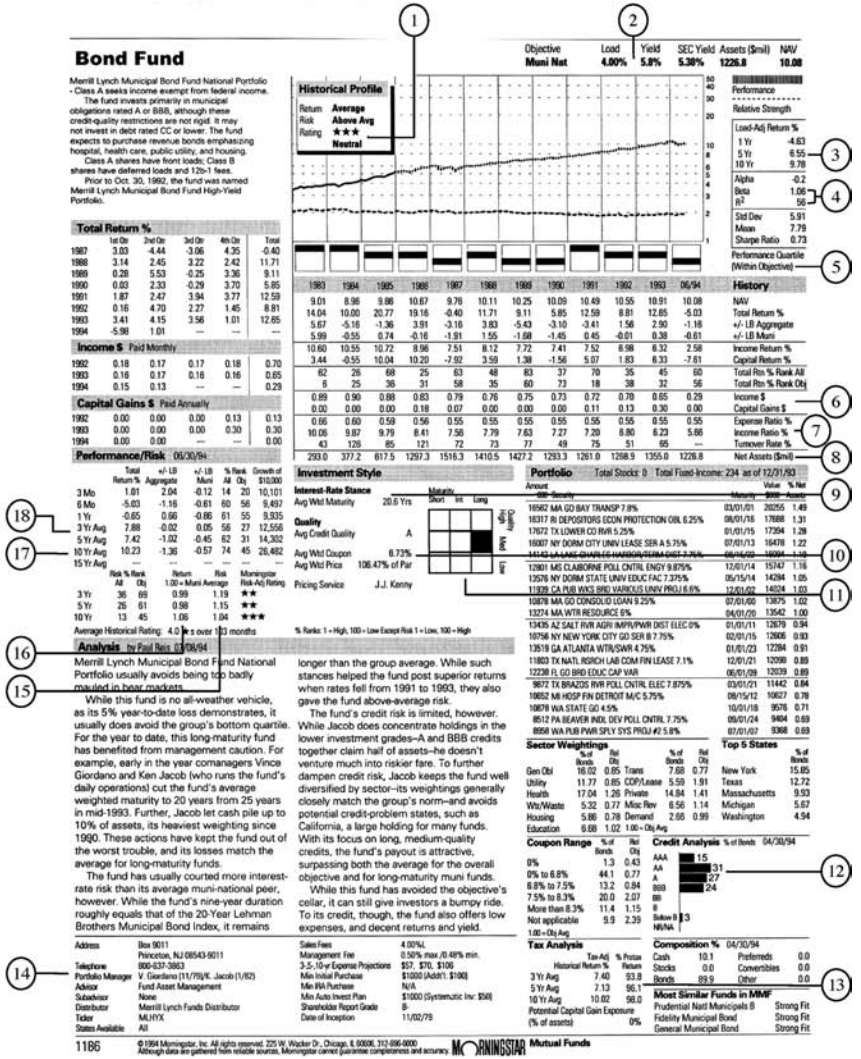
1 Year	*3 Years*	*5 Years*	*10 Years*
$62	$87	$115	$197

TABLE 8–2
Financial Highlights

	1992	*1991*	*1990*	*1989*	*1988*
Net asset value per share, beginning of period	$19.18	$13.27	$14.44	$11.14	$10.31
Income from investment operations					
Net investment income	−0.02	−0.01	0.01	0.15	0.15
Net gains or losses on securities (both realized and unrealized)	−0.52	7.40	−0.23	3.35	0.83
Total from investment operations	−0.54	7.39	−0.22	3.50	0.98
Less distributions					
Dividends (from net investment income)	0.00	0.00	0.00	−0.15	−0.15
Distributions (from capital gains)	−0.74	−1.48	−0.95	−0.05	0.00
Returns of capital	0.00	0.00	0.00	0.00	0.00
Total distributions	−0.74	−1.48	−0.95	−0.20	−0.15
Net asset value per share, end of period	$17.90	$19.18	$13.27	$14.44	$11.14
Total return	−2.8%	+54.3%	+0.8%	+31.4%	+9.5%
Ratios/supplemental data					
Net assets, end of period (in millions)	$661.3	$546.6	$301.4	$298.1	$244.6
Ratio of expenses to average net assets	2.07%	2.28%	2.18%	2.21%	2.20%
Ratio of net income to average net assets	−0.82%	−0.11%	0.54%	1.46%	0.81%
Portfolio turnover rate	96%	147%	96%	112%	126%

Table must be shown for lesser of ten years or life of fund.

FIGURE 8–1
Morningstar Analysis—Bond Fund



Bond Fund

Merrill Lynch Municipal Bond Fund National Portfolio - Class A seeks income exempt from federal income.

The fund invests primarily in municipal obligations rated A or BBB, although these credit-quality restrictions are not rigid. It may not invest in debt rated CC or lower. The fund expects to purchase revenue bonds emphasizing hospital, health care, public utility, and housing.

Class A shares have front loads; Class B shares have deferred loads and 12b-1 fees.

Prior to Oct. 30, 1992, the fund was named Merrill Lynch Municipal Bond Fund High-Yield Portfolio.

Objective	Load	Yield	SEC Yield	Assets ($mil)	NAV
Muni Nat	4.00%	5.8%	5.38%	1226.8	10.08

Historical Profile
Return Average
Risk Above Avg
Rating ★★★ Neutral

Performance
Relative Strength

Load-Adj Return %
1 Yr -4.63
5 Yr 6.55 (3)
10 Yr 9.78

Alpha -0.2
Beta 1.06 (4)
R^2 56
Std Dev 5.91
Mean 7.79
Sharpe Ratio 0.73
Performance Quartile (Within Objective) (5)

Total Return %

	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total
1987	3.03	-4.44	-3.06	4.35	-0.40
1988	3.14	2.45	3.22	2.42	11.71
1989	0.28	5.53	-0.25	3.36	9.11
1990	0.03	2.33	-0.29	3.70	5.85
1991	1.87	2.47	3.94	3.77	12.59
1992	0.16	4.70	2.27	1.45	8.81
1993	3.41	4.15	3.56	1.01	12.65
1994	-5.98	1.01	---	---	---

Income $ Paid Monthly

1992	0.18	0.17	0.17	0.18	0.70
1993	0.16	0.17	0.16	0.16	0.65
1994	0.15	0.13	---	---	0.29

Capital Gains $ Paid Annually

1992	0.00	0.00	0.00	0.13	0.13
1993	0.00	0.00	0.00	0.30	0.30
1994	0.00	0.00	---	---	0.00

Performance/Risk 06/30/94

	Total Return %	+/- LB Aggregate	+/- LB Muni	% Rank All	% Rank Obj	Growth of $10,000
3 Mo	1.61	2.04	-0.12	14	20	10,101
6 Mo	-5.03	-1.16	-0.61	60	56	9,497
1 Yr	-0.65	0.66	-0.86	61	55	9,935
3 Yr Avg	7.88	-0.02	0.05	56	27	12,556
5 Yr Avg	7.42	-1.02	-0.45	62	31	14,302
10 Yr Avg	10.23	-1.36	-0.57	74	45	26,482
15 Yr Avg	---	---	---	---	---	---

	Risk % Rank All	Risk % Rank Obj	Return 1.00 = Muni Average	Risk 1.00 = Muni Average	Morningstar Risk-Adj Rating
3 Yr	36	66	0.99	1.19	★★
5 Yr	26	61	0.98	1.15	★★
10 Yr	13	45	1.06	1.04	★★★

Average Historical Rating: 4.0 ★s over 183 months

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	06/94
	9.01	8.96	9.86	10.67	9.76	10.11	10.25	10.09	10.49	10.55	10.91	10.08
	14.04	10.00	20.77	19.16	-0.40	11.71	9.11	5.85	12.59	8.81	12.65	-5.03
	5.67	-5.16	-1.36	3.91	-3.16	3.83	-5.43	-3.10	-3.41	1.56	2.90	-1.16
	5.99	-0.55	0.74	-0.16	-1.91	1.55	-1.68	-1.45	0.45	-0.01	0.38	-0.61
	10.60	10.55	10.72	8.98	7.51	8.12	7.72	7.41	7.52	8.98	8.32	2.58
	3.44	-0.55	10.04	10.20	-7.92	3.59	1.38	-1.56	5.07	1.83	6.33	-7.61
	82	28	68	25	63	48	83	37	70	35	45	60
	8	25	36	31	58	35	60	73	18	38	32	56
	0.89	0.90	0.88	0.83	0.79	0.76	0.75	0.73	0.72	0.70	0.65	0.29
	0.00	0.00	0.00	0.18	0.07	0.00	0.00	0.00	0.11	0.13	0.30	0.00
	0.66	0.60	0.59	0.56	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
	10.06	9.87	9.79	8.41	7.56	7.79	7.63	7.27	7.29	8.80	6.23	5.66
	43	129	85	121	72	73	77	49	75	51	65	---
	293.0	377.2	617.5	1297.3	1516.3	1410.5	1427.2	1293.3	1261.0	1268.9	1355.0	1226.8

History

NAV
Total Return %
+/- LB Aggregate
+/- LB Muni
Income Return %
Capital Return %
Total Rtn % Rank All
Total Rtn % Rank Obj
Income $ (6)
Capital Gains $
Expense Ratio %
Income Ratio % (7)
Turnover Rate %
Net Assets ($mil) (8)

Investment Style

Interest-Rate Stance — Avg Mtd Maturity: 20.6 Yrs
Quality — Avg Credit Quality: A
Avg Mtd Coupon: 6.73%
Avg Mtd Price: 106.47% of Par
Pricing Service: J.J. Kenny

Maturity: Short / Int / Long; Quality: High / Med / Low

% Ranks: 1 = High, 100 = Low Except Risk 1 = Low, 100 = High

Portfolio Total Stocks: 0 Total Fixed-Income: 234 as of 12/31/93

Amount	Security	Maturity	Value	% Net Assets
16562	MA GO BAY TRANSP 7.8%	03/01/01	20255	1.49
16317	RI DEPOSITORS ECON PROTECTION OBL 6.25%	08/01/16	17688	1.31
17672	TX LOWER CO RVR 5.25%	01/01/15	17394	1.28
16007	NY DORM CITY UNIV LEASE SER A 5.75%	07/01/13	16478	1.22
14145	LA LAKE CHARLES HARBOR/TERM DIST 7.75%	06/15/20	16094	1.18
12801	MS CLAIBORNE POLL CNTRL ENGY 9.875%	12/01/14	15747	1.16
13576	NY DORM STATE UNIV EDUC FAC 7.375%	05/15/14	14298	1.05
11328	CA PUB WKS BRD VARIOUS UNIV PROJ 6.6%	12/01/22	14024	1.03
10878	MA GO CONSOLID LOAN 9.25%	07/01/00	13875	1.02
13274	MA WTR RESOURCE 6%	04/01/20	13542	1.00
13435	AZ SALT RVR AGRI IMPR/PWR DIST ELEC 0%	01/01/11	12679	0.94
10796	NY NEW YORK CITY GO SER B 7.75%	02/01/15	12606	0.93
13519	GA ATLANTA WTR/SWR 4.75%	01/01/23	12294	0.91
11803	TX NATL RSRCH LAB COM FIN LEASE 7.1%	12/01/21	12098	0.89
12238	FL GO BRD EDUC CAP VAR	06/01/09	12039	0.89
9872	TX BRAZOS RVR POLL CNTRL ELEC 7.875%	03/01/21	11442	0.84
10652	MI HOSP FIN DETROIT M/C 5.75%	09/15/12	10627	0.78
10878	WA STATE GO 4.5%	10/01/18	9576	0.71
8512	PA BEAVER INDL DEV POLL CNTRL 7.75%	09/01/24	9404	0.69
8958	WA PUB PWR SPLY SYS PROJ #2 5.8%	07/01/07	9368	0.69

Sector Weightings

	% of Bonds	Rel Obj		% of Bonds	Rel Obj
Gen Obl	16.02	0.85	Trans	7.68	0.77
Utility	11.77	0.85	COP/Lease	5.59	1.91
Health	17.04	1.26	Private	14.84	1.41
Wtr/Waste	5.32	0.77	Misc Rev	6.56	1.14
Housing	5.86	0.78	Demand	2.66	0.99
Education	9.68	1.02	1.00 = Obj Avg		

Top 5 States

	% of Bonds
New York	15.85
Texas	12.72
Massachusetts	9.93
Michigan	5.67
Washington	4.94

Coupon Range

	% of Bonds	Rel Obj
0%	1.3	0.43
0% to 6.8%	44.1	0.77
6.8% to 7.5%	13.2	0.84
7.5% to 8.3%	20.0	2.07
More than 8.3%	11.4	1.15
Not applicable	9.9	2.39
1.00 = Obj Avg		

Credit Analysis % of Bonds 04/30/94

AAA 15
AA 31 (12)
A 27
BBB 24
BB
B
Below B 3
NR/NA

Tax Analysis

Historical Return %	Tax-Adj	% Pretax Return
3 Yr Avg	7.40	93.8
5 Yr Avg	7.13	96.1
10 Yr Avg	10.02	98.0
Potential Capital Gain Exposure (% of assets)		0%

Composition % 04/30/94

Cash	10.1	Preferreds	0.0
Stocks	0.0	Convertibles	0.0
Bonds	89.9	Other	0.0 (13)

Most Similar Funds in MMF

Prudential Natl Municipals B	Strong Fit
Fidelity Municipal Bond	Strong Fit
General Municipal Bond	Strong Fit

Analysis by Paul Rain 03/08/94

Merrill Lynch Municipal Bond Fund National Portfolio usually avoids being too badly mauled in bear markets. (16) (15)

While this fund is no all-weather vehicle, as its 5% year-to-date loss demonstrates, it usually does avoid the group's bottom quartile. For the year to date, this long-maturity fund has benefited from management caution. For example, early in the year comanagers Vince Giordano and Ken Jacob (who runs the fund's daily operations) cut the fund's average weighted maturity to 20 years from 25 years in mid-1993. Further, Jacob let cash pile up to 10% of assets, its heaviest weighting since 1990. These actions have kept the fund out of the worst trouble, and its losses match the average for long-maturity funds.

The fund has usually courted more interest-rate risk than its average muni-national peer, however. While the fund's nine-year duration roughly equals that of the 20-Year Lehman Brothers Municipal Bond Index, it remains longer than the group average. While such stances helped the fund post superior returns when rates fell from 1991 to 1993, they also gave the fund above-average risk.

The fund's credit risk is limited, however. While Jacob does concentrate holdings in the lower investment grades–A and BBB credits together claim half of assets–he doesn't venture much into riskier fare. To further dampen credit risk, Jacob keeps the fund well diversified by sector–its weightings generally closely match the group's norm–and avoids potential credit-problem states, such as California, a large holding for many funds. With its focus on long, medium-quality credits, the fund's payout is attractive, surpassing both the average for the overall objective and for long-maturity muni funds.

While this fund has avoided the objective's cellar, it can still give investors a bumpy ride. To its credit, though, the fund also offers low expenses, and decent returns and yield.

Address	Box 9011 Princeton, NJ 08543-9011
Telephone	800-637-3863
Portfolio Manager (14)	V. Giordano (11/79)/K. Jacob (1/82)
Advisor	Fund Asset Management
Subadvisor	None
Distributor	Merrill Lynch Funds Distributor
Ticker	MLHYX
States Available	All

Sales Fees	4.00%L
Management Fee	0.50% max./0.48% min.
3-5-10-yr Expense Projections	$57, $70, $106
Min Initial Purchase	$1000 (Addn'l: $100)
Min IRA Purchase	N/A
Min Auto Invest Plan	$1000 (Systematic Inv: $50)
Shareholder Report Grade	B-
Date of Inception	11/02/79

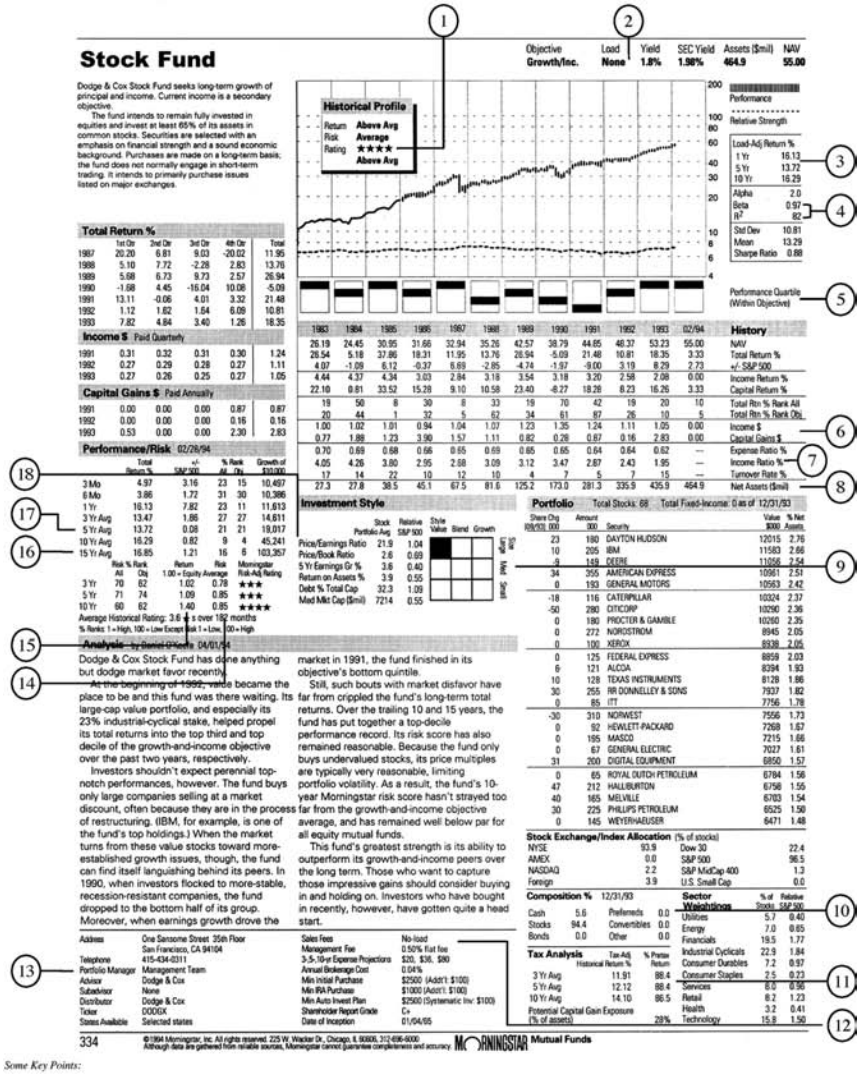
1186

MORNINGSTAR Mutual Funds

Some Key Points:

1. Rating—Three stars (average).
2. Sales load of 4% on purchases.
3. Sales charge reduces one-year return from -0.65% to -4.63%. Ten-year return reduced from 10.23% to 9.78%.
4. Beta (1.06) close to that of the Lehman Brothers Aggregate Bond Index; ExMark (56) significantly lower.
5. Solid annual rankings relative to municipal bond funds. No fourth quartile appearances.
6. Little capital gains realization in the past.
7. Gross income yield of 6.21% less expense ratio of 0.55% brings net income yield to 5.66%.
8. Net assets of $1.226 billion.
9. Average weighted maturity of 20.6 years.
10. Low coupon consistent with holding some discount bonds.
11. Style matrix: medium quality, long-term maturity.
12. Mix of top-tier and lower-tier investment-grade municipal bonds gives portfolio average quality rating of A.
13. Only 2 percent of long-term return consumed by taxes.
14. Tenured portfolio managers (since 1979 and 1982, respectively).
15. Morningstar risk slightly higher, over time, as average municipal bond fund.
16. Morningstar return similar to the average municipal bond fund.
17. Ten-year average return -1.36% below the unmanaged Lehman Aggregate Bond Index.
18. Three-year return about the same as the Lehman Aggregate Bond Index.

FIGURE 8–2
Morningstar Analysis—Stock Fund



Stock Fund

Objective	Load	Yield	SEC Yield	Assets ($mil)	NAV
Growth/Inc.	None	1.8%	1.98%	464.9	55.00

Dodge & Cox Stock Fund seeks long-term growth of principal and income. Current income is a secondary objective.

The fund intends to remain fully invested in equities and invest at least 65% of its assets in common stocks. Securities are selected with an emphasis on financial strength and a sound economic background. Purchases are made on a long-term basis; the fund does not normally engage in short-term trading. It intends to primarily purchase issues listed on major exchanges.

Historical Profile
Return Above Avg
Risk Average
Rating ★★★★ Above Avg

Performance
Relative Strength

Load-Adj Return %
1 Yr 16.13
5 Yr 13.72
10 Yr 16.29

Alpha 2.0
Beta 0.97
R^2 82

Std Dev 10.81
Mean 13.29
Sharpe Ratio 0.88

Performance Quartile (Within Objective)

Total Return %

	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total
1987	20.20	6.81	9.03	-20.02	11.95
1988	5.10	7.72	-2.28	2.83	13.76
1989	5.68	6.73	9.73	2.57	26.94
1990	-1.68	4.45	-16.04	10.08	-5.09
1991	13.11	-0.06	4.01	3.32	21.48
1992	1.12	1.62	1.64	6.09	10.81
1993	7.82	4.84	3.40	1.26	18.35

Income $ Paid Quarterly

1991	0.31	0.32	0.31	0.30	1.24
1992	0.27	0.29	0.28	0.27	1.11
1993	0.27	0.26	0.25	0.27	1.05

Capital Gains $ Paid Annually

1991	0.00	0.00	0.00	0.87	0.87
1992	0.00	0.00	0.00	0.16	0.16
1993	0.53	0.00	0.00	2.30	2.83

Performance/Risk 02/28/94

	Total Return %	+/- S&P 500	% Rank All	% Rank Obj	Growth of $10,000
3 Mo	4.97	3.16	23	15	10,497
6 Mo	3.86	1.72	31	30	10,386
1 Yr	16.13	7.82	23	11	11,613
3 Yr Avg	13.47	1.86	27	27	14,611
5 Yr Avg	13.72	0.08	21	21	19,017
10 Yr Avg	16.29	0.82	9	4	45,241
15 Yr Avg	16.85	1.21	16	6	103,357

	Risk % Rank All	Risk % Rank Obj	Return 1.00 = Equity Average	Risk 1.00 = Equity Average	Morningstar Risk-Adj Rating
3 Yr	70	62	1.02	0.78	★★★
5 Yr	71	74	1.09	0.85	★★★
10 Yr	60	62	1.40	0.85	★★★★

Average Historical Rating: 3.6 ★'s over 192 months
% Ranks: 1 = High, 100 = Low Except Risk: 1 = Low, 100 = High

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	02/94	History
	26.19	24.45	30.95	31.66	32.94	35.26	42.57	38.79	44.85	48.37	53.23	55.00	NAV
	28.54	5.18	37.86	18.31	11.95	13.76	26.94	-5.09	21.48	10.81	18.35	3.33	Total Return %
	4.07	-1.09	6.12	-0.37	6.69	-2.85	-4.74	-1.97	-9.00	3.19	8.29	2.73	+/- S&P 500
	4.44	4.37	4.34	3.03	2.84	3.18	3.54	3.18	3.20	2.58	2.08	0.00	Income Return %
	22.10	0.81	33.52	15.28	9.10	10.58	23.40	-8.27	18.28	8.23	16.26	3.33	Capital Return %
	19	50	8	30	8	33	19	70	42	19	20	10	Total Rtn % Rank All
	20	44	1	32	5	62	34	61	87	26	10	5	Total Rtn % Rank Obj
	1.00	1.02	1.01	0.94	1.04	1.07	1.23	1.35	1.24	1.11	1.05	0.00	Income $
	0.77	1.88	1.23	3.90	1.57	1.11	0.82	0.28	0.67	0.16	2.83	0.00	Capital Gains $
	0.70	0.69	0.68	0.66	0.65	0.69	0.65	0.65	0.64	0.64	0.62	—	Expense Ratio %
	4.05	4.26	3.80	2.95	2.68	3.09	3.12	3.47	2.87	2.43	1.95	—	Income Ratio %
	17	14	22	10	12	10	4	7	5	7	15	—	Turnover Rate %
	27.3	27.8	38.5	45.1	67.5	81.6	125.2	173.0	281.3	335.9	435.9	464.9	Net Assets ($mil)

Investment Style

	Stock Portfolio Avg	Relative S&P 500
Price/Earnings Ratio	21.9	1.04
Price/Book Ratio	2.6	0.69
5 Yr Earnings Gr %	3.6	0.40
Return on Assets %	3.9	0.55
Debt % Total Cap	32.3	1.09
Med Mkt Cap ($mil)	7214	0.55

Style: Value, Blend, Growth; Large, Med, Small

Portfolio Total Stocks: 68 Total Fixed-Income: 0 as of 12/31/93

Share Chg 09/93 000	Amount 000	Security	Value $000	% Net Assets
23	180	DAYTON HUDSON	12015	2.76
10	205	IBM	11583	2.66
-9	148	DEERE	11056	2.54
34	355	AMERICAN EXPRESS	10961	2.51
0	193	GENERAL MOTORS	10563	2.42
-18	116	CATERPILLAR	10324	2.37
-50	280	CITICORP	10290	2.36
0	180	PROCTER & GAMBLE	10260	2.35
0	272	NORDSTROM	8945	2.05
0	100	XEROX	8938	2.05
0	125	FEDERAL EXPRESS	8859	2.03
6	121	ALCOA	8394	1.93
10	128	TEXAS INSTRUMENTS	8128	1.86
30	255	RR DONNELLEY & SONS	7937	1.82
0	85	ITT	7756	1.78
-30	310	NORWEST	7556	1.73
0	92	HEWLETT-PACKARD	7268	1.67
0	195	MASCO	7215	1.66
0	67	GENERAL ELECTRIC	7027	1.61
31	200	DIGITAL EQUIPMENT	6850	1.57
0	65	ROYAL DUTCH PETROLEUM	6784	1.56
47	212	HALLIBURTON	6756	1.55
40	165	MELVILLE	6703	1.54
30	225	PHILLIPS PETROLEUM	6525	1.50
0	145	WEYERHAEUSER	6471	1.48

Stock Exchange/Index Allocation (% of stocks)

NYSE	93.9	Dow 30	22.4
AMEX	0.0	S&P 500	96.5
NASDAQ	2.2	S&P MidCap 400	1.3
Foreign	3.9	U.S. Small Cap	0.0

Composition % 12/31/93

Cash	5.6	Preferreds	0.0
Stocks	94.4	Convertibles	0.0
Bonds	0.0	Other	0.0

Sector Weightings

	% of Stocks	Relative S&P 500
Utilities	5.7	0.40
Energy	7.0	0.65
Financials	19.5	1.77
Industrial Cyclicals	22.9	1.84
Consumer Durables	7.2	0.97
Consumer Staples	2.5	0.23
Services	8.0	0.90
Retail	8.2	1.23
Health	3.2	0.41
Technology	15.8	1.50

Tax Analysis

	Historical Return %	Tax-Adj. Return %	% Pretax Return
3 Yr Avg		11.91	88.4
5 Yr Avg		12.12	88.4
10 Yr Avg		14.10	86.5
Potential Capital Gain Exposure (% of assets)			28%

Analysis by Daniel O'Keefe 04/01/94

Dodge & Cox Stock Fund has done anything but dodge market favor recently.

At the beginning of 1992, value became the place to be and this fund was there waiting. Its large-cap value portfolio, and especially its 23% industrial-cyclical stake, helped propel its total returns into the top third and top decile of the growth-and-income objective over the past two years, respectively.

Investors shouldn't expect perennial top-notch performances, however. The fund buys only large companies selling at a market discount, often because they are in the process of restructuring. (IBM, for example, is one of the fund's top holdings.) When the market turns from these value stocks toward more-established growth issues, though, the fund can find itself languishing behind its peers. In 1990, when investors flocked to more-stable, recession-resistant companies, the fund dropped to the bottom half of its group. Moreover, when earnings growth drove the market in 1991, the fund finished in its objective's bottom quintile.

Still, such bouts with market disfavor have far from crippled the fund's long-term total returns. Over the trailing 10 and 15 years, the fund has put together a top-decile performance record. Its risk score has also remained reasonable. Because the fund only buys undervalued stocks, its price multiples are typically very reasonable, limiting portfolio volatility. As a result, the fund's 10-year Morningstar risk score hasn't strayed too far from the growth-and-income objective average, and has remained well below par for all equity mutual funds.

This fund's greatest strength is its ability to outperform its growth-and-income peers over the long term. Those who want to capture those impressive gains should consider buying in and holding on. Investors who have bought in recently, however, have gotten quite a head start.

Address	One Sansome Street 35th Floor San Francisco, CA 94104	Sales Fees	No-load
Telephone	415-434-0311	Management Fee	0.50% flat fee
Portfolio Manager	Management Team	3-5-10-yr Expense Projections	$20, $36, $80
Advisor	Dodge & Cox	Annual Brokerage Cost	0.04%
Subadvisor	None	Min Initial Purchase	$2500 (Add'l: $100)
Distributor	Dodge & Cox	Min IRA Purchase	$1000 (Add'l: $100)
Ticker	DODGX	Min Auto Invest Plan	$2500 (Systematic Inv: $100)
Shares Available	Selected states	Shareholder Report Grade	C+
		Date of Inception	01/04/65

Some Key Points:

1. Rating—Four stars (above average).
2. No sales load.
3. No total return adjustment necessary for fund without a sales commission.
4. Risk level in line with S&P 500 Index (Beta 0.97); relatively low ExMark (R-squared) of 82.
5. Solid annual rankings relative to Growth and Income funds. Only one fourth quartile appearance (1991).
6. Consistent and substantial capital gains distributions.
7. Reasonably low expenses of 0.62% reduce gross income yield of 2.57% to a net income yield of 1.95%.
8. Net assets of $464.9 billion.
9. Style matrix: large company, with a tilt towards value stocks.
10. Nearly fully invested in equities (94.4%); cash 5.6%.
11. About 13% of long-term return lost to taxes. Fairly high potential tax liability (28%).
12. No sales charges or 12b-1 distribution fees.
13. Portfolio management by committee.
14. Morningstar risk about 15% below average equity mutual fund.
15. Morningstar return in past 10 years 40% above average equity mutual fund.
16. Fifteen-year average return +1.21% above the unmanaged S&P 500 Index.
17. Five-year average return +0.08% above the S&P 500 Index.
18. Portfolio price-earnings ratio of 21.9 times, 4% above S&P 500 Index.

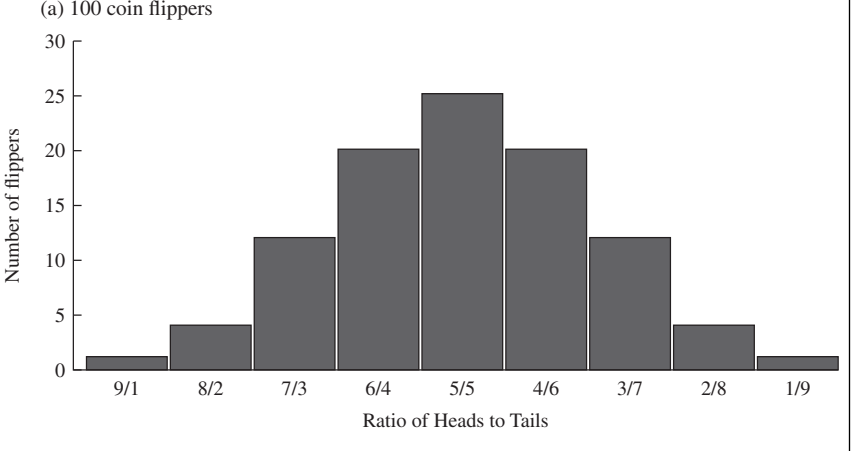
TABLE 8–3
The Morningstar Rating System

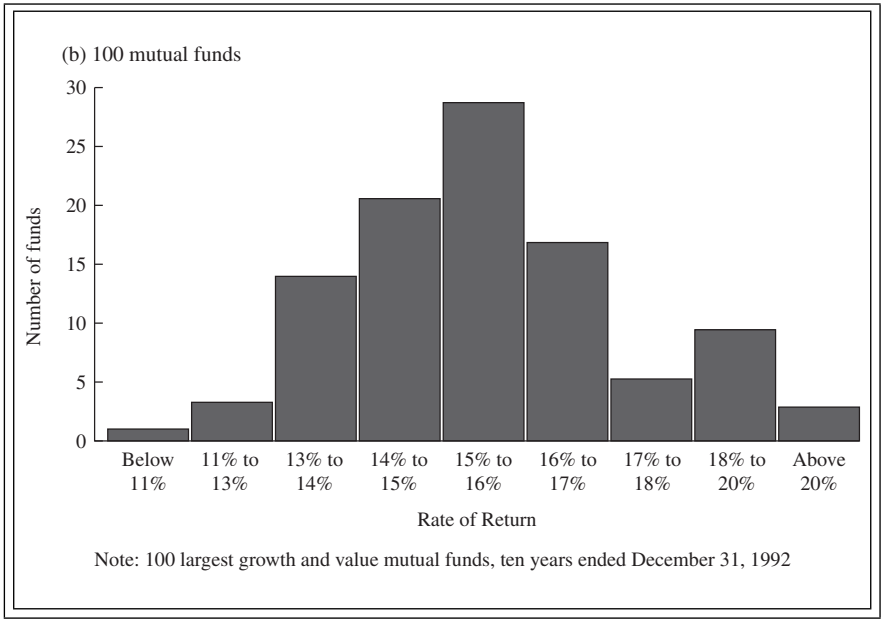
	Absolute Results		*Relative Results (Base 1.00)*		
	Three-year rate of return	*Average shortfall*	*Reward*	*Risk*	*Score**
Stock Fund A	+13.2%	−1.7%	1.15	1.00	1.15
Stock Fund B	+ 9.2	−1.1	0.80	0.65	1.15
Average stock fund	+11.5%	−1.7%	1.00	1.00	1.00

*Reward + (1 − risk).

CAVEAT EMPTOR: *The Coin-Flipping Contest*

It is interesting, if not entirely fair, to compare the mutual fund performance derby that attracts so much press attention to a coin-flipping contest. In the contest, 100 persons begin flipping coins; at the end of ten flips, the most likely outcome is that 25 persons will have flipped five heads and five tails. The chances are virtually nil that anyone will flip either all heads or all tails. The upper chart illustrates the pattern of the expected outcome of the coin-flipping contest. The lower chart illustrates the actual outcome of the contest among equity fund managers for performance over the ten years ended December 31, 1992. The 100 largest growth and value fund managers had average annual gross returns of +15.6%. The table shows that 28 provided returns between +15% and +16%, 17 provided returns between +16% and +17%, and 21 provided returns between +14% and +15%, and so on. Three of the 100 managers defied the averages, as it were, two by earning returns of more than +20%, and one by earning a return of less than +11%. As you can see, the patterns are remarkably similar. A winning coin flipper commands no press interest; a winning fund manager is acclaimed a near genius.





Note: 100 largest growth and value mutual funds, ten years ended December 31, 1992

FIGURE 9–1

Total Stock Market versus Average General Equity Mutual Fund and Average Equity Pension Fund—Cumulative Returns *(1971–92)*

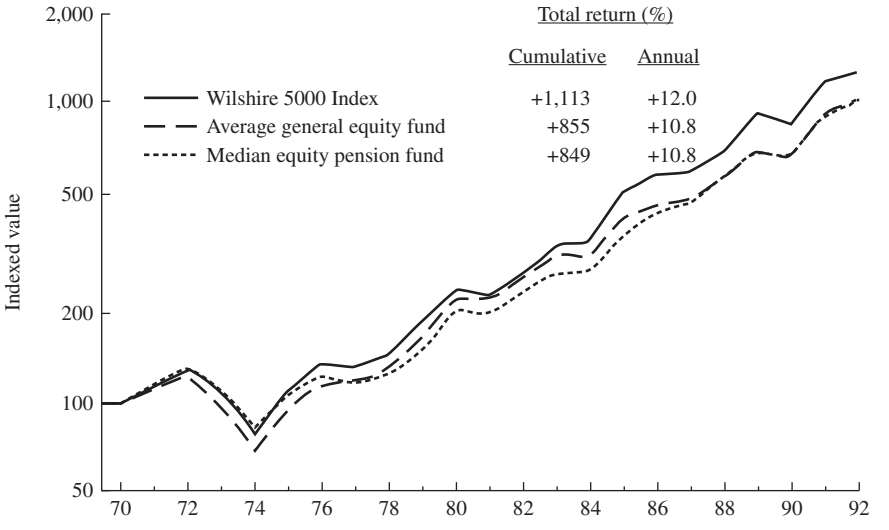


TABLE 9–1
Initial Investment of $10,000 *(December 31, 1970, to December 31, 1992)*

Program	*Rate of return*	*Final value*
Total stock market	+12.0%	$121,300
Average equity mutual fund	+10.8	95,500
Average pension equity fund	+10.8	95,500

FIGURE 9–2
General Equity Funds Outperformed by the Wilshire 5000 *(1971–92)*

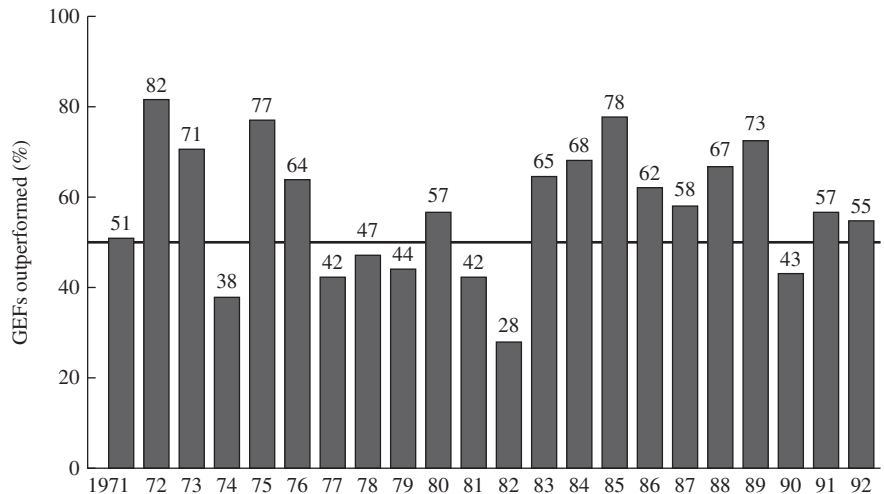
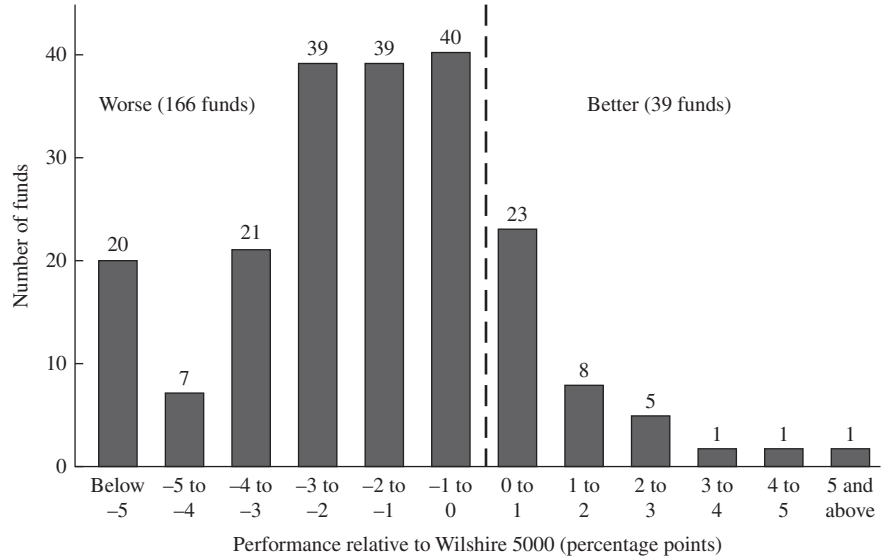


FIGURE 9–3
Growth and Value Funds versus Total Stock Market *(Ten Years Ended December 31, 1992)*



CAVEAT EMPTOR: *Indexing Pays Dividends*

The focus on the yields available in the Growth and Value Indexes drives home yet again the importance of mutual fund operating expenses. The table below compares the actual yields on actively managed growth and value funds with those available from a respective index fund.

Dividend Yields *(December 31, 1992)*

	Growth Objective		*Value Objective*	
	Index fund	*Active fund*	*Index fund*	*Active fund*
Gross yield	2.1%	2.4%	3.7%	3.7%
Expense ratio	−0.2	−1.4	−0.2	−1.3
Net yield	1.9%	1.0%	3.5%	2.4%

Note how the growth index fund, despite a lower gross yield than its counterpart active funds, provides, by reason of its low expenses, almost double the net yield. More importantly, note that the income from the value index fund is nearly 50% higher than for the active value funds. An investment of $50,000 would provide annual income of $1,200 for the active value funds, compared to $1,750 for the value index fund. This extra income of $550 per year comes without additional risk. If you are seeking retirement income, it is a compelling advantage.

TABLE 9–2
The Index Advantage—Annual Rate of Return *(Ten Years Ended December 31, 1992)*

	Mutual fund	*Index**	*Index advantage*
Growth objective	+12.8%	+15.5%	+2.7%
Value objective	+13.6	+16.1	+2.5

*Reduced by 0.20% to account for assumed operating expenses incurred by an index fund.

FIGURE 9–4
Bond Funds versus Lehman Bond Index—Cumulative Returns *(1983–92)*

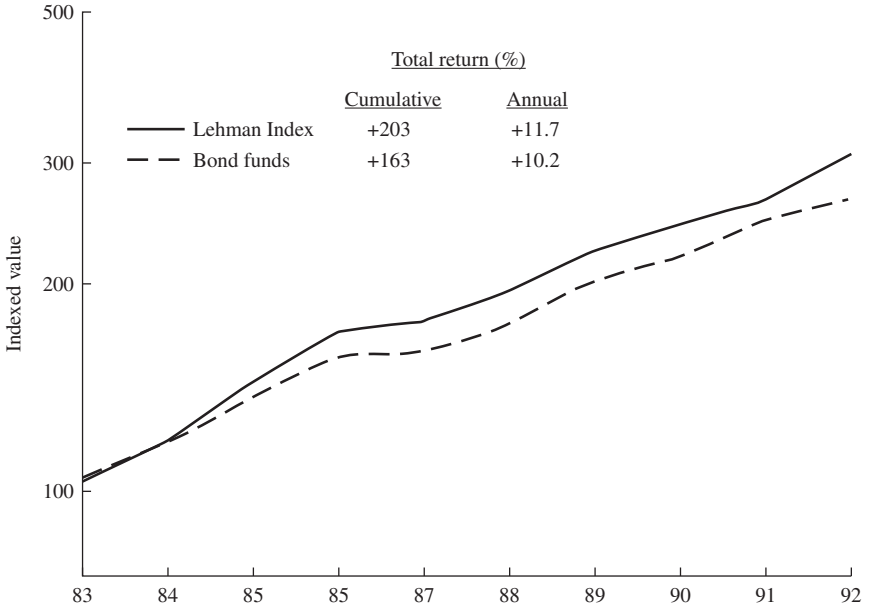


TABLE 9–3
Initial Investment of $10,000 *(December 31, 1982, to December 31, 1992)*

Program	*Rate of return*	*Final value*
Lehman Bond Index	+11.7%	$30,270
Average bond fund	+10.2	26,300

TABLE 10–1
Mutual Fund Cost Analysis *(Initial Investment of $10,000)*

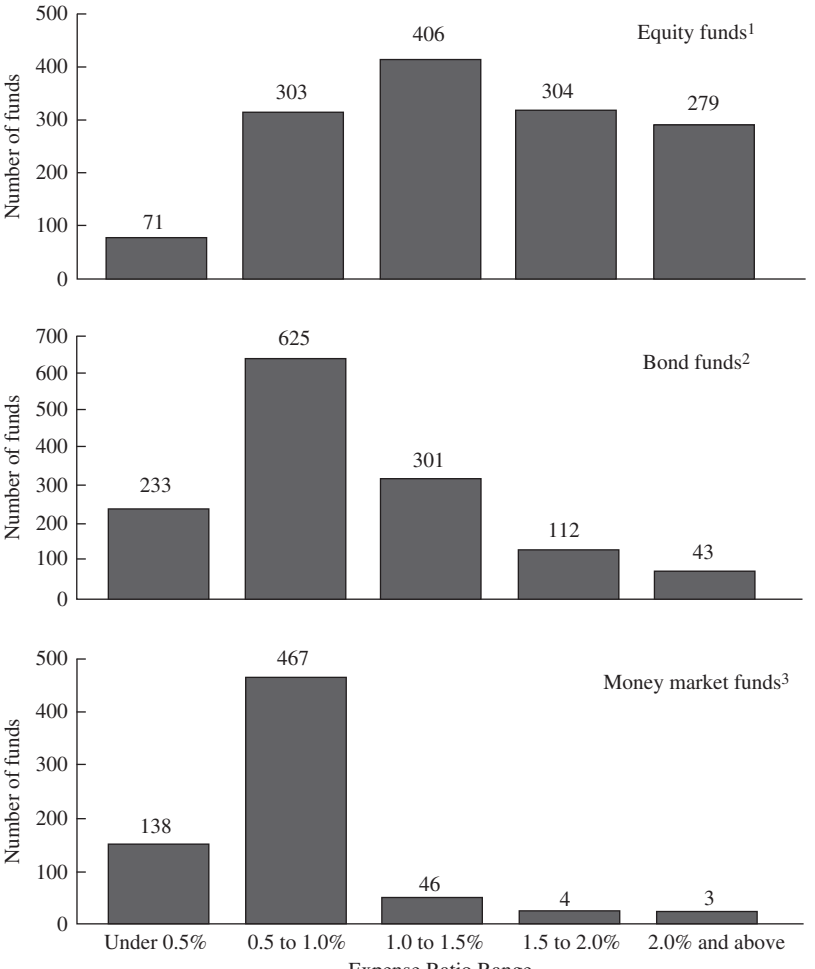
				Total Accumulations	
Type of fund	*Gross return*	*Expenses*	*Net return*	*One year*	*Ten years*
Money market fund					
Low cost	+5.0%	0.3%	+4.7%	$ 470	$ 5,800
High cost	+5.0	1.0	+4.0	400	4,800
Bond fund					
Low cost	+8.0%	0.5%	+7.5%	$ 750	$10,600
High cost	+8.0	2.0	+6.0	600	7,900
Stock fund					
Low cost	+12.0%	0.6%	+11.4%	$1,140	$19,400
High cost	+12.0	2.5	+9.5	950	14,800

TABLE 10–2
Contingent Deferred Sales Load

Year	*Annual 12b-1 fee*	*Cumulative 12b-1 fee*	*Applicable exit fee*	*Cumulative sales load*
1	1%	1%	5%	6%
2	1	2	4	6
3	1	3	3	6
4	1	4	2	6
5	1	5	1	6
6	1	6	0	6
7	1	7	0	7*
8	1	8	0	8*
9	1	9	0	9*
10	1	10	0	10*

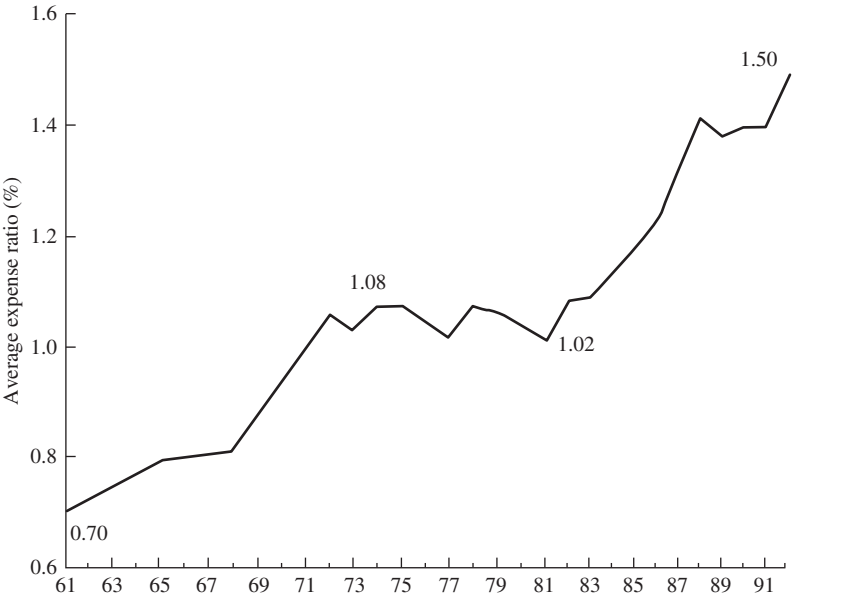
*ln some funds, the maximum load is limited to 6%.

FIGURE 10–1
Distribution of Expense Ratios *(1992)*



1. Includes asset allocation and equity-oriented balanced funds.
2. Includes income-oriented balanced funds.
3. Excludes institutional money market funds.

FIGURE 10–2
Equity Fund Expense Ratios *(1961–92)*



CAVEAT EMPTOR: *Another Kind of Expense Ratio*

There are in fact two methods of calculating mutual fund expense ratios. One, almost universally accepted and the method I use in this chapter, is the ratio of fund expenses to average fund *assets.* The other, almost universally ignored, is the ratio of fund expenses to fund gross *income.* The latter ratio simply shows the percentage of your income that goes to fund management fees and operating expenses. These examples of the ratio of fund expenses to gross income are based on 1992 data:

	Percent of Assets			*Percent of gross income consumed by expenses*
Fund category	*Gross income*	*Expenses*	*Net income*	
Stock funds	2.79%	1.50%	1.29%	54%
Balanced funds	5.35	1.27	4.08	24
Bond funds	8.75	1.07	7.68	12
Money market funds	3.48	0.62	2.86	18

Note that, even for the most income-oriented funds, expenses consume a substantial amount of your investment income. In this context, choosing between funds with high and low expense ratios makes an important difference in the amount of income you receive. This table shows the fund expense ratio analysis using the gross income yields shown above:

		Low Expenses			*Higher Expenses*			
Fund type	*Gross income*	*Expense ratio*	*Net income*	*Percent of income consumed*	*Expense ratio*	*Net income*	*Percent of income consumed*	*Increase in income in low-expense fund*
Stock	2.79%	0.70%	2.09%	25%	2.00%	0.79%	72%	+165%
Balanced	5.35	0.60	4.75	11	1.50	3.85	28	+23
Bond	8.75	0.50	8.25	6	1.40	7.35	16	+12
Money market	3.48	0.40	3.08	11	1.00	2.48	29	+24

Particularly if you depend on investment income to help meet your retirement expenses, the table poses the question: "Why should you relinquish 30% of your income when perfectly good alternatives exist at a cost that consumes barely more than 10% of your income?" It is a rational question that demands a rational answer.

FIGURE 10–3
Annual Costs of Mutual Fund Ownership *(Three-Year Holding Period Excludes Money Market Funds)*

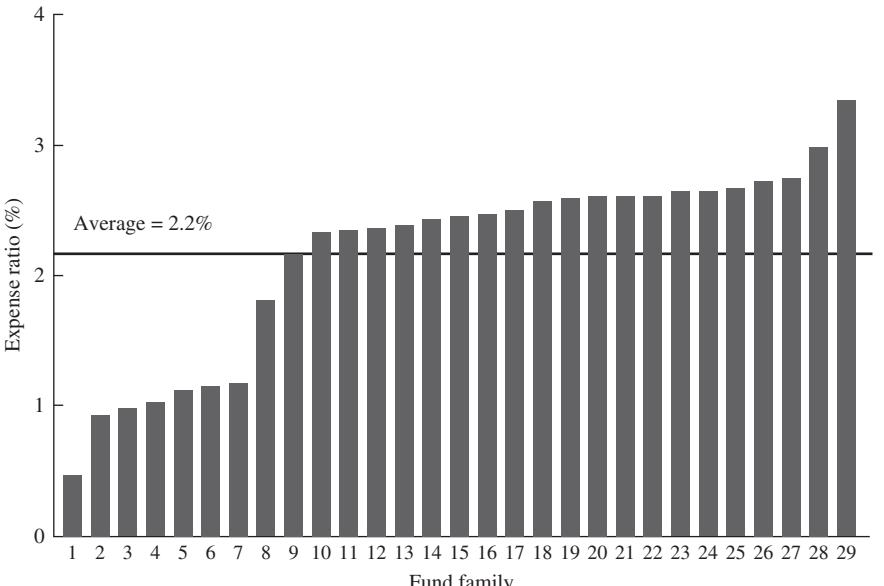


TABLE 11–1
Real After-Tax Returns *(1926–92)*

	Nominal return	*Tax impact*	*After-tax nominal return*	*Inflation impact*	*After-tax real return*
Common stocks	+10.3%	−1.1%	+9.2%	−3.1%	+6.1%
Long-term bonds	+ 4.8	−1.2	+3.6	−3.1	+0.5
Cash reserves	+ 3.7	−0.9	+2.8	−3.1	−0.3

TABLE 11–2
Impact of Federal Taxes on Stock and Bond Returns

		*Stocks** *Realization of Capital Gains*		
	Bonds	*Annually (high)†*	*Tenth year (low)†*	*At death (zero)†*
Pretax nominal return	+7.0%	+10.0%	+10.0%	+10.0%
Taxes on income	−2.3	−1.0	−1.0	−1.0
Taxes on capital gains	0.0	−2.0	−1.6	0.0
After-tax nominal return	+4.7%	+7.0%	+7.4%	+9.0%
Inflation rate	−3.0	−3.0	−3.0	−3.0
After-tax real return	+1.7%	+4.0%	+4.4%	+6.0%
Pretax real return	+4.0%	+7.0%	+7.0%	+7.0%
Taxes as percent of real return	58%	43%	36%	14%

*Dividend yield of 3%; capital growth of +7%. Table assumes a 33% marginal tax rate for income and 28% for capital gains.
†Rate of portfolio turnover.

TABLE 11–3
Final Value of Initial Investment of $10,000 *(Ten-year period)*

		*Stocks** *Realization of Capital Gains*		
	Bonds	*Annually (high)*†	*Tenth year (low)*†	*At death (zero)*†
Pretax nominal value	$19,670	$25,940	$25,940	$25,940
After-tax real value	11,840	14,800	15,380	17,910

*Same assumptions as Table 11–2.
†Rate of portfolio turnover.

TABLE 11–4
Impact of Taxes on Capital Returns *(Ten Years Ended December 31, 1992)*

	Fund A	*Fund B*	*Fund C*
Percent of gains realized	96%	41%	13%
A. Before taxes			
Initial investment	$10,000	$10,000	$10,000
Capital gains distributions	18,211	7,830	2,450
Unrealized capital gains	850	11,070	16,460
Increase in value	$19,061	$18,900	$18,900
Final before-tax value	$29,061	$28,900	$28,900
B. After taxes			
Initial investment	$10,000	$10,000	$10,000
Capital gains distributions	$15,834	$7,288	$2,411
Tax on distributions (28%)	−4,434	−2,041	−675
Unrealized capital gains	660	10,488	16,132
Increase in value	$12,060	$15,735	$17,868
Final after-tax value	$22,060	$25,735	$27,868
Rate of capital return			
Before taxes	+11.3%	+11.2%	+11.2%
After taxes	+ 8.2	+ 9.9	+10.8

TABLE 11–5
Impact of Taxes on Capital Returns *(Ten Years Ended December 31, 1992)*

	Fund A	*Fund B*	*Fund C*
Percent of gains realized	96%	41%	13%
Final after-tax value (before sale)	$22,060	$25,735	$27,868
Unrealized capital gains	660	10,488	16,132
Tax liability (28%)	−185	−2,936	−4,516
Final after-tax value (after sale)	$21,875	$22,799	$23,352
Rate of capital return	+8.1%	+8.6%	+8.9%

TABLE 11–6
Annual Portfolio Turnover of Common Stock Funds *(1992)**

Annual rate of portfolio turnover	*Number of funds*
Under 25%	114
25% to 50%	112
51% to 75%	85
76% to 100%	62
101% to 150%	61
More than 150%	61
Total funds	495

*Includes common stock funds with assets greater than $100 million.

TABLE 11–7
Mutual Fund Portfolio Turnover *(Ten Years Ended December 31, 1992)*

Level of turnover	*Annual portfolio turnover rate*	*Percent of Capital Return*	
		Unrealized	*Realized*
Low (under 25%)	16%	67%	33%
Below average (25%–50%)	36	53	47
Average (51%–100%)	66	22	78
Above average (more than 100%)	150	18	82

TABLE 11–8
Impact of Taxes on Total Returns *(10 Years Ended December 31, 1992)*

	Pretax total return	*After-tax total return*	*After-tax value of $10,000 initial investment*
Fund A	+12.2%	+11.1%	$28,580
Fund B	+12.3	+ 9.6	25,080

TABLE 11–9
Taxable versus Tax-Deferred Investment Programs *(Annual Investments of $5,000)*

Value at end of year	*Total Accumulations**		
	Taxable account	*Tax-deferred accounts*†	*Tax-deferred accounts*‡
10	$ 48,690	$ 58,800	$ 87,760
15	87,770	117,080	174,750
20	141,820	211,060	315,010
25	216,580	362,410	540,910
30	319,960	606,160	904,720

*Assumes +10% annual rate of return and a 33% tax rate applied to the annual investments in the taxable account and to its entire annual return.
†Net of taxes payable on withdrawal from tax-deferred account at the end of each period.
‡Assumes no withdrawal from tax-deferred account at the end of each period.

TABLE 11–10
Variable Annuity Fund versus Taxable Mutual Fund* *($50,000 Initial Investment)*

Value at end of year	*Taxable mutual fund*	*Tax-deferred variable annuity*†	*Tax-deferred variable annuity*‡
10	$ 89,800	$105,470	$ 87,170
15	120,340	153,190	119,140
20	161,270	222,490	165,570
25	216,120	323,150	233,010
30	289,620	469,340	330,960

*Assumes +10% average annual gross return, 33% tax rate, and annual expenses of 1% for the taxable fund and 2.25% for the variable annuity fund.
†Assumes no withdrawal from annuity at the end of each period.
‡Net of taxes payable on withdrawal from annuity at the end of each period.

TABLE 11–11
Variable Annuity Cost Comparison *($50,000 Initial Investment)**

Value at end of year	*Average-cost variable annuity*	*Low-cost variable annuity*
10	$105,470	$115,680
15	153,190	175,960
20	222,490	267,640
25	323,150	407,100
30	469,340	619,220

*Based on +10% annual return, reduced by costs of 2.25% and 1.25%, respectively. Assumes no withdrawals from either account.

TABLE 11–12
Tax Impact on Various Yields

Taxable yield	4.0%	5.0%	6.0%	7.0%	8.0%	9.0%	10.0%
Less federal taxes*	1.3	1.6	2.0	2.3	2.6	3.0	3.3
Required tax-exempt yield	2.7%	3.4%	4.0%	4.7%	5.4%	6.0%	6.7%

*Assumes 33% marginal tax rate.

TABLE 11–13
Impact of Higher Tax Rates on Tax-Exempt Yields

Marginal federal tax rate	*Tax-exempt yield*	*Equivalent taxable yield*
25%	6.0%	8.0%
30	6.0	8.6
35	6.0	9.2
40	6.0	10.0

TABLE 11–14
Impact of Taxes on Corporate and Treasury Instruments

	Taxable money market fund	*Taxable long-term bond fund*
Corporate obligation		
Pretax yield	4.0%	7.0%
Federal taxes (33%)	−1.3	−2.3
After-tax yield	2.7%	4.7%
State and local taxes*	−0.2	−0.3
After-tax yield	2.5%	4.4%
U.S. Treasury obligation		
Pretax yield	3.5%	6.5%
Federal taxes (33%)	−1.2	−2.1
After-tax yield	2.3%	4.4%

*Assumes a marginal state tax rate of 6%, net of the federal tax deduction for state and local taxes.

FIGURE 12–1
Basic Asset Allocation Model *(Stocks/Bonds)*

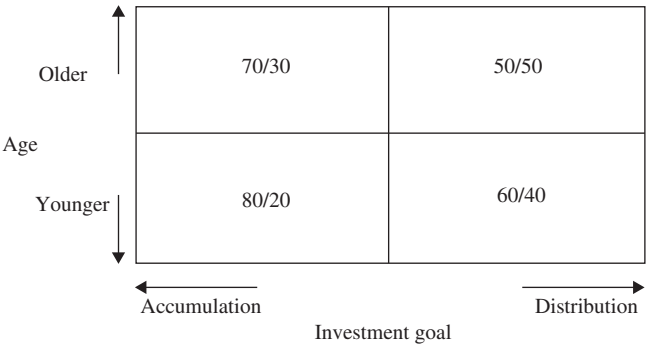


TABLE 12–1
50/50 Stock/Bond Allocation *(25 Years Ended December 31, 1992)**

	Accumulation Investor				*Distribution Investor*				
	Cumulative Total Value				*Cumulative Capital Value*				*Cumulative Income*
Time span	*Stocks (+10%)*	*Bonds (+7%)*	*Total portfolio*	*Stock ratio*	*Stocks (+7%)*	*Bonds (0)*	*Total portfolio*	*Stock ratio*	
Inception	$ 100	$100	$ 200	50%	$100	$100	$200	50%	$ 0
5 years	161	140	301	53	140	100	240	58	53
10 years	259	197	456	57	197	100	297	66	114
15 years	418	276	694	60	276	100	376	73	186
20 years	673	387	1,060	63	387	100	487	79	272
25 years	1,083	543	1,626	67	543	100	643	84	378

*No rebalancing of portfolio. Initial investment of $100 in both stocks and bonds.

TABLE 12–2
50/50 Initial Stock/Bond Allocation *(25 Years Ended December 31, 1992)*

	Portfolio Value at End of Each Period	
Time span	*Fixed-ratio program*	*Variable-ratio program*
Inception	$ 10,000	$10,000
5 years	13,570	13,540
10 years	15,830	15,410
15 years	25,990	24,850
20 years	52,040	49,950
25 years	100,590	97,910

Stock returns are based on the S&P 500 Index; bond returns are based on long-term U.S. government bonds. Initial investment of $10,000 in each program.

TABLE 12–3
Stock/Bond Allocation (%)

Basic allocation	*Maximum aggressive allocation*	*Maximum conservative allocation*
50/50	65/35	35/65
60/40	75/25	45/55
70/30	85/15	55/45
80/20	95/5	65/35

TABLE 12–4
Impact of a Changing Price-Dividend Ratio

Price Paid for $1 of Dividends		*Implied Percentage Change in Market Value*	
Initial	*25-year average*	*Instantaneous*	*Spread over 10 years*
$40*	$27	− 33%	− 3.9%
35	27	− 23	− 2.6
30	27	− 10	− 1.0
25	27	+ 8	+ 0.8
20	27	+ 35	+ 3.0
15	27	+ 80	+ 6.1
10*	27	+170	+10.4

*These extreme valuations were reached, respectively, only at the 1987 market high and the 1933 market low.

FIGURE 12–2
Forecast Returns versus Actual Returns—Stocks and Bonds

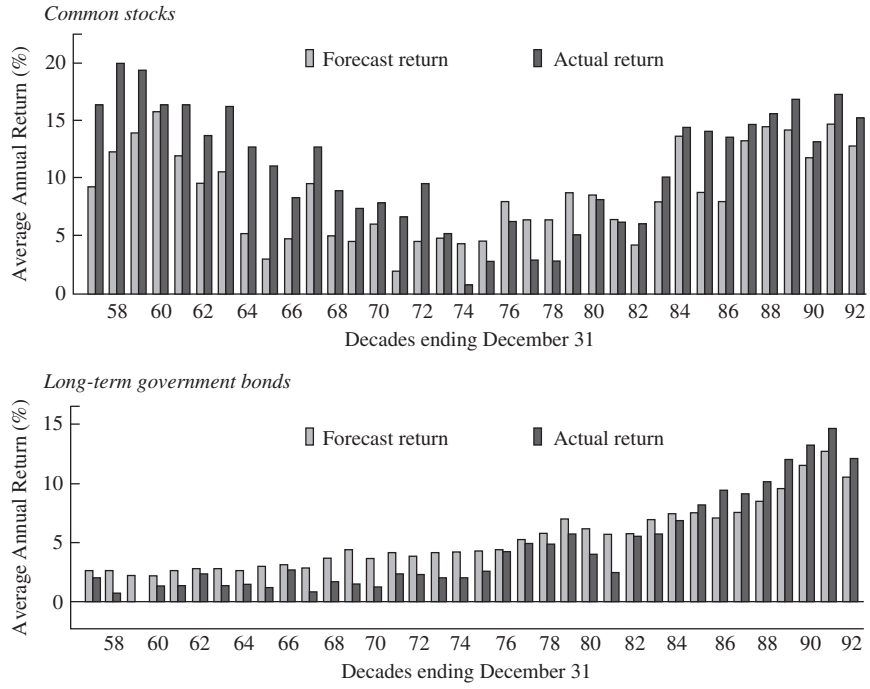


TABLE 12–5
Stock Returns *(Decades Ending 1935–92)*

Initial yield	*Chances of return greater than +10% over subsequent decade*
Less than 3.5%	1 in 16
3.5% to 4.5%	7 in 15
4.6% to 6.0%	13 in 17
More than 6.0%	6 in 10
Total	27 in 58*

*Out of 58 ten-year periods, 27 had average returns greater than +10%.

TABLE 12–6
Long-Term U.S. Government Bond Returns *(Decades Ending 1935–92)*

Future returns versus initial yield	*Chances of occurrence*
Within 1.5%	34 in 58
1.5% to 2.0%	13 in 58
2.1% to 2.5%	8 in 58
Greater than 2.5%	3 in 58

TABLE 12–7
The Relationship between Cost and Quality

	U.S. Treasury bond fund	*BBB quality bond fund*
Assumed gross yield	7.0%	8.2%
Assumed annual cost	0.3	2.3
Yield to investor	6.7%	5.9%

TABLE 12–8
Sample Asset Allocation Portfolios *(Stocks/Bonds)*

	Balanced Risk		*Risk Averse*
	Actively managed funds 50/50	*Index funds 50/50*	*Index funds 35/65*
Weighted portfolio return	+8.5%	+8.5%	+8.1%
Assumed cost	−2.0	−0.2	−0.2
Net portfolio return	+6.5%	+8.3%	+7.9%

Return of +10% on stocks and +7% on bonds.

TABLE 12–9
Sample Asset Allocation Portfolios *(Stocks/Bonds)*

	Balanced Risk		*Risk Averse*
	Actively managed funds 50/50	*Index funds 50/50*	*Index funds 35/65*
Weighted portfolio return	+9.5%	+9.5%	+8.8%
Assumed cost	−1.0	−0.2	−0.2
Net portfolio return	+8.5%	+9.3%	+8.6%

Return of +12% on stocks and +7% on bonds.

TABLE 13–1
Model Portfolio Allocations

	Type of Investor							
			Distribution		*Lump Sum*		*Institution*	
	Accumulation	*Transition*	*Earlier years*	*Later years*	*Growth-oriented*	*Income-oriented*	*Pension*	*Endowment*
Stock funds								
Growth	35%	15%	0%	0%	35%	15%	15%	10%
Value	30	30	25	15	20	25	15	25
Equity income	0	15	25	20	0	20	15	25
Specialty	15	5	0	0	15	0	15	0
Total stock funds	80%	65%	50%	35%	70%	60%	60%	60%
Bond funds								
Long term	10%	10%	20%	30%	20%	25%	20%	20%
Intermediate term	10	15	20	25	10	10	10	20
Short term	0	10	10	10	0	5	10	0
Total bond funds	20%	35%	50%	65%	30%	40%	40%	40%
Total portfolio	100%	100%	100%	100%	100%	100%	100%	100%

TABLE 13–2
Accumulating Investment Assets

Number of years	*Monthly investment required to accumulate $100,000*
30	$ 44
20	131
10	484
5	1,281

Assumes an annual return of +10%.

FIGURE 13–1
The Accumulation Investor

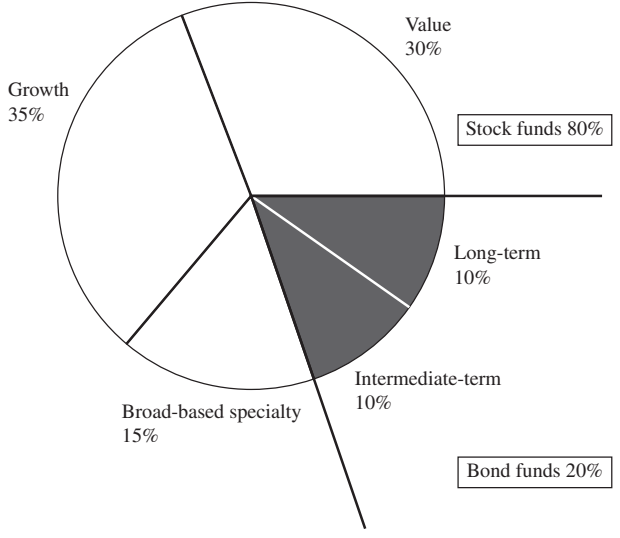


FIGURE 13–2
The Transition Investor

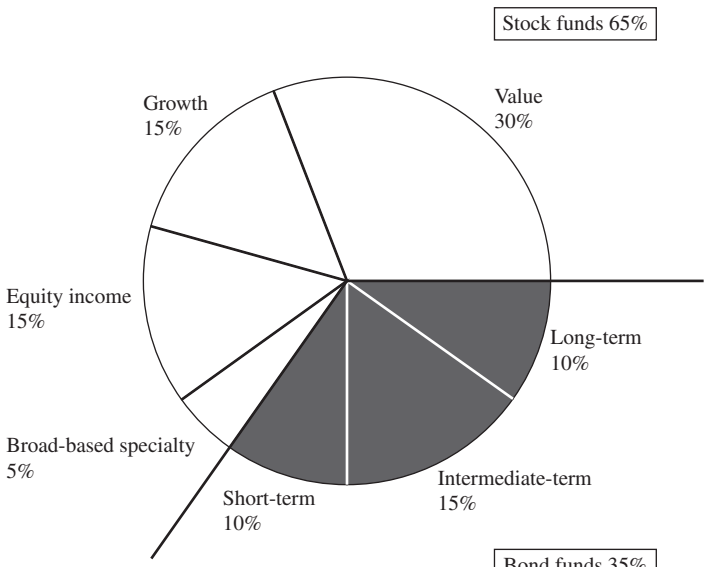


TABLE 13–3
The Impact of Inflation on an Investment Portfolio

Year	*Inflation-adjusted value*
Inception	$100,000
5	85,870
10	73,740
15	63,330
20	54,380
25	46,700

Assumes 7% income return and 3% rate of inflation. All distributions received in cash.

CAVEAT EMPTOR: *Looking for More Income?*

Despite logic and historical evidence, reasonable persons can disagree that the total returns achieved by a passive stock market index fund will outpace the total returns achieved by most traditional professional advisers. However, there can be no debate about the fact that, when risk is held constant, an index fund will provide a higher current income return, solely by reason of its lower cost. Similarly, a low-cost stock fund and a low-cost bond fund will provide higher income returns than their high-cost counterparts. The magnitude of the income differences may be large, as indicated by the examples in this table.

Impact of Costs on Income—Distribution Investor *(Early Retirement Years)*

	Portfolio allocation	*Assumed gross yield*	*Net income after annual expenses*	
			0.30%	*1.50%*
Value stock fund	25%	4.0%	3.7%	2.5%
Equity income fund	25	5.0	4.7	3.5
Long-term bond fund	20	7.0	6.7	5.5
Intermediate-term bond fund	20	6.0	5.7	4.5
Short-term bond fund	10	5.0	4.7	3.5
Total (weighted)	100%	5.4%	5.1%	3.9%

Given a choice between a yield of 5.1% or 3.9% in two substantially identical portfolios, any intelligent investor would make the sensible selection. For an investor with $100,000 of capital, opting for annual income of $5,100 rather than $3,900—an increase of more than 30%—without any increase whatsoever in risk exposure should not be a difficult decision. So for the distribution investor, the income-oriented lump-sum investor, and the endowment fund, it seems almost beyond argument that a significant portion of assets should be invested in stock funds and bond funds (including index funds) with minimal costs and no sales commissions.

FIGURE 13–3
The Distribution Investor

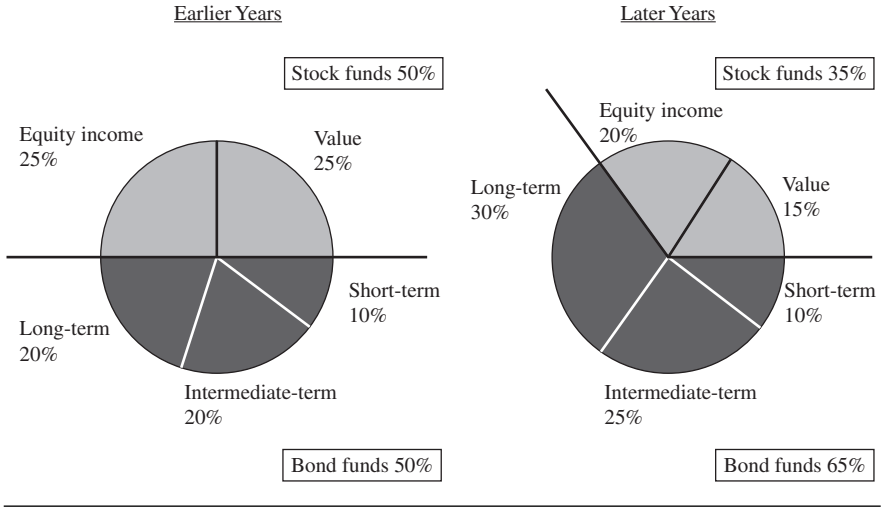
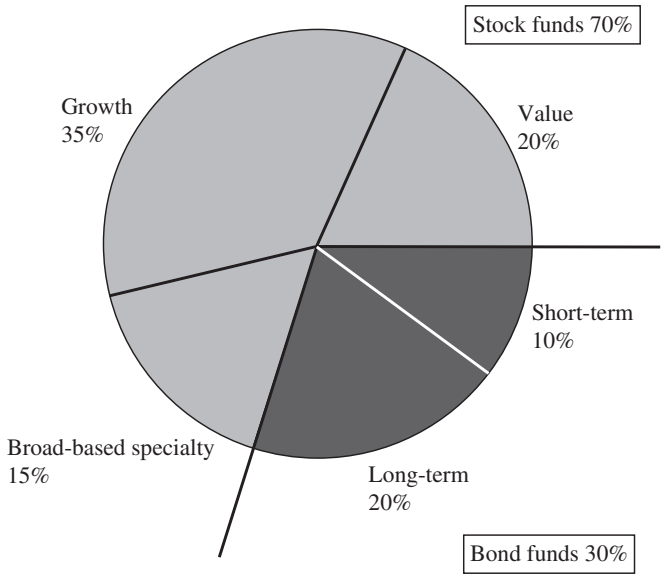
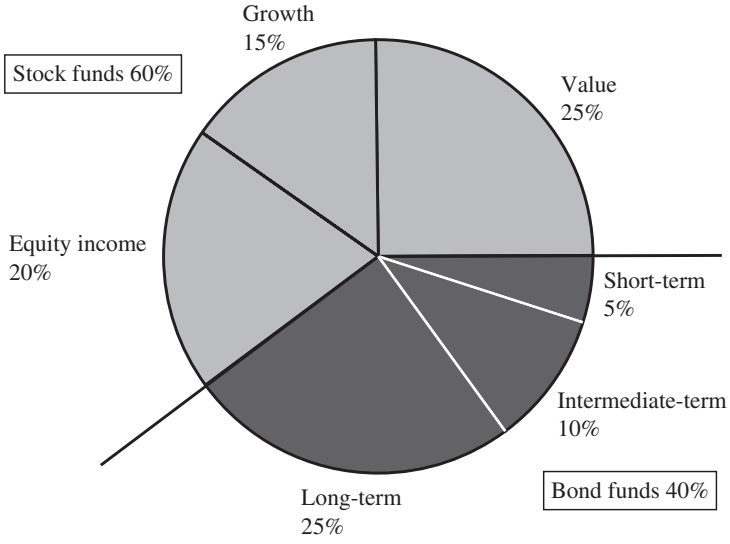


FIGURE 13–4
The Lump-Sum Investor

(a) *Growth-oriented*



(b) *Income-oriented*



CAVEAT EMPTOR: *Compared to What?*

It is conventional wisdom that an investor should *never* dip into principal. Broadly speaking, that is sound policy. Yet circumstances may arise under which you will need additional spendable resources. In my view, spending principal is often better than increasing the yield on the account. For example, assume that you hold a $100,000 portfolio and need an additional $1,000 cash during the coming year. Withdrawing it would simply reduce the capital value of your account to $99,000. On the other hand, increasing the portfolio yield to earn the additional $1,000, would require a significant change in the very nature of the investment portfolio, as this table shows.

Increasing Yield by Lowering Bond Quality

		Current		*Required*	
Asset	*Amount*	*Yield*	*Income*	*Yield*	*Income*
Bonds	$ 50,000	7.0%	$3,500	9.0%	$4,500
Stocks	50,000	3.0	1,500	3.0	1,500
Total	$100,000	5.0%	$5,000	6.0%	$6,000

For simplicity, I have assumed that the additional income is earned by changing the bond position only, increasing the yield from 7% to 9%. That would mean, essentially, liquidating an all-U.S. Treasury bond fund position and investing the proceeds in a portfolio equally divided between BBB and BB bond funds. Such a reduction in quality, especially for investors who can't afford to incur any credit risk, is beyond the bounds of prudence. So, compared to downgrading the quality of the entire portfolio, occasionally spending moderate amounts of principal makes sense.

FIGURE 13–5
The Pension Fund

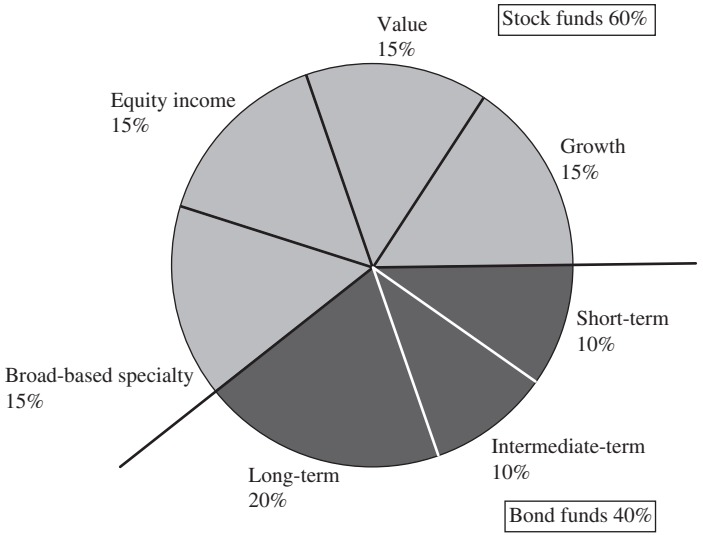


FIGURE 13–6
The Endowment Fund

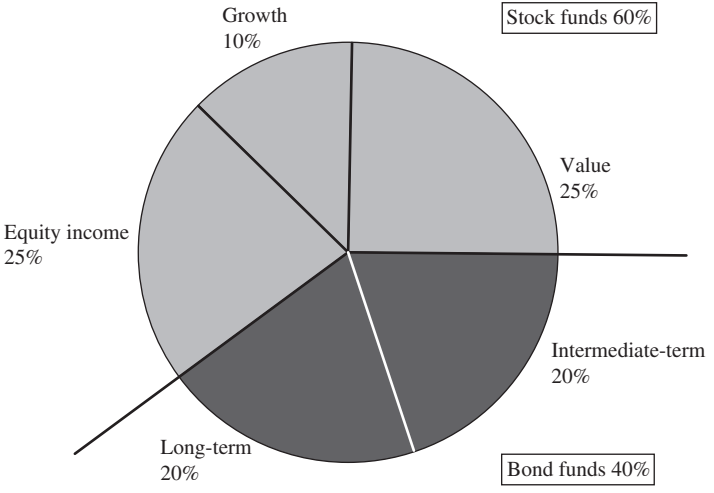


TABLE 13–4
Mutual Fund Gross Yields *(December 31, 1992)*

Stock Funds		*Bond Funds*	
Fund type	*Gross yield*	*Fund type*	*Gross yield*
Growth	2.3%	Long term	7.3%
Value	3.7	Intermediate term	6.7
Equity income	5.0	Short term	4.8
Specialty	1.5		

TABLE 14–1
Management Company Profit Margins

	Before fee increase	*After fee increase*
Management fees	$5,369,000	$7,055,000
Operating expenses	823,000	823,000
Operating profit	$4,546,000	$6,232,000
Profit margin	85%	88%

CAVEAT EMPTOR: *The What-If Portfolio*

In considering the division of economies of scale between mutual funds and their management companies, let's contrast the investment returns on the stocks of mutual fund management companies with those of the funds that they manage. It has been much more profitable to own shares in the managers than to own shares in their funds. One outstanding mutual fund manager, describing "one of my favorite what-if portfolios," recently wrote that "in a single year (1989), if you had divided your money equally among eight (management company) stocks, you would have outperformed 99% of the funds that these companies promote." The long-run record appears far more imposing than that. This table compares the results of investing $10,000, equally weighted, in the shares of the two largest publicly traded management companies during the decade ended December 31, 1992, with the returns of their equity funds and the unmanaged Standard & Poor's 500 Stock Index.

Total Return *(Ten Years Ended December 31, 1992)*

	Final value of $10,000 investment	*Annual rate of return*
Management companies	$1,590,600	+65.9%
Equity funds managed	35,500	+13.6
S&P 500 Index	44,800	+16.2

At least over this time period, during which the mutual fund industry grew so substantially, the profitability of these advisers has been completely disproportionate to the returns of the funds they manage. Ironically, these two managers have enjoyed this enormous growth despite the fact that the aggregate performance of their managed equity funds fell far short of the performance of the unmanaged S&P 500 Index. (Incidentally, I am not recommending investments in management company stocks, in part because I see a new era of intense price competition ahead.)