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## Total Shareholder Cost of Mutual Funds: An Update

Investors incur fees and expenses when purchasing and holding mutual funds. These costs include expenses that funds incur when providing portfolio management, fund administration, and other services to shareholders. Fund costs also may include sales charges that compensate investment professionals for investment advice, assistance, or services provided to fund shareholders. All of these fees and expenses must be considered to properly understand and measure the total cost of investing in mutual funds.

This issue of *Fundamentals* updates previous research published by the Investment Company Institute on the fees and expenses incurred by investors who purchase mutual funds.<sup>1</sup> Three earlier studies found that the total fees and expenses that investors paid to fund companies when purchasing shares—called total shareholder cost—declined substantially from 1980 to 1998.<sup>2</sup> The decline reflected both direct actions taken by fund companies and shifts to lower cost funds by mutual fund buyers.

This update finds that the average total cost that investors incurred when purchasing mutual funds continued to decline between 1998 and

2001 (Figure 1). During this period, the total cost of investing in mutual fund shares declined seven basis points for equity funds, 18 basis points for bond funds, and six basis points for money funds.

### Definition and Measurement of Total Shareholder Cost

Total shareholder cost is the concept used to assess the actual cost investors incur when purchasing a mutual fund. This measure incorporates all of the major fees and expenses that a mutual fund investor might pay, including annual fees for portfolio management, fund administration, shareholder services, and distribution (under what is known as a Rule 12b-1 plan<sup>3</sup>), as well as any sales load paid by the investor. The sales load is a one-time payment, whereas fund fees are typically ongoing. Thus, to measure accurately all of a mutual fund investor's relevant costs, the sales load must be converted into the equivalent of an annual payment paid by the investor over the life of his or her investment.

As explained in greater detail in our earlier studies, total shareholder cost for a fund is the sum of fund expenses and the converted, or

<sup>1</sup> See John D. Rea and Brian K. Reid, "Trends in the Ownership Cost of Equity Mutual Funds," *Perspective*, Vol. 4, No. 3, November 1998; John D. Rea and Brian K. Reid, "Total Shareholder Cost of Bond and Money Market Mutual Funds," *Perspective*, Vol. 5, No. 3, March 1999; and John D. Rea, Brian K. Reid, and Travis Lee, "Mutual Fund Costs, 1980–1998," *Perspective*, Vol. 5, No. 4, September 1999. All issues of *Perspective* are available on the Institute's policy website at [www.ici.org](http://www.ici.org).

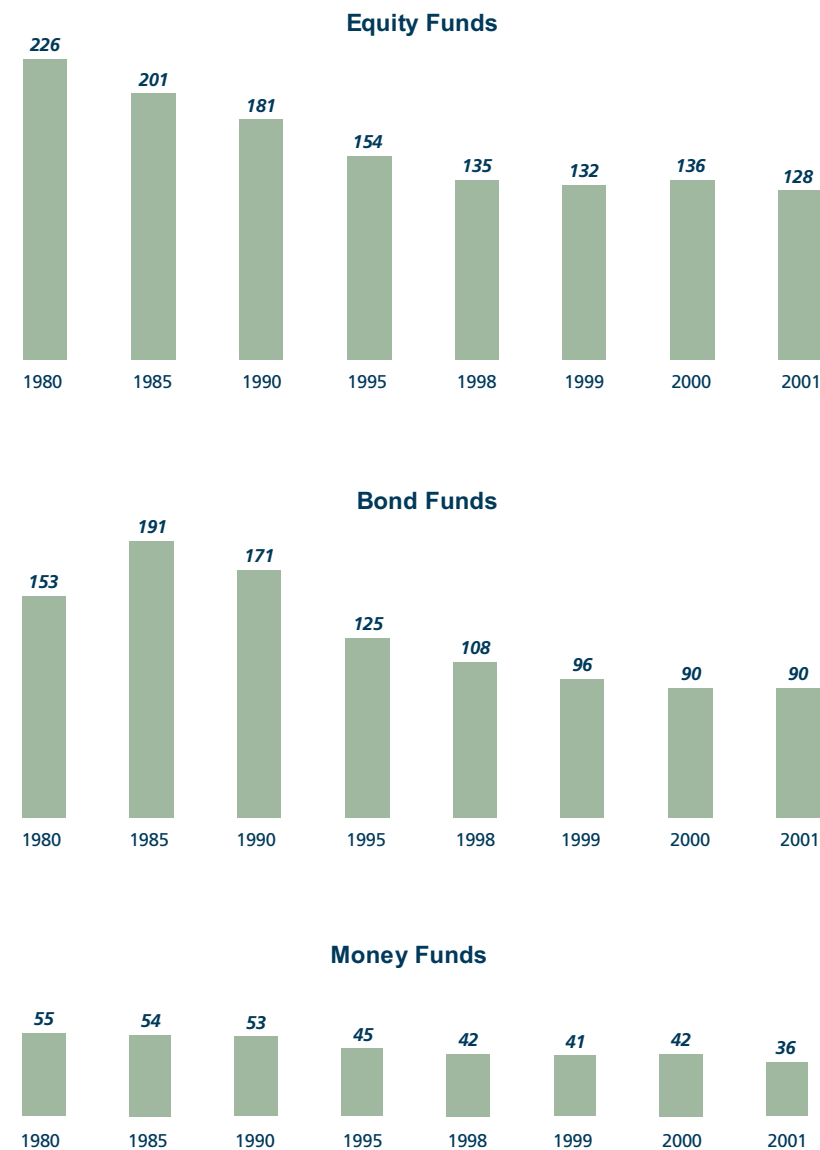
<sup>2</sup> Total shareholder cost is similar to the cost concept used by Erik R. Sirri and Peter Tufano in "Competition and Change in the Mutual Fund Industry," *Financial Services: Perspectives and Challenges*, ed. Samuel L. Hayes, III. Boston: Harvard Business School Press, 1993, pp. 199–202.

<sup>3</sup> For a discussion of 12b-1 fees and their uses by mutual funds see "Use of Rule 12b-1 Fees by Mutual Funds in 1999," *Fundamentals*, Vol. 9, No. 1, April 2000. All issues of *Fundamentals* are available on the Institute's policy website at [www.ici.org](http://www.ici.org).

figure 1

**Total Shareholder Cost for Mutual Funds, Selected Years\***

(basis points)



\*Sales-weighted average of total shareholder cost for individual funds.

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annuitized, sales load expressed as a percentage of dollars invested (measured in basis points). The calculation of total shareholder cost is based on the same considerations that underlie the figures the U.S. Securities and Exchange Commission (SEC) requires in the fee table which must appear at the front of all mutual fund prospectuses.

Total shareholder cost is intended to be a measure of the purchase price of a fund. A sales-weighted average is therefore used to measure the total shareholder cost of a group of funds. This sales-weighted average of total shareholder cost is calculated by weighting the shareholder cost of each fund by the fund's portion of total new fund sales in any given year. As a result, the funds that are in greatest demand in a given year, and that therefore receive the largest proportion of new sales, are weighted more heavily than funds that garner a smaller share of new investor dollars. The sales-weighted average total shareholder cost measures the average cost of a dollar invested in a group of funds during the year when the fund purchases were made.

**Total Shareholder Cost of Equity Funds**

The total shareholder cost of purchasing equity mutual funds fell seven basis points, or about 5 percent, between 1998 and 2001 to 128 basis points per year (Figure 2).<sup>4</sup> All told, from 1980 to 2001, total shareholder cost at equity funds fell 98 basis points, a reduction of 43 percent.

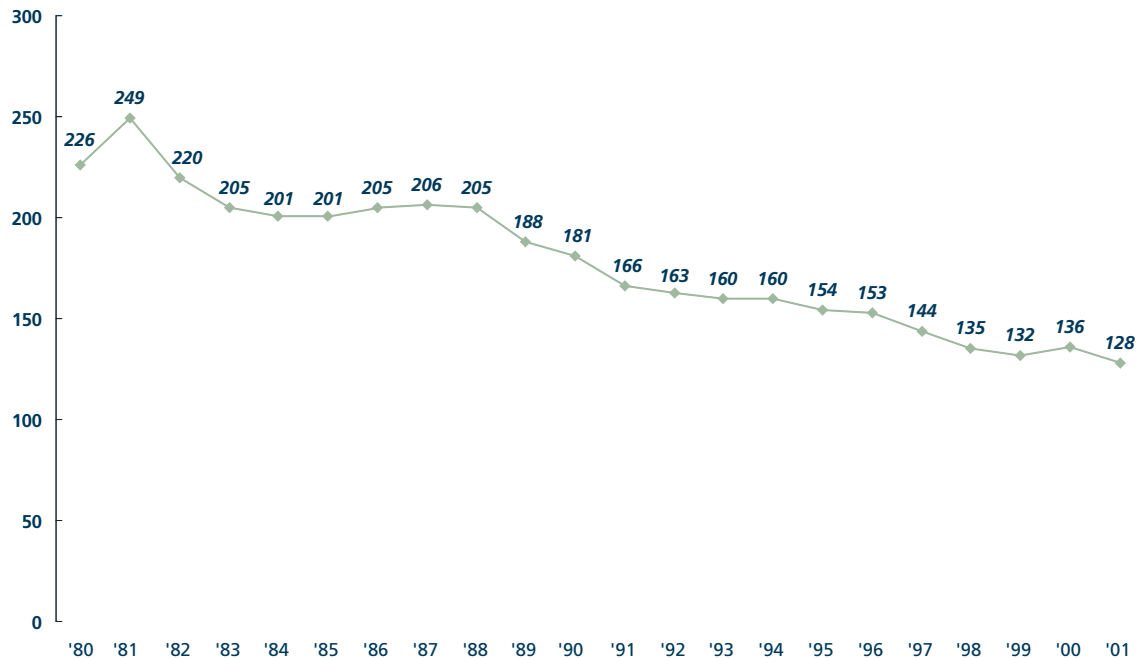
The decline in total shareholder cost at equity funds from 1998 to 2001 was the net result of two trends among equity funds during that period. As during most of the past two decades, a significant contributor to the decline was a reduction

<sup>4</sup> Equity funds include balanced and other hybrid funds.

figure 2

### Total Shareholder Cost for Equity Funds, 1980–2001

(basis points)



**note:** Total shareholder cost is measured as a sales-weighted average.

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figure 3

### Components of Total Shareholder Cost for Equity, Bond, and Money Funds, Selected Years

(basis points)

	Equity Funds					Bond Funds					Money Funds <sup>1</sup>				
	1980	1998	1999	2000	2001	1980	1998	1999	2000	2001	1980	1998	1999	2000	2001
<b>Total Shareholder Cost</b>	226	135	132	136	128	153	108	96	90	90	55	42	41	42	36
Operating Expense <sup>2</sup>	77	83	84	90	88	71	62	58	60	57	55	37	36	36	32
Distribution Cost	149	52	48	46	40	82	46	38	30	33	-	-	-	-	-
Memo: 12b-1 Fee	0	22	21	22	20	0	19	16	13	17	0	5	5	6	4

<sup>1</sup> Total shareholder cost for money market funds has been computed without including the annuitized sales load. Few money funds charge sales loads and those that do typically are part of a package of bond and equity load funds. The package of funds is designed to allow the investor to transfer between funds without incurring any additional sales charge beyond that associated with the initial purchase. In this arrangement, few investors are likely to purchase a money fund with a load as a stand-alone or long-term investment. Inasmuch as the definition of total shareholder cost entails the expected cost over the holding period, it is unlikely that an investor initially purchasing a money fund would regard the sales load as part of the expected cost of purchasing the money fund. For this reason, the annuitized sales load is not included in the measurement of total shareholder cost. As a practical matter, the quantitative effect of excluding the annuitized sales load is negligible.

<sup>2</sup> Operating expenses include expenses used to support investment management, fund administration, and shareholder servicing.

**note:** Total shareholder cost, distribution cost, operating expense, and 12b-1 fee are all measured as sales-weighted average.

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in “distribution costs,” charges that are used primarily to compensate sales professionals for advice and service. Distribution costs for investors who purchased equity funds fell 12 basis points between 1998 and 2001 (Figure 3), more than offsetting a slight rise in the expenses of mutual funds which support investment management, fund administration, and shareholder servicing (“operating expenses”).<sup>5</sup>

Distribution costs for equity funds declined for two distinct reasons: an increase in sales of no-load

funds and the changing character of sales of load funds.

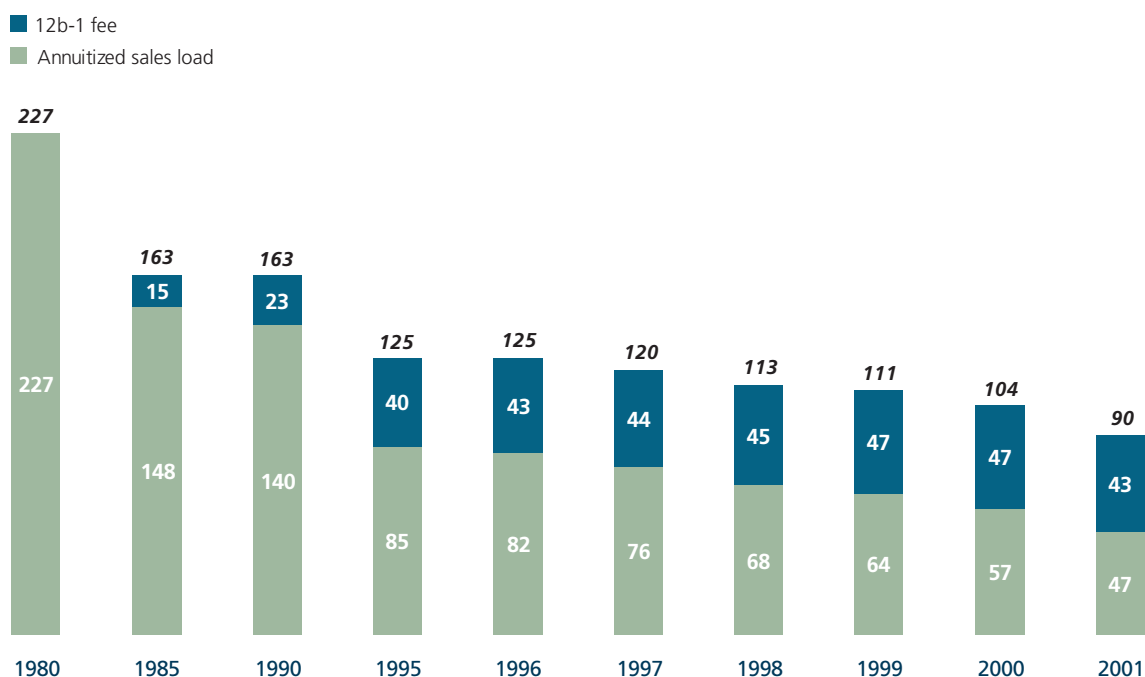
**No-load funds.** No-load equity funds, by definition, have minimal distribution costs.<sup>6</sup> The share of new sales attributable to no-load funds rose from 56 percent in 1998 to 58 percent in 2001, accounting for one basis point of the reduction in the average distribution costs for equity funds.<sup>7</sup>

**Load funds.** By 2001, the cost of distributing equity load funds had fallen to 90 basis points

figure 4

### Distribution Cost for Equity Load Funds,\* Selected Years

(basis points)



\*Sales-weighted average of distribution charges, 12b-1 fee, and annuitized load for all equity load funds

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<sup>5</sup> Operating expenses include all fees that a fund incurs in its operations (including the management fee and fees paid to the transfer agent, fund administrator, and fund custodian), but exclude 12b-1 fees which are included in distribution charges.

<sup>6</sup> A no-load fund is defined as a fund with neither a sales load nor a 12b-1 fee in excess of 25 basis points. Conversely, a load fund is defined as a fund that has either a sales load or a 12b-1 fee greater than 25 basis points, or both. Sales of no-load shares are made to a broad range of investors. Investors who do not need the advice and assistance of an investment professional can purchase no-load funds directly from funds typically thought of as “direct-marketed.” However, investors sometimes purchase shares of direct-marketed funds using the advice and assistance of financial planners or investment advisers who charge shareholders directly for their services. Investors who opt for these types of plans may purchase shares in directly marketed funds (those funds traditionally thought of as “no-load”). Similarly, funds that are traditionally thought of as “load funds” sometimes have special share classes that incur no load and a 12b-1 fee of 25 basis points or less for investors who purchase mutual funds through employer-sponsored retirement plans. Sales in these share classes are also considered to be “no-load.”

<sup>7</sup> The rise in the share of sales of no-load funds accounted for two of the seven basis point decline in the total shareholder cost of all equity funds.

(Figure 4), a decline of 23 basis points from 1998.<sup>8</sup> During this period, an increased proportion of load fund sales resulted from large purchases—such as those through 401(k) plans, wrap plans, and rollovers of 401(k) balances into IRA accounts—where loads were reduced or waived. From 1998 to 2001, the average maximum sales load charged by mutual funds was essentially unchanged (Figure 5). Nonetheless, owing to the relatively high proportion of sales on which loads were reduced or waived, the average of actual loads paid by investors on new sales of front-load mutual funds declined. In total, from 1980 to 2001 the decline in maximum loads and average actual loads paid reduced the distribution costs of equity load funds by 137 basis points.

The fall in distribution costs would have produced a greater decline in the total shareholder cost of equity funds but for a shift in investors’

figure 5

**Average Actual and Maximum Front-End Sales Load, Selected Years**

(percent)

Year	Average Actual Cost	Average Maximum Load*
1960	7.0	N/A
1970	5.7	N/A
1982	4.9	7.0
1989	4.4	5.5
1991	3.6	4.9
1997	2.1	5.1
1998	1.8	5.1
1999	1.8	5.2
2000	1.5	5.3
2001	1.1	5.2

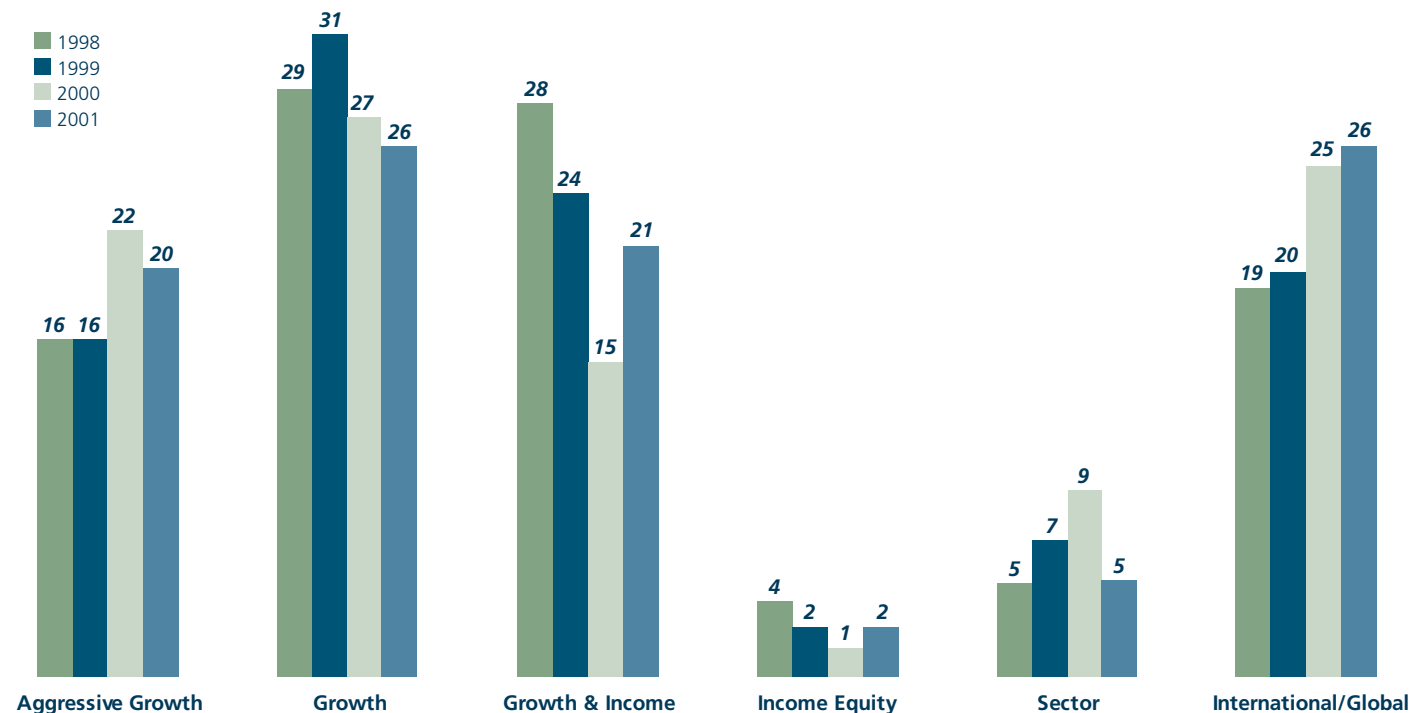
\*Sales-weighted average of maximum loads for a sample of stock and bond funds with maximum front-end sales loads greater than 3 percent. The maximum front-end load is the highest load the fund is allowed to charge as set forth in its prospectus.

sources: Maximum loads: Investment Company Institute. Actual loads: Investment Company Institute, 1960, 1970, 1982, 1989, 1991; Strategic Insight Mutual Fund Research and Consulting LLC, 1997–2001.

figure 6

**Share of New Sales of Equity Funds by Investment Objective, 1998–2001**

(percent)



note: Figures are gross new sales of fund shares as a percent of gross new sales of all equity funds. Years may not sum to 100 due to rounding.

source: Investment Company Institute

<sup>8</sup> According to NASD rules, funds may use up to 25 basis points of the 12b-1 fee to compensate third-party broker-dealers for providing record-keeping, reporting, and other services to shareholders. Not all funds account for service fees under a Rule 12b-1 plan. The service fees of those funds which do not are excluded from “distribution charges” in this study. As an empirical matter, treating these service fees as distribution charges would have little effect on estimated distribution costs. For example, in 2001, the cost of distributing equity load funds would have been one basis point higher than reported in Figure 4 had these service fees been included as distribution charges.

preferences toward aggressive growth and international/global funds (Figure 6). Shareholder demand for these funds rose markedly from 1998 to 2001. As a rule, funds in these categories tend to have higher expense ratios than most other types of equity funds. In part, this reflects the higher research costs associated with identifying and evaluating eligible securities in these categories. Also, costs for providing securities custody are likely higher than average for international/global funds. Finally, these types of funds tend to be smaller, with fewer assets under management than other equity funds.<sup>9</sup> Generally speaking, larger funds have lower expense ratios because of economies of scale.<sup>10</sup> As a result, the increased

demand for aggressive growth and international/global funds raised the average operating expenses of equity funds between 1998 and 2001.

Economies of scale may have worked in another dimension to moderate declines in total shareholder cost during 2000 and 2001. The fall in the stock market over that period led to a shrinkage in the assets of many equity funds. For such funds, decreases in assets could lead to higher expense ratios partly because relatively fixed costs such as accounting, registration, and directors' fees must be spread over a smaller asset base. In addition, for those funds with an advisory fee schedule that falls with rising assets, a drop in assets could push fees back up the schedule to higher levels. Given

figure 7

### Total Shareholder Cost for Bond Funds, 1980–2001

(basis points)



**note:** Total shareholder cost is measured as a sales-weighted average.

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<sup>9</sup> Equity funds whose investment objective is aggressive growth or international/global are about half the size of all other funds. For instance, in 2001, such funds had average assets of \$500 million, compared to \$900 million for all other funds.

<sup>10</sup> Economies of scale among equity mutual funds are documented, for instance, in John D. Rea and Brian K. Reid, "Trends in the Ownership Cost of Equity Mutual Funds," *Perspective*, Vol. 4, No. 3, November 1998.

all else, these two effects would have tended to put upward pressure on operating expense ratios, thus moderating the fall in total shareholder cost.

### Total Shareholder Cost of Bond Funds

The total shareholder cost of bond funds declined 18 basis points, or 17 percent, from 1998 to 2001 (Figure 7), continuing a downward trend that began in the mid 1980s.<sup>11</sup> All told, from 1980 to 2001, the total shareholder cost of bond funds declined 63 basis points, a decrease of 41 percent.

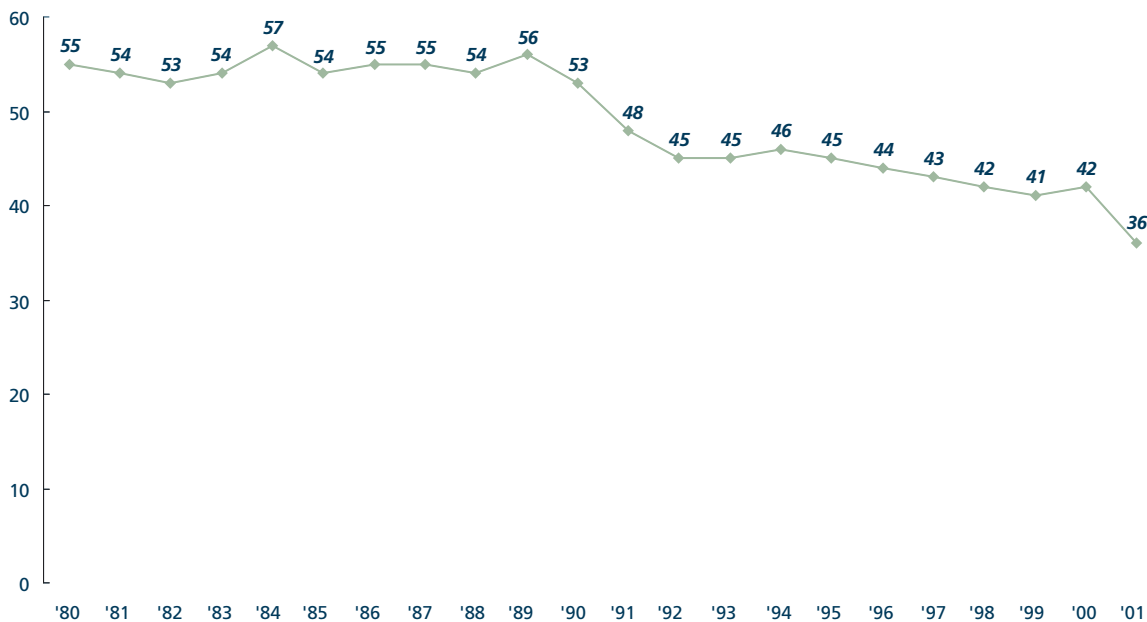
The fall in total shareholder cost of bond funds reflected declines in both distribution costs and operating expenses. The average cost that investors

paid for distribution fell 13 basis points between 1998 and 2001 (Figure 3). A portion of this decline was attributable to an increase in sales of no-load funds and no-load share classes. Sales of no-load funds and no-load share classes increased from 59 percent of all bond fund sales in 1998 to 64 percent in 2001. This change accounted for four of the 13 basis point decline in distribution costs. In addition, distribution costs for bond funds with sales loads fell throughout the three-year period, accounting for the remaining nine basis points of the drop in distribution costs. Bond load funds, like equity load funds, experienced an increase in the sales of shares for which loads were reduced or waived.

figure 8

### Total Shareholder Cost for Money Funds, 1980–2001

(basis points)



**note:** Total shareholder cost is measured as a sales-weighted average.

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<sup>11</sup> During the first half of the 1980s, total shareholder cost of bond funds rose as investors, seeking the higher returns available in the bond market brought about by falling interest rates, made heavy purchases of bond funds with loads. Load funds typically have higher total shareholder costs than no-load funds, which, in combination with heavy sales of bond load funds, contributed to a rise in total shareholder cost of bond funds in the first half of the 1980s.

In contrast with equity funds, investors' changing tastes for certain types of bond funds contributed to a decline in total shareholder cost by pushing operating expenses down. The popularity of high-yield funds, which on average have higher expenses than many other types of bond funds, diminished somewhat during the period in favor of lower-cost bond fund categories. This development helped to bring about a five basis point decline in the average operating expenses of bond funds (Figure 3).

### **Total Shareholder Cost of Money Funds**

Total shareholder cost at money funds fell six basis points between 1998 and 2001, all of which occurred in 2001 (Figure 8). Total shareholder cost fell one basis point for retail money funds and rose one basis point for institutional money funds.

The decline in the total shareholder cost for all money funds owed to a sharp increase in sales of

the lower-cost institutional money funds. Sales of these funds tend to rise when short-term interest rates decline, as they did in the U.S. in 2001.<sup>12</sup> In part because they typically have far fewer accounts with much larger average account balances, the expense ratios of institutional money funds are lower than those of retail money funds. For example, in 2001, the median institutional money fund had an average account balance of about \$1.4 million versus roughly \$23,000 for a retail money fund. Large account balances help to keep expense ratios low because some kinds of charges, such as transfer agent fees, are assessed at a fixed dollar amount per account. Those fixed dollar amounts, when spread over much larger account balances, result in a lower cost per dollar of fund assets—in other words, a lower expense ratio.

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<sup>12</sup> The share of money fund sales going to institutional funds jumped from 60 percent in 1998 to 73 percent in 2001. Short-term interest rates fell in 2001 as the Federal Reserve loosened monetary policy. In a declining interest rate environment, institutional money funds typically experience inflows because money funds' yields lag yields on direct investments in money market instruments such as Treasury bills, repurchase agreements, and commercial paper. The institutional investors who use institutional money funds tend to be very sensitive to small changes in yield, so that modest changes in short-term interest rates can produce large flows to those funds.