Investment Company Institute
PERSPECTIVE

Volume 2, Number 2 March 1996

MUTUAL FUND SHAREHOLDER ACTIVITY DURING U.S. STOCK MARKET CYCLES, 1944-95

*by John Rea and Richard Marcis**

Summary

Do stock mutual fund shareholders run when markets sour? Despite a long history of speculation about the response of shareholders to sudden, sharp declines in stock prices, there is scant historical analysis of shareholder behavior. To help fill this void, this paper examines the past fifty years for evidence of shareholder flights from stock mutual funds in response to market downturns. Key findings of the study are summarized below.

- In none of the stock market breaks and sharp declines in equity prices have stock fund owners liquidated shares en masse. Even the October 29, 1987 market break failed to trigger substantial outflows from stock funds: An estimated 4½ percent of stock fund assets were redeemed over the last half of October, and the outflow moderated substantially thereafter. Moreover, only an estimated 5 percent of stock fund owners liquidated shares in the six weeks after the break.
- This finding does not mean that shareholders are insensitive to stock price movements. Their response, however, tends to be spread over time. For example, over the course of the typical cycle in stock prices, the net flow of new cash to stock funds (sales less redemptions, expressed as a percent of assets) generally increased when stock prices rose and

*Research Department, Investment Company Institute. Research assistance provided by Srinivas Pulavarti and Jianguo Shang.

INVESTMENT COMPANY INSTITUTE

Perspective is a series of occasional papers published by the Investment Company Institute, the national association of the American investment company industry.

decreased when stock prices declined. This pattern primarily results from adjustments in the pace of share purchase by stock fund investors rather than in the pace of share redemptions.

- Stock fund investors also have been sensitive to long-run trends in equity returns. Stock funds generally experienced inflows throughout the 1944-70 and 1982-95 periods when equity returns were relatively high, and they generally experienced outflows throughout the 1971-82 period when equity returns were relatively low.
- The lack of massive redemptions by stock fund investors during sharp and sudden market sell-offs is consistent with other Investment Company Institute research indicating that stock fund shareholders generally are experienced investors, have long-term investment objectives and horizons, and have a basic understanding of investment risk.

Stock Market Cycles

To determine the response of mutual fund shareholders to declines in stock prices, movements in the net flow[1] of cash to stock funds were analyzed during stock market cycles since the end of World War II. The analysis was confined to stock funds and did not include either money market funds or bond and income funds. During the period studied, the stock market experienced 14 major cycles, and the mutual fund industry grew from 68 funds with $653 million in assets at the end of 1943 to more than 5,700 funds with over $2.8 trillion in assets at the end of 1995. In 1943, 67 of the 68 funds were stock funds; in 1995, equity funds numbered more than 2,200 with assets exceeding $1.3 trillion.

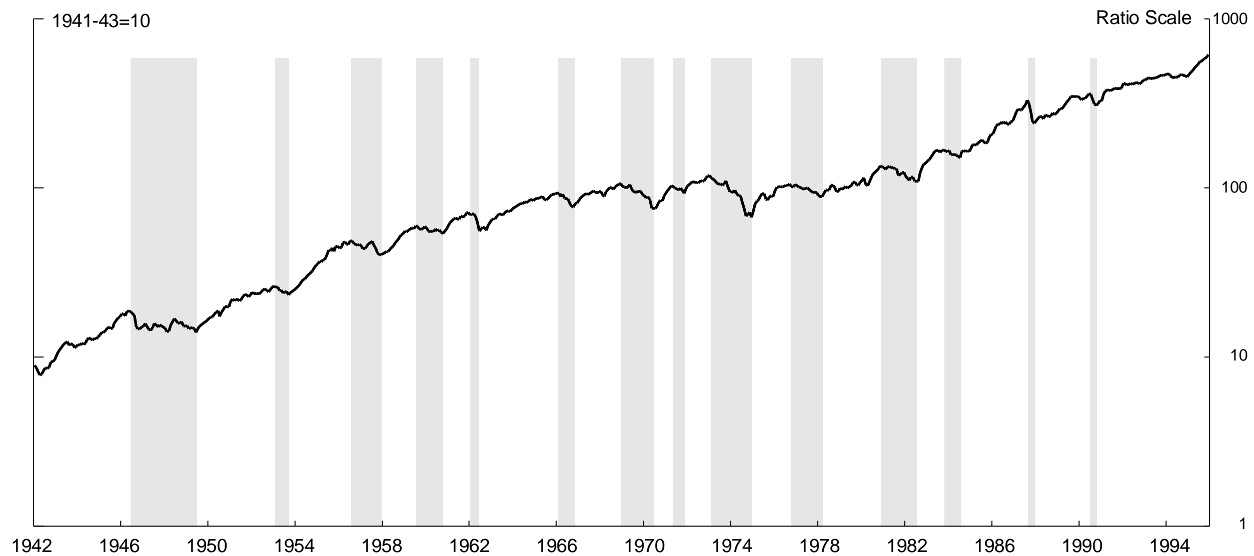
Figure 1 shows the 14 market cycles since the end of World War II, as measured by peaks and troughs in the monthly average of Standard and Poor's (S&P) 500 stock price index.[2] A peak in the S&P 500 index is identified as a cyclical high that is followed either by a three- or four- month period over which the index declined at least 20 percent or by a period of five or more months over which the index declined at least 9 percent. The cyclical low or trough marks the end of the downturn from which the index begins a sustained increase.

---

[1] Net flow is the difference between sales and redemptions of shares in stock funds; a negative value indicates a movement of cash by shareholders from stock funds to other assets.

[2] The use of monthly averages conforms to the method used by the Bureau of Economic Analysis in dating stock market cycles. (See *Business Condition Digest*, Dec. 1989.) Monthly averages also smooth out transitory movements in the index that would affect daily, weekly, or month-end data.

FIGURE 1
S&P 500 Stock Price
(monthly average of daily index, 1942-95)



Source: Standard and Poor's Corporation
Note: Shaded regions represent contraction phase of stock market cycle.

As shown in Figure 2, the characteristics of stock market cycles vary considerably. Eight cycles were associated with cycles in general business conditions, as identified by the National Bureau of Economic Research. (Only the mild 1980 recession failed to produce a significant decline in stock prices.) For these eight cycles, the peak in the S&P 500 index, on average, led the peak in business activity by 11 months, and the trough in the index, on average, led the trough in business activity by 4.5 months. Six of the 14 stock market cycles were not associated with cycles in business conditions, although the contractions in 1961-62, 1966, and 1983-84 occurred in advance of slowdowns in economic activity.

The stock market contractions also differ in length and severity. The duration of the 14 contractions ranged from 4 to 37 months, with the average downturn lasting 14 months. With two exceptions, the shortest stock market contractions were not associated with business recessions, whereas the longest contractions occurred in conjunction with recessions. The largest decline in the S&P 500 index was 43.4 percent during the 1973-74 contraction, and the smallest decreases of roughly 10 percent occurred in the 1959-60, 1971, and 1983-84 contractions. The average decrease in the index for all contractions was 19.5 percent.

The 14 cycles contain several short-term periods of sharp declines in stock prices. Because of the averaging of daily values, the largest one-month decline in the S&P 500 index occurred not in October 1987, but in September 1946, when the index fell 14.7 percent. The second largest decline of 12.5 percent was in October 1987; three other contractions produced one-month decreases in excess of 10 percent. Over a two-month period, the largest decrease by far was the 23.1 percent drop in the 1987 contraction. Sizable two-month declines also were posted in the 1962 and 1973-74 contractions. Over a three-month period, the 25.6 percent decreases in the index between October and December 1987 was the largest for all postwar contractions but was not much greater than 24.1 percent drop between June and September of 1974. Substantial three-month decreases also occurred in the 1946 and 1962 downturns.

FIGURE 2

Stock Market Cycles, 1942-95

Cycle			Duration (months)		Change in S&P Index (in percent)		Largest Decrease in S&P Index in Contraction (in percent)		
Expansion		Contraction							
Trough	Peak	Trough	Expansion[1]	Contraction[2]	Expansion[1]	Contraction[2]	One-Month	Two-Month	Three-Month
Apr. 1942	May 1946	Jun. 1949[3]	49	37	138.5	-25.3	14.7	16.7	18.8
Jun. 1949	Jan. 1953	Sep. 1953[3]	43	8	87.4	-11.1	4.9	4.4	7.8
Sep. 1953	Jul. 1956	Dec. 1957[3]	34	17	109.6	-17.3	6.2	10.0	15.1
Dec. 1957	Jul. 1959	Oct. 1960[3]	19	15	48.1	-10.1	4.0	5.6	6.8
Oct. 1960	Dec. 1961	Jun. 1962	14	6	33.5	-22.5	11.7	18.3	20.9
Jun. 1962	Jan. 1966	Oct. 1966	43	9	67.8	-17.3	6.0	9.4	10.1
Oct. 1966	Dec. 1968	Jun. 1970[3]	26	18	38.1	-29.0	11.5	14.2	14.7
Jun. 1970	Apr. 1971	Nov. 1971	10	7	36.3	-10.0	4.6	6.7	4.6
Nov. 1971	Jan. 1973	Dec. 1974[3]	14	23	27.6	-43.4	10.4	17.7	24.1
Dec. 1974	Sep. 1976	Mar. 1978	21	18	57.2	-15.8	3.8	5.2	6.4
Mar. 1978	Nov. 1980	Jul. 1982[3]	32	20	52.7	-19.4	8.8	7.5	10.5
Jul. 1982	Oct. 1983	Jul. 1984	15	9	53.3	-9.9	5.5	5.4	5.3
Jul. 1984	Aug. 1987	Dec. 1987	37	4	118.0	-26.8	12.5	23.1	25.6
Dec. 1987	Jun. 1990	Oct. 1990[3]	30	4	49.6	-14.8	8.1	12.4	14.7
Average			28	14	65.6	-19.5	8.1	11.3	13.3

[1]*trough to peak*

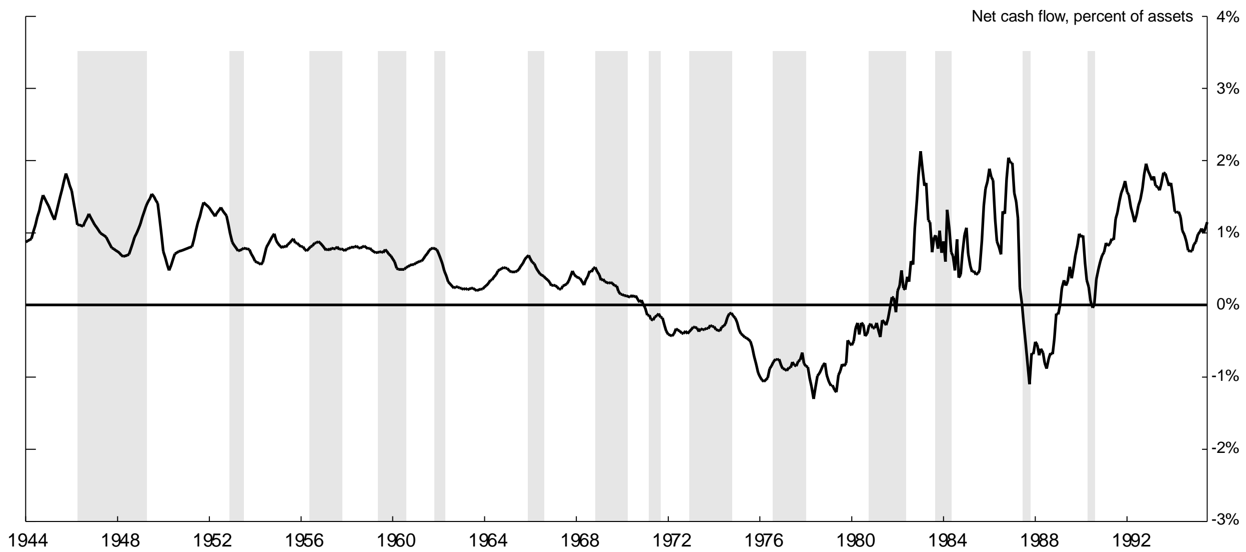
[2]*peak to trough*

[3]*contraction associated with business recession*

FIGURE 3

Net Flow to Equity Mutual Funds

(monthly, six-month moving average, 1944-45)



Note: Shaded regions represent contraction phase of stock market cycle. First observation is June 1944; last observation is December 1995.

Net Flows During Expansions and Contractions

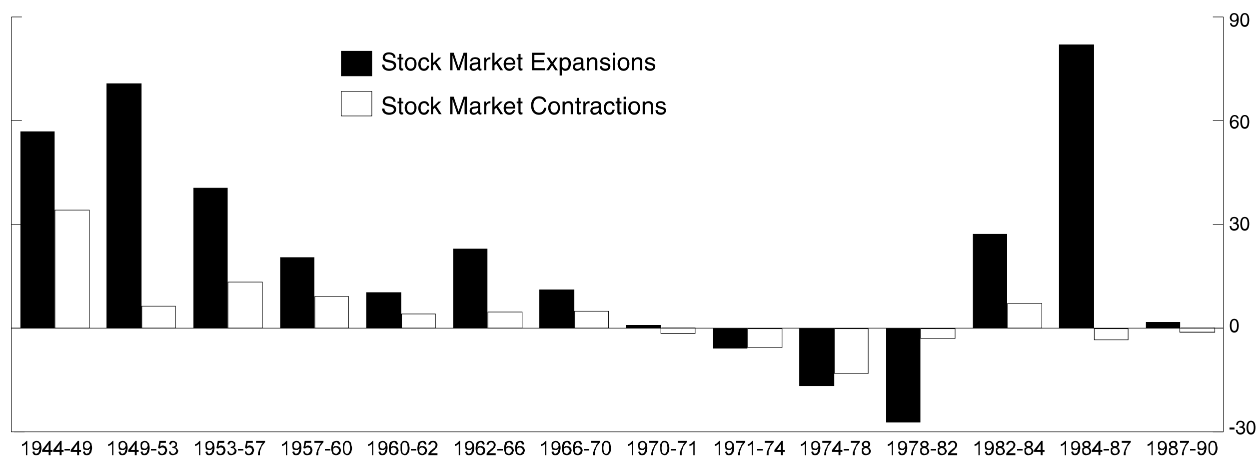
It might be expected that, in the aggregate, stock fund shareholders would invest during periods of rising stock prices and redeem during periods of falling stock prices. However, as Figure 3 illustrates, this pattern has been the exception, not the rule. Of the 13 stock market cycles for which complete data are available for both the expansion and contraction phases, only three—those in 1970-71, 1984-87, and 1987-90—showed this pattern (see Figure 4). Specifically, only those three periods show positive net flows to stock mutual funds during the expansion and negative net flows during the contraction.[3] Of the remaining ten cycles, three experienced net outflows in both the expansion and contraction phases, and seven recorded net inflows in

[3] In computing net flow as the difference between sales and redemptions, sales include those due to exchanges from bond, income, and money market funds into equity funds but do not include those from reinvested distributions. Redemptions include exchanges out of stock funds and into bond, income, and money market funds. The first year for which data on sales and redemptions are available is 1944. Data are available on a quarterly basis from 1944 through the third quarter of 1954, and monthly thereafter. In those instances in which monthly data are required in computations, a monthly estimate is obtained by assigning one third of the quarterly flow to each month within the quarter. From 1944 through 1975, data on sales from reinvested distributions have been estimated. In addition, from 1944 to 1960, data on exchanges are not available; no estimates have been made as exchange transactions were likely insignificant. From 1944 to 1960, separate data for stock funds and bond and income funds are not available; however the vast majority of mutual fund assets over this period were in stock funds.

FIGURE 4

Net Flow to Equity Mutual Funds During Stock Market Expansions and Contractions, 1944-90

(percent of assets*)



**For stock market expansions, net flow is expressed as a percent of assets at trough; for stock market contractions, net flow is expressed as a percent of assets at peak.*

both phases. The fourteenth cycle—1942 to 1949, for which flow data are only available beginning in 1944—most likely fell into the last category, as net flow was positive from 1944 through 1949.

Contractions with net inflows. With only three minor exceptions, the eight contractions with positive, cumulative net flows experienced a net inflow in each month; that is, the cumulative net flow does not mask a short period of heavy net outflows (see Figure 5). Although no significant net outflows occurred during these eight contractions, two of the largest one-month and two-month declines in the S&P stock price index were recorded during the 1946-49 contraction and during the 1961-62 contraction. Neither of these market breaks, however, was associated with net outflows from stock mutual funds, either during the break or in subsequent months—evidence that net redemptions are not the inevitable result of a sharp sell-off in the stock market.

Contractions with net outflows. In the six contractions with net outflows, none cumulated over the course of the entire contraction to a high level, ranging from 0.9 percent of assets to 13.1 percent (see Figure 4). The largest occurred during the relatively mild 1976-78 contraction.[4] The net outflow during the entire 1987 downturn was only 3.5 percent of assets.

[4] In contrast, the cumulative net outflow (as a percent of assets) in both the 1975-76 and 1978-80 stock market expansions exceeded that in the 1976-78 contraction.

FIGURE 5

Minimum and Maximum Monthly Net Flow to Equity Funds During Stock Market Contractions, 1946-90

(percent of assets in previous month)

Contraction			
Peak	**Trough**	**Minimum**	**Maximum**
May 1946	Jun. 1949	0.6	1.3
Jan. 1953	Sep. 1953	0.7	1.0
Jul. 1956	Dec. 1957	0.6	1.2
Jul. 1959	Oct. 1960	0.4	0.9
Dec. 1961	Jun. 1962	0.4	1.0
Jan. 1966	Oct. 1966	0.3	0.8
Dec. 1968	Jun. 1970	-0.1	0.8
Apr. 1971	Nov. 1971	-0.5	0.1
Jan. 1973	Dec. 1974	-0.6	-0.1
Sep. 1976	Mar. 1978	-1.0	-0.4
Nov. 1980	Jul. 1982	-1.1	0.9
Oct. 1983	Jul. 1984	-0.1	1.9
Aug. 1987	Dec. 1987	-3.1	0.6
Jun. 1990	Oct. 1990	-1.0	0.3

The relatively low rate of net outflows over the entire course of each of the six contractions does not rule out the possibility of substantially higher rates of net outflows within shorter time-frames. However Figure 6 shows that net outflows measured over one-month, two-month, and three-month intervals were never large. The largest one-month net outflow, in October 1987, represented only 3.1 percent of stock fund assets. This contraction also produced the largest two- and three-month net outflows, but even over the three-month period, the outflow represented little more than 4 percent of assets.

FIGURE 6

Largest Net Outflows in Stock Market Contractions Over One-, Two- and Three-month Periods

(percent of assets in previous month)

Period	Percent
One-Month	
Oct 1987	3.1
Jan 1981	1.1
Mar 1977	1.0
May 1977	1.0
Aug 1977	1.0
Dec 1977	1.0
Dec 1981	1.0
May 1982	1.0
Aug 1990	1.0
Two-Month	
October - November 1987	3.6
March - April 1977	1.9
December 1980 - January 1981	1.8
June - July 1981	1.4
August - September 1990	1.3
Three-Month	
October - December 1987	4.1
March - May 1977	2.9

Specific Market Downturns

Although there is no evidence in the historical record of a precipitate, wholesale flight from stock funds, a closer examination of several of the downturns helps to identify other aspects of shareholders' responses to market developments.

The 1987 stock market break. On a monthly basis, the net outflow of $7.5 billion in October 1987 was the highest on record, attributable primarily to an increase in share redemptions and secondarily to a drop-off in sales of new shares. It reversed a $1.5 billion net inflow in September and followed an average monthly net inflow of $3.2 billion during the first nine months of 1987.

The net outflow in October likely was concentrated in the second half of the month (with a net inflow during the first half) and could have been as high as $8.2 billion between October 16

and October 21.[5] Information from 30 large mutual fund families—which at the time held 80 percent of equity fund assets—implies that perhaps $1.6 billion occurred on October 16, $2.7 billion on October 19 (the day of the break), and $1.3 billion on October 20.[6] The three-day estimate of $5.6 billion is nearly 70 percent of the net outflow between October 16 and the end of the month.

Despite the record level of net outflow in October 1987, several aspects of the redemption activity suggest that it was not large in a relative sense. At most, the net outflow in the last half of October amounted to no more than 4.5 percent of assets.[7] Moreover, the burst in net redemptions was largely confined to October 16, 19, and 20. After averaging nearly $2 billion per day over these three days, the net outflow moderated to an estimated $325 million per business day over the remainder of the month and then tapered off to $60 million per business day in November and December. For each of these two months, the net outflow represented about 0.7 percent of assets.

Furthermore, mutual fund shareholders did not characterize themselves as having redeemed share heavily during and shortly after the market break. In an Investment Company Institute survey of households owning mutual funds conducted in November 1987, only 5 percent of the stock fund shareholders had redeemed shares during and since the market break.[8] In a follow-up survey in May 1988, this figure had risen to only 11 percent. However, the May survey did reveal that mutual fund shareholders had become more conservative in their investments and were exercising restraint in making new purchases of mutual fund shares.

---

[5] This estimate assumes that a net inflow continued through October 15 at the daily rate recorded in September. The estimate is consistent with information reported by 30 mutual fund complexes for the period October 16 to October 26. For this period, these complexes, which at the time held 80 percent of equity fund assets, had a net outflow of $4.6 billion. Assuming that the average net outflow over October 22, 23 and 26 of $330 million for 30 complexes continued over the remaining four business days of the month produces an estimate of $5.9 billion in net outflow for these complexes for the last half of October. Assuming that their 80 percent share of equity assets also represents their share of equity fund net flow produces an estimate of $7.4 billion net outflow for the entire industry between October 16 and October 31. These data were reported in a letter to David Ruder, Chairman of the Securities and Exchange Commission, from David Silver, president of the Investment Company Institute, dated November 24, 1987.

[6] These estimates apply the proportions of the net outflow for the thirty complexes to the estimated total net outflow of $8.2 billion.

[7] For the thirty complexes, the net outflow of $4.6 billion recorded between October 16 and October 26 represented 3.3 percent of their assets. Assuming per footnote 5 that the net outflow over the remaining four days of the month was $330 million per day yields an estimated 4.4 percent of assets.

[8] "After the October 1987 Market Break: An Industry and Investor Perspective," Investment Company Institute, October 1988, pp. 10-15.

Perhaps reflecting this prudence, the net flow to equity funds remained negative through the first quarter of 1989 even though stock prices were rising. The net outflow came as a result of a slowdown in sales, rather than a pickup in the pace of redemptions. In fact, monthly redemptions as a percent of assets declined, on average, about one percentage point between the first nine months of 1987 and the period from January 1988 to March 1989. However, the drop was not enough to offset the fall-off in new sales of shares.

The 1976-78 contraction; long waves in net flow. The historical record since World War II reveals three distinct periods or "long waves" in net stock fund flows: net inflows from 1944-70, net outflows from 1971-82, and net inflows again over the past 15 years. Thus, the relatively large net outflows in the 1976-78 contraction—which included several monthly net redemptions of 1 percent of assets and three-month net outflow of 2.9 percent between March and May 1977 (see Figure 6)—should be evaluated in the context of an 11-year period when equity funds experienced a net outflow in almost every month.

In comparison with net outflows in the stock market expansions during this period, the net outflows in the 1976-78 contraction were not especially large. For example, the cumulative net outflow in the 1978-80 expansion was 27.2 percent of assets, more than double that in the 1976-78 contraction, and the cumulative net outflow in the 1975-76 expansion also exceeded that in the 1976-78 contraction. In addition, both of these expansions had numerous months in which the net outflow was more than 1 percent of assets. Indeed, the largest net outflow for any three-month period since 1944—4.5 percent—occurred during the 1978-80 expansion. Furthermore, from March 1978 through October 1978, equity funds experienced a net of outflow of 9.0 percent of assets, even as the S&P index increased 13.2 percent.

This period of eleven and one-half years during which equity funds were out of favor with the investing public stands in marked contrast to the preceding period, dating back to 1944, when equity funds experienced net inflows in virtually every month of every stock market expansion and contraction. Stock prices in the 1944-1970 period trended strongly upward, as indicated by the S&P index increasing at an 8.4 percent compound annual rate between the cyclical peaks in May 1946 and December 1968. In contrast, the 1970s were a period of stagnation in the stock market: the S&P index reached a record high in December 1968, pushed briefly above the level in late 1972 and early 1973, but did not return to it until late 1979. The compound annual rate of increase in the S&P index between the cyclical peaks in December 1968 and November 1980 was only 2.1 percent.[9]

---

[9] These dates and figures are based upon monthly averages of the S&P index.

The period spanning the 1970s and early 1980s also contrasts with the subsequent decade and a half in which stock prices generally rose and stock funds again experienced persistent net inflows, apart form the eighteen months after the 1987 market break. This relationship between the long-run movement in net flow and stock returns, along with that observed between the late 1940s and early 1970s, suggests that stock fund investors are sensitive to long-term rates of return on equity. The 1970s and early 1980s were a period of high inflation, making investments in real assets more attractive than those in financial assets, whereas the high stock returns before and after this period likely contributed to households' investing in equities through mutual funds.

The 1973-74 contraction. The nearly 25 percent drop in the S&P 500 index over the third quarter of 1974 was second in size only to the decline registered in the 1987 stock market break. Nonetheless, the pace of net outflows from stock mutual funds ticked up only slightly during the three-month sell-off, averaging a modest 0.4 percent of assets. After the fall in stock prices subsided in the fourth quarter, stock fund net outflows moderated significantly, declining to less than 0.1 percent of assets, and did not rise again until several months after stock prices turned up in January 1975. As stock prices continued to advance thereafter, net outflows rose further, reaching 1.2 percent of assets in the spring of 1976, a figure that was about double the largest monthly net outflow during the 1973-74 contraction.

Other market sell-offs. The movement in net flow to equity funds during other periods with significant short-term declines in the S&P 500 index has been mixed. In some instances, such as the sell-off in the spring of 1970 and the market downturn sparked by Iraq's invasion of Kuwait in August 1990, net flow turned temporarily negative by a small margin for a month or two. Net flow also was negative for a two-week period with the heightened market volatility in the spring of 1994.[10] In all these instances, the largest monthly outflow amounted to no more than 1.1 percent of stock fund assets.

During other market sell-offs, such as the outbreak of the Korean War in June 1950 and the sharp sell-off between August and October 1957, net flow either declined slightly and remained positive or continued at the same pace posted in preceding months.[11] And, in the market decline in the spring of 1980, net flow actually turned from negative to positive.

---

[10] Richard Marcis, Sandra West, and Victoria Leonard-Chambers, "Mutual Fund Shareholder Response to Market Disruptions," *Perspective*, Vol. 1, No. 1 (July 1995), pp. 6-8.

[11] For a discussion of the Korean War and 1957 market sell-offs, see Hugh Bullock, *The Story of Investment Companies*, New York: Columbia University Press, 1959, pp. 162-63.

Other Cyclical Patterns

As noted above, only three of the 14 stock market cycles show positive net flows to stock mutual funds during the expansion period and negative net flows during the contraction. In an attempt to identify other cyclical patterns in net flow, measured a percent of assets, both the expansion and contraction phase of each stock market cycle were divided into two stages. For the expansion, the first stage includes all months other than the last six and the second stage covers the last six months. For the contraction, the first stage is the first six months, and the second is the remaining months, although not all contractions extend into a second stage.[12]

Net flow has tended, on average, to rise during the expansion phase and to decline during the contraction phase. For all 14 cycles, the average of monthly net flows, as a percent of assets, increases from 0.38 percent in the first stage of the expansion to 0.58 percent in the last six months of the expansion (see Figure 7). Thereafter, the average declines to 0.25 percent for the first six months of the contraction, about its value in the remaining months of the contraction.

The apparent absence of variation in net flow between the two stages of the contraction is the result of three of the contractions being so short that they do not contain the second stage. Eliminating these three contractions from the computations of stage averages reveals a tendency for net flow to decline as the contraction progresses. During the first six months of the contraction for the 11 complete cycles, net flow averaged 0.36 percent, as compared with 0.26 percent for the remaining months.

The cyclical pattern in net flow results from a similar pattern in sales of shares rather than from changes in share redemptions. Sales, as a percent of assets, tends to rise during the expansion and to fall during the contraction (see Figure 8). In contrast, the redemption rate generally remains unchanged, except in the second stage of the contraction when it declines slightly (see Figure 9). By itself, the decrease in the redemption rate during this stage would increase net flow.

From the pattern of sales and redemption rates, it would appear that, to the extent stock fund owners respond to cyclical movements in stock returns, they do so by adjusting the pace of new share purchases rather than by changing the pace of redemptions. That is, stock fund owners tend to buy more intensively when stock prices are rising and to become more restrained when prices are falling. Even so, the cyclical variation in the pace of sales is not particularly

---

[12] A six-month period before and after the peak was selected for the purpose of determining whether net flow as a percent of assets tends to accelerate near market peaks and to decelerate shortly after market peaks.

FIGURE 7

Net Flow to Equity Mutual Funds During Expansion and Contraction Phases of Stock Market Cycles

(percent of assets, period average, 1944-90)

Cycle			Expansion		Contraction	
Expansion	Contraction					
Trough	Peak	Trough	Other Than Last Six Months	Last Six Months	First Six Months	Remaining Months
Apr. 1942	May 1946	Jun. 1949	1.21[1]	1.66	1.10	0.93
Jun. 1949	Jan. 1953	Sep. 1953	1.05	1.31	0.83	0.78
Sep. 1953	Jul. 1956	Dec. 1957	0.79	0.81	0.86	0.76
Dec. 1957	Jul. 1959	Oct. 1960	0.81	0.76	0.72	0.56
Oct. 1960	Dec. 1961	Jun. 1962	0.56	0.71	0.71	. . .
Jun. 1962	Jan. 1966	Oct. 1966	0.32	0.54	0.59	0.45
Oct. 1966	Dec. 1968	Jun. 1970	0.32	0.39	0.42	0.23
Jun. 1970	Apr. 1971	Nov. 1971	0.13	0.07	-0.21	-0.02
Nov. 1971	Jan. 1973	Dec. 1974	-0.34	-0.39	-0.31	-0.31
Dec. 1974	Sep. 1976	Mar. 1978	-0.47	-1.04	-0.76	-0.81
Mar. 1978	Nov. 1980	Jul. 1982	-0.90	-0.25	-0.32[2]	-0.07
Jul.1982	Oct. 1983	Jul. 1984	1.11	1.17	1.03[2]	0.33
Jul. 1984	Aug. 1987	Dec. 1987	1.06	1.43	-0.97	. . .
Dec. 1987	Jun. 1990	Oct. 1990	-0.25	0.94	-0.23	. . .
Average						
All cycles			0.38	0.58	0.25	0.26
Eleven complete cycles			0.36	0.46	0.36	0.26

[1] *January 1944 to May 1946*

[2] *four months*

large, ranging from an average low of 1.2 percent in the last part of the contraction to 2 percent in the last six months of the expansion. Furthermore, the sales rate in the last six months of the expansion exceeds that in the first stage of the expansion, on average, by only 0.25 percentage points. This is also about the same amount as the drop-off in the sales rate during the first six months of the contraction phase of the cycle relative to the last six months of the expansion.

In moving from the contraction phase of one cycle to the expansion phase of the next, both the sales rate and the redemption rate tend to increase. The average rate of sales in the first stage of the expansion exceeds the average sales rate in the last part of the previous contraction by 0.26 percentage points. In addition, the average redemption rate in the first stage of the expansion exceeds that in the last part of the previous contraction by 0.14 percentage points.

FIGURE 8

Sales of Shares of Equity Mutual Funds During Expansion and Contraction Phases of Stock Market Cycles

(percent of assets, period average, 1944-90)

Cycle			Expansion		Contraction	
Expansion	Contraction					
Trough	Peak	Trough	Other Than Last Six Months	Last Six Months	First Six Months	Remaining Months
Apr. 1942	May 1946	Jun. 1949	2.08[1]	2.62	1.90	1.55
Jun. 1949	Jan. 1953	Sep. 1953	1.89	1.79	1.36	1.22
Sep. 1953	Jul. 1956	Dec. 1957	1.39	1.27	1.23	1.12
Dec. 1957	Jul. 1959	Oct. 1960	1.22	1.26	1.11	1.01
Oct. 1960	Dec. 1961	Jun. 1962	1.14	1.14	1.20	. . .
Jun. 1962	Jan. 1966	Oct. 1966	0.87	1.08	1.15	0.97
Oct. 1966	Dec. 1968	Jun. 1970	0.98	1.11	1.15	0.87
Jun. 1970	Apr. 1971	Nov. 1971	0.71	0.81	0.68	0.73
Nov. 1971	Jan. 1973	Dec. 1974	0.72	0.69	0.62	0.56
Dec. 1974	Sep. 1976	Mar. 1978	0.52	0.49	0.59	0.54
Mar. 1978	Nov. 1980	Jul. 1982	1.04	1.82	1.88	2.10
Jul. 1982	Oct. 1983	Jul. 1984	4.22	3.89	3.55	2.56
Jul. 1984	Aug. 1987	Dec. 1987	4.46	6.14	4.48[2]	. . .
Dec. 1987	Jun. 1990	Oct. 1990	3.19	4.08	3.01[2]	. . .
Average						
All cycles			1.75	2.01	1.71	1.20
Eleven complete cycles			1.42	1.53	1.39	1.20

[1]January 1944 to May 1946
[2]four months

FIGURE 9

Redemptions of Shares of Equity Mutual Funds During Expansion and Contraction Phases of the Stock Market Cycle

(percent of assets, period average, 1944-90)

Cycle			Expansion		Contraction	
Expansion	Contraction					
Trough	Peak	Trough	Other Than Last Six Months	Last Six Months	First Six Months	Remaining Months
Apr. 1942	May 1946	Jun. 1949	0.87[1]	0.96	0.80	0.61
Jun. 1949	Jan. 1953	Sep. 1953	0.85	0.48	0.53	0.44
Sep. 1953	Jul. 1956	Dec. 1957	0.60	0.46	0.37	0.36
Dec. 1957	Jul. 1959	Oct. 1960	0.41	0.49	0.39	0.45
Oct. 1960	Dec. 1961	Jun. 1962	0.59	0.42	0.48	. . .
Jun. 1962	Jan. 1966	Oct. 1966	0.55	0.55	0.56	0.52
Oct. 1966	Dec. 1968	Jun. 1970	0.66	0.72	0.74	0.64
Jun. 1970	Apr. 1971	Nov. 1971	0.58	0.74	0.89	0.74
Nov. 1971	Jan. 1973	Dec. 1974	1.06	1.08	0.93	0.87
Dec. 1974	Sep. 1976	Mar. 1978	0.99	1.53	1.35	1.36
Mar. 1978	Nov. 1980	Jul. 1982	1.95	2.06	2.20	2.17
Jul. 1982	Oct. 1983	Jul. 1984	3.11	2.72	2.53	2.23
Jul. 1984	Aug. 1987	Dec. 1987	3.39	4.71	5.45[2]	. . .
Dec. 1987	Jun. 1990	Oct. 1990	3.44	3.14	3.24[2]	. . .
Average						
All cycles			1.36	1.43	1.46	0.94
Eleven complete cycles			1.06	1.07	1.03	0.94

[1]January 1944 to May 1946

[2]four months

Evidence from Market Developments in 1994

Because the last cyclical downturn in stock prices ended in 1990, some may argue that the historical record is of little relevance in assessing shareholder reaction to the next major stock market sell-off. This view may be particularly persuasive to those who assume that investors new to owning mutual funds have fueled the surge in stock fund net flow since 1990.[13]

[13] Henry Kaufman, "Structural Changes in the Financial Markets: Economic and Policy Significance," *Economic Review*, Federal Reserve Bank of Kansas City (Second Quarter 1994), pp. 5-15.

In this context, the Institute's study of the response of mutual fund shareholders to market disruptions in 1994 is informative.[14] Unlike the research described here, this study examined both stock and bond market disruptions, including the tightening in monetary policy, derivatives losses at taxable money funds, the bankruptcy of Orange County, and the Mexican peso crisis. None of these events produced a flight from the types of mutual funds involved, although each event likely would have been viewed in advance as having the potential to spark heavy redemptions.

Shareholder stability in 1994 likely stemmed from several sources. First, the vast majority of shareholders are *not* new to investing in either mutual funds or stocks and bond, meaning that the strong net inflows to stock and bond funds in the 1990s have been attributable primarily to seasoned, rather than inexperienced, investors. Second, survey data indicate that most mutual fund shareholders save and invest for the long term, do not attempt to "time" the market, do not intend to redeem shares in response to adverse market developments, and indicate a basic understanding of investment risk. Finally, a substantial portion of net flows in recent years has been in retirement-related accounts, such as 401(k) plans and Individual Retirement Accounts, and in variable annuities, all of which tend to be held for the long term.[15]

[14] Marcis, West, and Leonard-Chambers, "Mutual Fund Shareholder Response."

[15] Marcis, West, and Leonard-Chambers, "Mutual Fund Shareholder Response." pp. 13-16

1401 H Street, NW
Suite 1200
Washington, DC 20005-2148

Copyright © 1996 by Investment Company Institute