The Variability of Mutual Fund Performance Persistence in the Long-Run

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Abstract

Mutual fund performance persistence has been well documented in the finance literature. This study extends the previous work by looking at a longer time period of returns over annual intervals, rather than longer time series groupings. The results document that persistence varies significantly through time, especially when the stock market turns. Clear long-term investing and trading rules based on persistence are not supported by the paper's conclusions.

Introduction

Many academic studies document mutual fund performance persistence, but differ on the implications for investors. Part of this ambiguity reflects the different time periods examined and the emphasis on the overall test results for the entire time period, with little attention given to the variability of persistence from year-to-year. This study employs the CRSP mutual fund database to examine the variability of fund persistence from 1970-2005. The longer time frame and focus on the variability of persistence extend existing work and contribute to deciding if persistence creates excess returns or is simply another risk factor.

Numerous academic studies have documented persistence in mutual fund performance. See, for example, Grinblatt and Titman (1992), Hendricks, Patel, and Zeckhauser (1993), Goetzmann and Ibbotson (1994), Brown and Goetzmann (1995), Malkiel (1995), Elton Gruber and Blake (1996), Carhart (1997), Detzel and Weigand (1998), and Jan and Hung (2004). Droms (2006) provides a good review of the major studies in the area. These papers report various forms of performance persistence over different time frames and the studies differ on the implications for investors. Some believe that chasing good performing mutual funds exploits market inefficiency and creates higher returns without increasing risk, thus "smart money" earns a higher return than expected given the risk incurred (positive excess return in the language of academic finance). Others argue that buying mutual funds with high past returns just trades higher returns for the higher risk that a "momentum" strategy entails.

Gruber (1996) contends that money is smart; flows are relatively higher into mutual funds that have superior future returns. But, Carhart (1997, pp. 57, 81) finds that "common factors in stock returns [value vs. growth, large cap vs. small cap, high beta vs. low beta] and persistent differences in mutual fund expenses and transactions costs explain almost all the predictability in mutual fund returns," and he warns that, "While the popular press will no doubt continue to glamorize the best-performing mutual fund managers, the mundane explanations of strategy and investment cost account for almost all of the important predictability of mutual fund returns."

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Even though other researchers have found results in line with Carhart's work, there is some recent evidence that money chasing recent strong performers is "smart" based on mutual fund managers' abilities to pick stocks. Chen, et al. (2000) find that the stocks most actively sold by mutual fund managers under-perform the ones most actively bought by over two percent per year. Wermers (2000) presents results which suggest that fund managers who trade more frequently have persistent stock picking talent.

Even more interesting for the "smart" money debate is the contention that the relationship between fund flows and managerial behavior may enhance fund persistence through a cycling of momentum strategies. Carhart (1997) finds that part of fund persistence can be explained by the fact that strong performing funds are invested in "winner" stocks that have strong price momentum. Sirri and Tufano (1998) show that consumers heavily invest in funds with strong returns in the previous year, but only weakly divest poor performing funds. Further, Wermers (2003) finds that winning managers use their large cash inflows to implement momentum based strategies more aggressively than losing managers and push up stock prices. In fact, the disposition effect, where investors have a lower propensity to sell stocks in which they have a capital loss, may account for the common findings that persistence is strongest for losers (see Grinblatt and Han, 2002, for a discussion of the disposition effect). Thus, as Sapp and Tiwari (2004, p. 2620) conclude, "when we control for stock return momentum, the smart money effect disappears." This result leads to the conclusion that an economically significant trading rule based on mutual fund persistence is difficult to construct and that a "copy-cat" strategy might be the smarter play (Myers, et al. 2002). Part of this ambiguity reflects the different time periods examined and the emphasis on the overall test results for the entire time period used in previous studies.

Another source of ambiguity may be that mutual fund persistence varies through time. The basic idea behind this paper is that if persistence is consistent through time then it should be possible to exploit with an economically significant trading rule that creates positive excess returns. But, if persistence is quite variable through time, then it should probably be considered just another risk factor, with the higher returns through time simply compensation for higher risk.

The variability of fund persistence has not been the focal point of the academic studies, they concentrate on the level of fund persistence, but there is evidence that it fluctuates significantly. For example, Wermers (2003) Table I shows that, for the twenty-year period between 1975 and 1994, persistence is reversed in five of those years, based on total net asset weighted fund returns. Even though results for the entire period show that past year winner funds average almost six percent more than losers, over the 1985-1989 five-year period losers actually outperformed winners by 1.5 percent. Further, Brown and Goetzmann (1995, p. 689) find that "the strongest evidence for repeat performance is over the late 1970s and early 1980s." Malkiel (1995, p. 560) finds similar results. Also, Detzel and Weigand (1998) find that over the 21-year period between 1976 and 1996, persistence was most prevalent over the earlier 1976-1985 period. Jan and Hung (2004) employ a longer time horizon but just report overall results with no mention of inter-temporal variability.

If variability exists in performance persistence, one factor that may be driving the variability is business and corresponding stock market cycles. In two recent articles, Avramov

and Wermers (2006) and Busse and Irvine (2006) document that persistence may be related to the business cycle. Many of the earlier published articles use data that covers business cycles and market cycles but does not examine the persistence results relative to these factors. This study uses data that includes the 1970s, a poor decade for stock returns, and more recent data, since the March, 2000 stock market downturn that allows for an examination of mutual fund persistence over both bear and bull market cycles.

Data and Methodology

The data employed in this study comes from the CRSP Survivor-Bias Free U.S. Mutual Fund Database. The importance of survivor-bias in mutual fund performance studies has been well documented (see Brown, Goetzmann, Ibbotson, and Ross (1992) for example). The monthly returns for U.S. equity mutual funds are examined for the period 1970 to 2005[2]. Previous studies have used a variety of data sources and broken the results into decades, or other time intervals, or simply looked at the results from regressions run over the entire time frame of the data employed. Grinblatt and Titman (1992) used a data set purchased from CDA Technologies that contained 279 equity mutual funds with data from December 1974 to December 1984. They divided the results into two five-year periods for analysis. Hendricks, Patel and Zeckhauser (1993) used four different data sources to collect returns on 165 equity mutual funds from 1974 to 1988. Goetzmann and Ibbotson (1994) use data from Ibbotson Associates and Morningstar Inc. for the period 1976 to 1987. Brown and Goetzmann (1995) use data from Weisenberger Investment Companies Service for the period 1976 to 1988. Malkiel (1995) uses a data set from Lipper Analytic Service for the period 1971 to 1991. Most recent studies since Carhart (1997) (for period 1962 to 1993) have used survivor-bias free data. Jan and Hung (2004) (data through 2000) and Avramov and Wermers (2006) (data from 1975 to 2002) use the CRSP data base for their studies.

In addition to the diversity of data used and time periods covered in previous studies the methodology used has been diverse as well. The two main approaches include an examination of the "hot hand" phenomenon and scrutiny of return persistence after returns are adjusted to excess returns using one to four factor models to adjust returns. The "hot hand" approach uses the raw returns data and examines year to year results for "winners" and "losers" that are identified by dividing the sample each year by median return and the top half are the winners and the bottom half are the losers. The data are then examined the following year to see if winners repeat and losers repeat as winners and losers, respectively. The results from the studies looking at the raw data indicate that return persistence is inconsistent period to period over the time frames examined. The excess return approach adjusts returns for risk factors. Examples of this approach are Carhart (1997) and Jan and Hung (2004). The returns are adjusted for market portfolio returns and zero-investment factor mimicking portfolios for size, book to market equity and one year momentum in stock returns. The results indicate that return persistence exists but is mitigated by market factors and expense ratios.

[2] The equity funds were chosen using the categories if sp_style_cd in ('ACG','ACV','LCB','LCG','LCV', 'MCB', 'MCG','MCV','SCP','SCG','SCV'); OR sp_obj_cd in ('GMC','GRI','GRO','ING'); OR icdi_obj in ('AG','GI','LG','TR') OR wbrger_obj_cd in ('G','GCI','IEQ', 'LTG','MCG','SCG'); OR policy='CS'

This study examines raw returns over a 35-year period (1970 to 2005) that covers and extends the time periods covered by previous studies. First results on the percentage of repeat winners for the data set used is compared to the results from the data sets used by Malkiel (1995) and Brown and Goetzmann (1995) to see how return persistence indicators change across data sets. The data is then sorted each year by the median return of all funds into winners (those above the median) and losers (those below the median). The number of winner to winner, winner to loser, loser to winner, and loser to loser funds are calculated each year based on their ranking from the previous year. Percentage repeat winners and percentage repeat losers are calculated for each year as well as a Z-test on whether the percentage is significantly different from 50%. The results are reported by decade in Tables I through V and the variability of return persistence is discussed year to year and for each decade.

Results and Implications

The variety of data sets used in previous studies might suggest that return persistence could vary by data used and time frame examined. The results in Table I indicate that the raw data results from Malkiel (1995) and Brown and Goetzmann (1995) are comparable to the results from the data set used in this study. The year to year repeat winners are similar for the comparable time periods covered by all three studies. In addition the average number of repeat winners for the comparable time periods is very similar. These results indicate that return persistence is consistent across data sets used but does vary year to year and across the time frame examined.

The results in Table II show for 1970 to 1979 the year to year winner to winner, winner to loser, loser to winner and loser to loser number of funds; percentage of repeat winners; percentage of repeat losers and the Z-tests on whether the percentage of repeat winners and repeat losers are significantly different from 50% (no persistence).[3] There was considerable persistence in the '70s; the Z-test is significant at the 99% confidence level for seven of the ten years documented in the table. There was a statistically significant reversal of persistence from 1970 to 1971 following a down stock market in 1969. The two years of statistically insignificant persistence were at least coincidental with turns in the market. The first was 1972 to 1973 when the market started a two-year downturn (as measured by the S&P 500 Index). The second was 1974 to 1975 when the market turned back to positive. The year in between these two insignificant persistence years (1973 to 1974) was the weakest significant persistence of the decade.

Table III reveals the same calculations for the decade of the '80s. There were three reversal years in the decade. Only five of the ten years had significant positive persistence. Two of the years were statistically insignificant at the 95% confidence level (1983 to 1984 and 1984 to 1985). The reversals occurred in 1980 to 1981, 1987 to 1988 and 1988 to 1989. All were significant at the 95% confidence level except for the repeat winners in 1988 to 1989. The 1980 to 1981 reversal occurred the year the market turned negative in 1981. The 1987 to 1988 reversal occurred the year after the market slowed to below historical average returns and the 1988 to 1989 reversal occurred the year after the market turned back to above historical average returns

[3] The Z-test is calculated as described in Malkiel (1995) footnote 13, page 559.

after the 1987 slowdown. Return persistence in the 1980s was much less consistent than the previous decade.

The results for the '90s and '00s, calculated and reported in Tables IV and V, were also mixed. The 1990 to 1991 results showed an insignificant reversal as market returns were negative in 1990. The 1991 to 1992 results were positive and insignificant as the market recovered strongly in 1991. Results were positive and significant in the 1992 to 1993 year but returned to positive and insignificant in the 1993 to 1994 and 1994 to 1995 years as the market returns lagged historical averages in 1992, 1993 and 1994. Significant positive persistence existed from 1995 through 1999 as the market returns were consistently well above historical averages. Return persistence followed market momentum in this period. A strong reversal is revealed in the 1999 to 2000 data with the lowest level of persistence of the entire 35 years of data. The reversal coincides with the market reversal that started in 2000. Strong persistence returns to the data in 2000 to 2001 and 2001 to 2002 as the market momentum continues downward. Another reversal occurs in the 2002 to 2003 data as the market turns from negative returns back to positive. This is followed by two years of strong persistence in 2003 to 2004 and 2004 to 2005 as positive momentum is once again present in the market return data.

Overall, the five years examined in the 2000s showed the strongest persistence with 66.6% of winners repeating and 64.6% of losers repeating. The '80s and '90s showed the weakest persistence with between 52% and 54% of winners and losers repeating. The data from the '70s shows that between 62% and 63% of winners and losers repeat.

The results indicate that persistence is strongest when the market has momentum in a particular direction. There is, however, considerable variability in return persistence over the time period studied. Persistence tends to reverse (winners become losers and losers become winners) when the market changes direction. Statistically significant reversals (at the 95% confidence level) occurred in 1970 to 1971 after negative market returns in 1969 and returns below historical average in 1970; in 1980 to 1981 as the market reversed to negative returns in 1981; in 1987 to 1988 and 1988 to 1989 as the market moved to below historical average returns in 1987 and then back to above historical average returns in 1988; in 1999 to 2000 and the market moved to negative returns in 2000; in 2002 to 2003 and the market moved to positive returns in 2003 after three years of negative returns.

Statistically insignificant persistence (at the 95% confidence level) occurred in 1972 to 1973 as the market generated negative returns in 1973; in 1974 to 1975 as the market turned back to positive returns after two years of negative returns; in 1983 to 1984 and 1984 to 1985 as the market slowed to below historical average returns in 1984 and then move to above historical average returns in 1985; in 1990 to 1991 and 1991 to 1992 as the market moved to negative returns in 1990, then back to above historical average positive returns in 1991 and then back to below historical average returns in 1992; in 1993 to 1994 as the market moved to below historical average returns in 1994. The data suggest that persistence trading rules work well when the market has momentum in a particular direction but break down as the market returns change sign; move from above historical average to below historical average; or move from below historical average to above historical average.

Table VI shows subsequent year median returns for the top/bottom halves of equity mutual funds based on their rank (top ½ and bottom ½) from the previous year. It provides an easily interpreted economic significance to persistence on a year-by-year basis: the percentage difference between the top/bottom performers from the previous year. The results indicate that the persistence and reversals were more significant in the 1970s, the 1971-1980 average difference in top/bottom returns from the previous year was 5.3% in the following year. For the 1981-1990 period that value fell to just .9%, up to 1.9% in the 1991-2000 period, then back to 1970s levels for the smaller 2001-2005 period.

Note that biggest persistence reversal (-14.5% in 2000) was followed by the biggest persistence gain (13.1% in 2001), highlighting the relationship between persistence and stock market turns as the longest bull market in history ended in March of 2000. Though the overall 1971-2005 average difference based on previous year halves is 3.1%, there were significant reversals in 1971 (-6.1%), 1981 (-5.4%), 1988 (-4.2%), and 2000 (-14.5%). The results indicate that the performance persistence is significant for investors for some time periods in the study but is not consistent over the study and the reversals can be very significant as well.

Conclusion

While previous studies have reported mutual fund return persistence, very little work has been done on the variability of return persistence. This study documents the extent that persistence varies year-by-year with a comprehensive sample of equity mutual funds. Overall, the percentage of repeat winners was less than 50% or not significantly different from 50% in 13 of the 35 years in the study and in 6 of those years persistence reversed so that the above median mutual funds actually underperformed below median funds the following year. The paper also shows that persistence is significant for investor returns when the market has strong momentum in either direction and is significant in the opposite direction when reversals in persistence occur. The results cast doubt on trading rules based on persistence being able to capture positive excess returns: persistence is quite variable through time and tied to changes in bull versus bear stock markets, also quite difficult to predict.

Table I

Repeat Winners - shows the percentage of repeat winners (above the median return) for two comparison studies.

Year	Malkiel	Brown & Goetzman	Maher & White
1971	64.8%		68.9%
1972	50.0%		52.9%
1973	62.6%		62.1%
1974	52.1%		54.0%
1975	74.4%		72.0%
1976	68.4%	62.0%	67.7%
1977	70.8%	68.0%	68.2%
1978	69.7%	68.7%	64.3%
1979	71.8%	71.4%	71.9%
1980	36.5%	33.0%	37.7%
1981	62.0%	59.0%	63.2%
1982	56.6%	55.0%	59.9%
1983	56.1%	53.0%	55.7%
1984	53.9%	53.9%	55.9%
1985	59.5%	60.7%	61.2%
1986	60.4%	60.9%	59.3%
1987	39.3%	42.5%	38.5%
1988	41.0%		46.1%
1989	59.6%		59.2%
1990	49.4%		49.4%
1976-1987 average			
Malkiel	58.8%		
Brown & Goetzman	57.3%		
Maher & White	58.6%		

Table II
Persistence Tests 1970-1979

This table shows two-way tables of next-year total returns for equity mutual funds ranked by previous one-year intervals. "Winners" are above the median and "losers" below.

Initial Year		Next Year Loser	Next Year Winner	Percentage Repeat Winners	Percentage Repeat Losers	Z-Test Repeat Losers (Winners)	S&P 500 Return Repeat Year
1970	Loser	37	66		35.9%	-2.86	14.31%
	Winner	65	40	38.1%		-2.44	
1971	Loser	79	33		70.5%	4.35	18.98%
	Winner	37	82	68.9%		4.13	
1972	Loser	59	59		50.0%	0.00	-14.66%
	Winner	57	64	52.9%		0.64	
1973	Loser	76	47		61.8%	2.62	-26.47%
	Winner	47	77	62.1%		2.69	
1974	Loser	67	56		54.5%	1.00	37.20%
	Winner	57	67	54.0%		0.89	
1975	Loser	87	31		73.7%	5.15	23.84%
	Winner	28	90	72.0%		4.78	
1976	Loser	85	41		67.5%	3.93	-7.18%
	Winner	41	86	67.7%		3.99	
1977	Loser	87	39		69.1%	4.29	6.56%
	Winner	42	90	68.2%		4.18	
1978	Loser	80	44		64.5%	3.23	18.44%
	Winner	46	83	64.3%		3.25	
1979	Loser	92	34		73.0%	5.16	32.42%
	Winner	36	92	71.9%		4.96	
1970-1979	**Loser**	**749**	**450**		**62.5%**		
	Winner	**456**	**771**	**62.8%**			

Table III
Persistence Tests 1980-1989

This table shows two-way tables of next-year total returns for equity mutual funds ranked by previous one-year intervals. "Winners" are above the median and "losers" below.

Initial Year		Next Year Loser	Next Year Winner	Percentage Repeat Winners	Percentage Repeat Losers	Z-Test Repeat Losers (Winners)	S&P 500 Return Repeat Year
1980	Loser	48	80		37.5%	-2.83	-4.91%
	Winner	81	49	37.7%		-2.80	
1981	Loser	87	53		62.1%	2.86	21.41%
	Winner	49	84	63.2%		3.04	
1982	Loser	88	60		59.5%	2.31	22.51%
	Winner	57	85	59.9%		2.36	
1983	Loser	89	69		56.3%	1.58	6.27%
	Winner	70	88	55.7%		1.43	
1984	Loser	98	77		56.0%	1.59	32.16%
	Winner	78	99	55.9%		1.57	
1985	Loser	122	78		61.0%	3.11	18.47%
	Winner	78	123	61.2%		3.18	
1986	Loser	137	91		60.1%	3.05	5.23%
	Winner	103	150	59.3%		2.96	
1987	Loser	106	173		38.0%	-4.01	16.81%
	Winner	171	107	38.5%		-3.83	
1988	Loser	142	176		44.7%	-1.89	31.49%
	Winner	185	158	46.1%		-1.44	
1989	Loser	222	158		58.4%	3.27	-3.17%
	Winner	147	213	59.2%		3.49	
1980-1989	**Loser**	**1139**	**1015**		**52.9%**		
	Winner	**1019**	**1156**	**53.1%**			

Table IV
Persistence Tests 1990-1999

This table shows two-way tables of next-year total returns for equity mutual funds ranked by previous one-year intervals. "Winners" are above the median and "losers" below.

Initial Year		Next Year Loser	Next Year Winner	Percentage Repeat Winners	Percentage Repeat Losers	Z-Test Repeat Losers (Winners)	S&P 500 Return Repeat Year
1990	Loser	193	197		49.5%	-0.20	30.55%
	Winner	208	203	49.4%		-0.24	
1991	Loser	214	213		50.1%	0.04	7.67%
	Winner	227	201	53.0%		1.24	
1992	Loser	304	141		68.3%	7.72	9.99%
	Winner	156	338	68.4%		8.18	
1993	Loser	279	285		49.5%	-0.24	1.31%
	Winner	292	311	51.6%		0.79	
1994	Loser	383	347		52.5%	1.35	37.43%
	Winner	330	429	56.5%		3.58	
1995	Loser	512	393		56.6%	3.97	23.07%
	Winner	392	533	57.6%		4.62	
1996	Loser	689	375		64.8%	9.66	33.36%
	Winner	386	752	66.1%		10.86	
1997	Loser	811	595		57.7%	5.77	28.58%
	Winner	534	803	60.1%		7.39	
1998	Loser	1054	563		65.2%	12.22	21.04%
	Winner	548	1144	67.6%		14.48	
1999	Loser	468	1421		24.8%	-21.91	-9.11%
	Winner	1367	569	29.4%		-18.13	
1990-1999	**Loser**	**4907**	**4530**		**52.0%**		
	Winner	**4440**	**5283**	**54.3%**			

Table V
Persistence Tests 2000-2005

This table shows two-way tables of next-year total returns for equity mutual funds ranked by previous one-year intervals. "Winners" are above the median and "losers" below.

Initial Year		Next Year Loser	Next Year Winner	Percentage Repeat Winners	Percentage Repeat Losers	Z-Test Repeat Losers (Winners)	S&P 500 Return Repeat Year
2000	Loser	1618	451		78.2%	25.65	-11.88%
	Winner	509	1698	76.5%		24.90	
2001	Loser	1856	666		73.6%	23.70	-22.10%
	Winner	578	1824	75.6%		25.09	
2002	Loser	1201	1422		45.8%	-4.30	28.70%
	Winner	1406	1288	47.8%		-2.28	
2003	Loser	1962	1041		65.3%	16.77	10.87%
	Winner	924	1995	68.4%		19.88	
2004	Loser	1917	1113		63.3%	14.64	4.91%
	Winner	989	1992	66.8%		18.35	
2000-2004	**Loser**	**8554**	**4693**		**64.6%**		
	Winner	**4406**	**8797**	**66.6%**			

Table VI
Median Returns for Previous Year Winner/Losers in the Subsequent Year

This table shows subsequent year median returns for the top/bottom halves of equity mutual funds based on their rank (top 1/2 and bottom 1/2) from the previous year.

Year	Median Return for Previous Year Top 1/2	Median Return for Previous Year Bottom 1/2	Difference in Top/Bottom Median Returns	Percentage Winners (from the previous year)	S&P500 Return
1971	16.7%	22.8%	-6.1%	37.5%	14.3%
1972	17.9%	10.2%	7.7%	68.9%	19.0%
1973	-21.3%	-21.9%	0.6%	52.9%	-14.7%
1974	-22.7%	-27.9%	5.2%	62.1%	-26.5%
1975	34.3%	32.9%	1.4%	54.0%	37.2%
1976	30.0%	19.5%	10.5%	72.0%	23.8%
1977	3.4%	-3.7%	7.1%	67.7%	-7.2%
1978	13.9%	7.9%	6.0%	68.2%	6.6%
1979	32.1%	22.6%	9.5%	64.3%	18.4%
1980	38.3%	27.7%	10.6%	73.0%	32.4%
	1971-1980 Average		**5.3%**		
1981	-4.5%	0.9%	-5.4%	37.7%	-4.9%
1982	27.7%	22.4%	5.3%	63.2%	21.4%
1983	23.0%	19.6%	3.4%	59.9%	22.5%
1984	1.5%	-1.3%	2.8%	55.7%	6.3%
1985	29.2%	28.0%	1.2%	55.9%	32.2%
1986	15.8%	13.1%	2.7%	61.2%	18.5%
1987	3.1%	-0.1%	3.2%	59.3%	5.2%
1988	12.7%	16.9%	-4.2%	38.5%	16.8%
1989	24.1%	26.1%	-2.0%	46.1%	31.5%
1990	-3.9%	-6.2%	2.3%	59.2%	-3.2%
	1981-1990 Average		**0.9%**		
1991	31.7%	31.7%	0.0%	49.4%	30.6%
1992	8.4%	7.9%	0.5%	53.0%	7.7%
1993	14.5%	9.4%	5.1%	68.4%	10.0%
1994	-1.3%	-1.4%	0.1%	51.6%	1.3%
1995	31.0%	30.6%	0.4%	56.5%	37.4%
1996	20.4%	18.5%	1.9%	57.6%	23.1%
1997	27.9%	22.2%	5.7%	66.1%	33.4%
1998	17.5%	11.0%	6.5%	60.1%	28.6%
1999	24.8%	11.1%	13.7%	67.6%	21.0%
2000	-9.5%	5.0%	-14.5%	29.4%	-9.1%
	1991-2000 Average		**1.9%**		
2001	-4.4%	-17.5%	13.1%	76.5%	-11.9%
2002	-19.1%	-27.0%	7.9%	75.6%	-22.1%
2003	29.4%	30.7%	-1.3%	47.8%	28.7%
2004	13.9%	9.9%	4.0%	68.4%	10.9%
2005	7.8%	4.9%	2.9%	66.8%	4.9%
	2001-2005 Average		**5.3%**		
	Overall (1971-2005) Average		**3.1%**		

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