

19 January 2024

Are yesterday's losers tomorrow's winners? (II)

At the beginning of 2024, we investigated whether it was worth investing in sectors that had performed relatively poorly in the previous year at the turn of the year. The result was clear: sticking rigidly to this simple investment strategy would not outperform a passive investment in the S&P 500 on the US equity market in the long term. Even if the return results could be significantly improved by a simple modification, the modified investment strategies were hardly convincing from a risk perspective. Is it still possible to derive a profitable investment strategy from the loser-winner approach if the selection is not made at sector level but at individual stock level? In other words: Is it worth investing in the relative loser stocks of the previous year - regardless of which sector they come from?

What do our experimental setup and results look like?

All stocks included in the S&P 500 at the turn of the year served as the investment universe for our test. In the next step, we divided the investment universe into ten equally sized portfolios based on the previous year's performance. This means: The first portfolio ("previous year's losers") contains the worst ten percent of stocks from the S&P 500 in terms of the previous year's performance. The second portfolio in turn consists of the following ten percent and so on. Finally, the tenth portfolio ("previous year's winners") contains the best ten percent. In order to take possible size effects into account when constructing the portfolio, we have also weighted the portfolios according to market capitalization in addition to equally

weighted portfolios. However, due to the lack of available data, the weighting by market capitalization could only be applied from 1997 onwards. Our observation period extends from 1990 to 2023 and a passive investment in the S&P 500 serves as a benchmark.

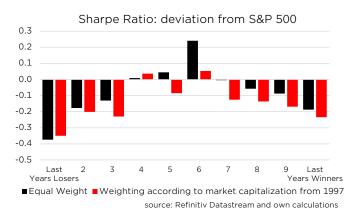


Was it worth investing in the relative losers of the previous year and betting on a reversal effect? The result is (once again) sobering. In terms of the annualized return, the "previous year's losers" portfolio did not outperform the benchmark in the long term. The annual return of the equally weighted portfolio was around 0.7 percentage points below that of a passive investment in the S&P 500. If the portfolio was weighted on the basis of market capitalization instead, the underperformance was reduced to 0.4 percentage points.

On the other hand, a small outperformance would have been achieved if one had bet on the winners of the previous year and thus pursued a momentum strategy. Overall, however, no clear pattern can be identified and the distribution of the deviations in annual returns appears arbitrary. Only the clear outperformance of portfolio six stands out. Here, the annual return of the equally weighted portfolio was even 3.4 percentage points

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higher. It is also striking that the equally weighted portfolios, with the exception of the "loser previous year" portfolio, have a higher annual return than the analogous portfolios with a weighting based on market capitalization. Even though the heavyweights in the S&P 500 have recently been responsible for the positive performance (see "Magnificent 7"), a weighting based on market capitalization has not always paid off in the history of the S&P 500. For example, the outperformance of the equally weighted S&P 500 compared to the market-capitalized S&P 500 rose almost continuously between 2000 and 2015.

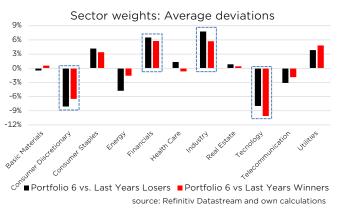


However, return characteristics are only one side of the coin. It is at least as important to consider the risk taken. For this reason, we have evaluated the strategies using the Sharpe Ratio. The result is quite clear: both the loser and winner portfolios performed worse than the S&P 500. Only portfolios four and six achieved a higher Sharpe Ratio than the benchmark, irrespective of the portfolio construction, with the outperformance of portfolio four being minimal.

Does Portfolio have six special features?

Portfolio six dominated the benchmark in terms of both the annual return and the Sharpe ratio. The question therefore arises as to whether and, if so, what special features this portfolio has. The sector weighting provides an initial indication. The following chart shows the average deviations in sector weightings between portfolio six and both the "previous year's loser" and "previous year's winner" portfolios. Systematic underweighting and overweighting of individual sectors can indeed be identified. It is noticeable, for example, that portfolio six had a higher average weighting in the Financials and Industry

sectors compared to the "loser" and "winner" portfolios, while the Consumer Discretionary and Technology sectors were underweighted on average. However, this should not lead to the conclusion that a corresponding sectoral positioning was solely responsible for the outperformance. Rather, good timing enabled the outperformance. For example, the technology sector was underweighted in portfolio six at the start of the millennium, meaning that the bursting of the dotcom bubble had a comparatively minor impact on performance. In the other periods, however, the weighting of the technology sector was significantly higher. A similar picture emerged during the global financial crisis. Here, the financial sector was relatively underweighted in portfolio six (in contrast to the other years) and thus cushioned the portfolio's losses.



What is our conclusion?

No successful investment strategy can be derived from the previous year's performance, not only at sector level but also at individual stock level. In terms of both the annual return and the Sharpe ratio, a portfolio consisting of the relative losers or winners from the previous year cannot achieve systematic outperformance in the long term. Even if the portfolio six achieved better return and risk characteristics than the S&P 500, we lack the economic reason. The conclusion is therefore: even if rule-based loser-winner strategies can be successful in certain areas, historically they have not succeeded in achieving robust outperformance. In fact, a contrary result would have surprised us, as the investment approach seems too simple for the real world.

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Market data

	As of	As of Change versus					
	19.01.2024	12.01.2024	18.12.2023	18.10.2023	18.01.2023	29.12.2023	
Stock marktes	08:42	-1 week	-1 month	-3 months	-1 year	YTD	
Dow Jones	37469	-0,3%	0,4%	11,3%	12,5%	-0,6%	
S&P 500	4820						
	15056	0,8%	1,7%	11,7%	22,7%	1,0%	
Nasdaq DAX	16567	0,6% -0,8%	1,0% -0,5%	13,1% 9,8%	37,4% 9,1%	0,3% -1,1%	
MDAX	25553	-					
TecDAX		-2,8%	-5,0%	3,4%	-11,3%	-5,8%	
EuroStoxx 50	3269 4453	-0,2% -0,6%	-1,1% -1,5%	12,3% 8,5%	1,9% 6,7%	-2,0% -1,5%	
Stoxx 50	4059				3,7%	-0,8%	
SMI (Swiss Market Index)	11186	-0,9%	-0,2%	3,6%			
Nikkei 225	35963	-0,4%	0,3% 9,8%	4,8%	-1,6% 34,2%	0,4%	
Brasilien BOVESPA		1,1%		12,2%		7,5%	
	127316	-2,8%	-2,9%	11,6%	13,4%	-5,1%	
Russland RTS	1121	-1,3%	4,3%	6,7%	11,4%	3,5%	
Indien BSE 30	71711	-1,2%	0,6%	8,9%	17,5%	-0,7%	
China CSI 300	3270	-0,4%	-1,8%	-9,4%	-20,8%	-4,7%	
MSCI Welt	3143	-0,8%	0,4%	10,2%	15,8%	-0,8%	
MSCI Emerging Markets	961	-3,5%	-3,7%	1,9%	-6,7%	-6,1%	
Bond markets							
Bund-Future	133,95	-172	-279	634	-635	-327	
Bobl-Future	117,53	-93	-129	223	-116	-175	
Schatz-Future	105,91	-34	-39	106	-17	-64	
3 Monats Euribor	3,90	0	0	0	156	2	
3M Euribor Future, Dec 2024	2,58	17	13	-87	14	28	
3 Monats \$ Libor	5,57	-1	-6	-11	76	-2	
Fed Funds Future, Dec 2024	4,02	27	1	-84	122	19	
10 year US Treasuries	4,15	20	20	-75	77	28	
10 year Bunds	2,31	16	26	-58	33	31	
10 year JGB	0,67	10	-1	-12	33	5	
10 year Swiss Government	0,90	6	25	-29	-15	20	
US Treas 10Y Performance	589,21	-1,4%	-1,2%	7,2%	-2,7%	-2,0%	
Bund 10Y Performance	553,03	-1,3%	-1,7%	5,6%	0,0%	-2,2%	
REX Performance Index	441,70	-0,5%	-1,8%	2,8%	0,9%	-1,4%	
IBOXX AA,€	3,39	14	23	-72	29	32	
IBOXX BBB, €	4,05	15	20	-90	0	30	
ML US High Yield	8,06	14	7	-138	1	27	
Convertible Bonds, Exane 25	6620	0,0%	0,0%	0,0%	0,0%	0,0%	
Commodities							
MG Base Metal Index	372,40	-1,4%	-3,0%	0,1%	-18,0%	-4,7%	
Crude oil Brent	79,04	0,4%	0,4%	-13,7%	-7,1%	1,7%	
Gold	2027,79	-1,2%	0,3%	4,4%	6,0%	-1,8%	
Silver	22,65	-2,5%	-4,7%	-0,7%	-4,5%	-6,6%	
Aluminium	2118,24	-2,5%	-5,0%	-2,3%	-18,9%	-9,7%	
Copper	8223,80	-0,2%	-2,0%	4,1%	-11,8%	-2,8%	
Iron ore	136,08	-0,8%	1,1%	14,3%	12,3%	-0,2%	
Freight rates Baltic Dry Index	1357	-7,1%	-40,7%	-35,5%	55,3%	-35,2%	
Currencies							
Currences							
EUR/ USD	1,0884	-0,5%	-0,3%	3,0%	0,4%	-1,5%	
EUR/ GBP	0,8576	-0,2%	-0,7%	-1,2%	-1,9%	-1,0%	
EUR/ JPY	161,38	1,4%	3,5%	2,1%	15,4%	3,2%	
EUR/ CHF	0,9442	1,0%	-0,4%	-0,5%	-4,7%	2,0%	
USD/ CNY	7,1916	0,3%	0,8%	-1,8%	6,6%	1,2%	
USD/ JPY	148,17	2,2%	3,8%	-1,2%	15,0%	5,0%	
USD/ GBP	0,79	0,6%	-0,3%	-4,3%	-2,3%	0,5%	

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