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## June 2012



## **Investment Losses and Emotional Decision-making**

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"Investors repeatedly jump ship on a good strategy just because it hasn't worked so well lately, and, almost invariably, abandon it at precisely the wrong time."

- David Dreman

"It's not whether you're right or wrong that's important, but how much money you make when you're right and how much you lose when you're wrong"

- George Soros

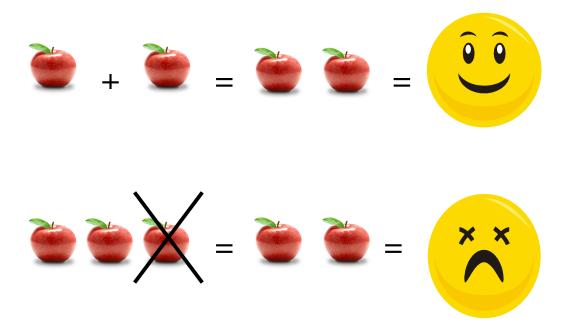
"An investor without investment objectives is like a traveller without a destination."

- Ralph Seger

No doubt exists about the mathematical validity of the following equation:

$$(1+1) = (3-1)$$

Yet, in real life we may act very differently when confronted with each of the two terms of this equation. Most people will prefer the left-hand side of the equation whereby they stand to gain as opposed to the right-hand side where they have to forsake an "asset", even though the net outcome of each term is the same.



Next, consider investment returns over time. The standard advice for equity-related investing is to "invest for the long term" and not to be sidetracked by short-term fluctuations in market valuations. Undoubtedly, this would have been sage advice for most long-term investment periods in the past, but that is if those investors stuck to their original investment strategy, especially during periods when the prospects for reasonable returns were depressed.

The only "problem" with this "long-term" investment advice is the near-certainty that investors will experience at least one year with disappointing or negative returns in, say, a ten-year investment cycle (actually, developed market investors suffered two serious market declines over the past decade, hence the miserable returns investors experienced in these markets). For example, over any ten-year investment period there is a 94% probability that at least one of those ten years will yield a negative return. Moreover, there is a 65% probability that the one-year loss will be greater than 10% and 34% it will be greater than a 20% loss.

## Probabilities of negative returns related to equity investing

Negative return greater than:	-30%	-20%	-10%	0%
Risk of negative return in any year	0%	4%	10%	24%
Risk of negative return at least once in	0 70	170	1070	2170
any three-year period	0%	12%	27%	56%
Risk of negative return at least once in				
any five-year period	0%	18%	41%	75%
Risk of negative return at least once in				
any seven-year period	0%	25%	52%	85%
Risk of negative return at least once in				
any ten-year period	0%	34%	65%	94%

Source: DRW Investment Research, Investing by Probabilities, March 2011

That is simply the mathematical or statistical nature of equity-related investing. That cannot be changed, but investors' behaviour can certainly be changed. Moreover, it can be expected that investors will react emotionally and not necessarily rationally to such a negative return (loss) experience.

Further to my argument, let us assume the following ten-year scenario: An investment yields every year a return of 15% per annum, except in one year which will yield a negative return of 20%, thus 9 x 15% and 1 x -20%. Next, I place this negative return-year in three different positions (order of occurrence) in the ten-year period, namely, in the first year, the middle and at the end of the period.

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<sup>&</sup>lt;sup>1</sup> Losses on equity investments? Perhaps not always true, "smart" investors will tell you that they can protect their capital values against market losses by means of derivative overlays. The costs of these derivative strategies, however, often exceed their engineered benefits over time and during bull markets such protective strategies will lag ordinary buy-and-hold equity portfolios.

Year	Investment A	Investment B	Investment C
1	-20%	15%	15%
2	15%	15%	15%
3	15%	15%	15%
4	15%	15%	15%
5	15%	<mark>-20%</mark>	15%
6	15%	15%	15%
7	15%	15%	15%
8	15%	15%	15%
9	15%	15%	15%
10	15%	15%	<mark>-20%</mark>

Which investment – A, B or C – would have done the best over the ten-year period?

Well, mathematically one can show that the actual year when the negative return occurred does not matter at all. All three investments would have yielded exactly the same return and final values.

	Investment	Investment	Investment
	Α	В	С
Initial			
investment	R1,000	R1,000	R1,000
Final value	R2,814	R2,814	R2,814
Annualised			
return	10.9%	10.9%	10.9%

However, this might not be full story. Let us think about investors' real-time experiences: Say an investor invested R1,000 in each of the three investments. The investment value of each investment changes according to the investment return of each option every year. Thereby the investment values of all three options will never be the same, except at the end of the tenyear term.

	Investment	Investment	Investment
Year	Α	В	С
0	1,000	1,000	1,000
1	800	1,150	1,150
2	920	1,323	1,323
3	1,058	1,521	1,521
4	1,217	1,749	1,749
5	1,399	1,399	2,011
6	1,609	1,609	2,313
7	1,850	1,850	2,660
8	2,128	2,128	3,059
9	2,447	2,447	3,518
10	2,814	2,814	2,814

-200

Loss/Regret

Chances are that the investor will perceive Investment C to be the "worst" investment of them all, because she lost with this option the most money in any given year (R704 versus R350 and R200). It is unlikely that investors perceive their losses in percentage terms, but rather in actual monies. Only after considering the final values of the three investment options at the end of the ten-year period, the investor will realise they are all the same. Thus, an exact comparison would have revealed the correct assessment. Otherwise, a one-year bad experience could have swayed an investor's perception in making incorrect conclusions. To be sure, during the ten-year period each investment option would have had the dubious reputation of being the "worst" investment.

-704

-350

In reality, however, it is unlikely that investors will have the luxury of comparing investments in this manner or that they will stomach losses in a year(s) and be prepared to remain invested in such "bad" investments. Also, when and how do we decide what is the "beginning" and especially the "end" of the investment evaluation period?

For example, say an investment for seven years did not perform according to expectations. Do we redeem this investment and invest in a "better" alternative? But importantly, how did we come to the conclusion that the alternative is a "better" investment? I'm afraid if we made this assessment only on the basis of what happened over the past seven years without an intrinsic understanding what the alternative is all about (why it actually performed better and the likelihood of continuing doing so) we are likely to be disappointed by the changes to our investment plan going forward.

The reality is that our "disappointing" investment may start to outperform in the eighth year and after another couple of outperforming years, we may be looking back at our initial investment and realise we could not have done a better investment after all! The point is, we

would not have made the changes to our plan if we used, say, a ten-year evaluation period in stead of the seven-year period!

Likewise, how do we decide a particular investment is "bad"? Is it because of poor performance due to market conditions? Poor investment decisions, mismanagement, weak regulatory framework, etcetera? The latter reasons may be all valid arguments, because they will remain a problem irrespective of how markets will behave, but certainly one cannot classify an investment as "bad" only because of dire market conditions.

Thus, what we do need to realise is that to make a fair, objective assessment on the merits of an investment is a far more complex task than simply a "quick" evaluation exercise. First and foremost, a lot of careful planning and thought should go into one's investment plan. Thereafter the primary objective should be to stick to one's plan. Tactical changes can be made, but should be of lesser importance. Yet, considering the amount of "churning" in the industry, it is clear most investors do not have a very clear idea about their game plan or the complexities (pitfalls) in evaluating investments and making investment decisions.

In our investment world a boring fixed interest investment might yield at times higher returns than an equity investment, even for a number of years. Actually this "outperforming" period may last until many investors would think: "Equities? Why bother". But the reversal of fortune is perhaps then just around the corner! This is not a too far-fetched scenario – something like this happened during the early 2000s and perhaps many investors missed out on the bulk of one of the biggest bull markets in our equity market history (2003 – 2008).

Today, looking back over the past decade (and considering a rather sedated past five years) equity investing thumped fixed interest investing by a mile. In fact, you won't easily find investors that are not considering equities as the primary source or cornerstone of their wealth creation going forward (did I mention something about the reversal of fortunes earlier?) That is arguably true for most long-term periods, but what if, for example, equities will underperform fixed interest investing for the next three to five years (not a prediction, just for argument's sake!) will the majority of investors still hold this belief and more importantly, how are they going to invest then?

The bottom line is we are not very good in assessing investment returns and making subsequent investment decisions. We apply relatively short-term experiences to structurally long-term orientated vehicles, which does not fit all too well in our world of instant gratification.

Moreover, we do not necessarily apply rational, mathematical thinking or tools when evaluating investment returns. In fact, I would argue that evaluating investment returns is of little practical value, if not outright dangerous to your financial health. In our ever-changing, dynamic world the right context or understanding of financial markets is essential, especially where often one investment that perhaps for years underperformed relatively to others is suddenly the star performer in a next period. And be sure there are no alarm bells announcing the next winner (except maybe the general perception that such investments are deemed to be worthless!).

[Considering all the above, it is scary many investors think they can all do this by themselves, but obviously it is just my biased opinion...]

What investors really need more of is a good mix of investments across the spectrum (asset class diversification) and less crystal ball gazing or colourful stories what is going to do well next (perhaps easier said than done, considering that the financial industry and media thrive on sensational stories, at least it has some entertainment value for their audiences!). And then "endless" quantities of one particular virtue that investors like Warren Buffett displayed over the years: Buffett undoubtedly is a very smart, calculated investor. Moreover, he has the mental strength to make "unpopular" investment choices at times. But above all, he has exhibited over the years the necessary patience for his investments to come to fruition.