PGIM
India Mutual Fund

Reversion to the Mean - A powerful concept for ordinary investors

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"Be fearful when others are greedy and greedy when others are fearful"
– Warren Buffett

Dear Investors and Partners,

I hope this letter finds you well. This month, I would like to talk about a concept that is crucial to understand when it comes to investing: reversion to the mean.

Reversion to the mean is the idea that over time, extreme events or outliers tend to move towards the average. This concept can be applied to many areas of life, including financial markets, where extreme returns or valuations tend to revert back to the long-term average.

Let's understand this concept further with a real life example. There is a popular narrative about the Sports Illustrated magazine cover - it states that whenever a player appears on the cover, he/she has a bad performance thereafter, in the following years. However, this is just a winning streak of that player coming to an end. The player got on the magazine cover because he was having an amazing run which was out of the ordinary and would have come to an end, with or without the appearance on the magazine cover. Take the above concept to understand some investor's bias, when a stock gets included in popular indices like the Nifty 50, based on past performance. The above average performance may not sustain after the inclusion, as it is just reverting to its long-term mean. However, investors may continue to expect outlier performance and thus term the inclusion in the index as a turning point in the company, which simply is not the case.

In the context of investing, this means that an asset that has outperformed in the past is more likely to underperform in the future, and vice versa. This is why it's important to have a well-diversified portfolio that can withstand market volatility and provide steady returns over the long-term. One of the better ways to achieve this is through a balanced portfolio, such as the popular 60/40 portfolio in the western world, which typically consists of 60% stocks and 40% bonds. This type of portfolio has been shown to provide a good balance between growth and stability over a long-term investment horizon of 50 years or more in the U.S. markets.

Even in an Indian context, if we look at 3 years rolling return for the Nifty 50 from 1990 onwards, we will see that long term average CAGR returns is 12.2%. The Nifty 50 has generated returns in the range of 0% to 20%, around 2/3rd of the times in the last 3 decades. Extreme outliers gains of 50% and above have been observed only 1% of the times. Thus, reversion to the mean theory suggests that investors should anchor their return expectation closer to the long-term average of around 12% in India. An accepted way to look at it is to assess the nominal GDP growth rate and add 2% perhaps for a professional fund manager's skill over the longer term.

3 years CAGR returns between	% of Observations
Less than -20%	0%
0% to -20%	15%
0% to 20%	64%
20% to 50%	20%
Greater than 50%	1%

(Source: ICRA MFIE. Data for period from June 1990 to Jan 2023)

Historically, in India this reversion has been playing out during outliers events, except for the Covid crisis in March 2020, as highlighted in the table below. Investing at peak levels has meant that returns over the short to medium term have been muted in the past. However, investors tend to crowd in during such peaks with the expectation that past performance will continue in the future as they are generally not aware of mean reversion.

Nifty 500 TRI	Investments at Peak	Next 1 year return	Next 3 years return
Dot com bubble	21-Feb-00	-41.9%	-21.7%
2006 Global Rate Hike Selloff	10-May-06	6.9%	-3.1%
2008 Global Financial Crisis	08-Jan-08	-57.8%	-3.4%
2010 European Debt Crisis	05-Nov-10	-18.3%	-1.4%
2015 Global Market Selloff (Yuan Devaluation)	03-Mar-15	-14.5%	9.2%
2020 Covid Crash	14-Jan-20	21.1%	16.3%

(Source: ICRA MFIE)

Thus we can see that this concept of reversion to mean is more of a fundamental aspect of life. Almost a natural law that affects us all - and also investments. Investors can do well to follow a goal-based approach and stick to the return requirement of their goals rather than deviating whenever they see higher performance in themes or sectors. This will be easier to follow in practice, if they remember the concept of mean reversion during such times.

In conclusion, reversion to the mean is a powerful concept that can help us make more informed investment decisions. By taking a long-term perspective and building a well-diversified portfolio, we can increase the likelihood of achieving our financial goals.

Thank you for your continued trust and confidence in our investment management services. If you have any questions or concerns, please do not hesitate to reach out to the PGIM India team or our distributor partners as well.

Stay safe & happy investing.

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