Asset Allocation and Rebalancing

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Mr Market – Where are you heading next?

I am writing this article on 18 August 2007, a rainy cozy Saturday – in the aftermath of one of the worst weeks the stock markets worldwide had seen – but things are looking up after the surprising Fed's move last night to cut the discount rate, and Asian bourses are all set to rebound strongly from the opening bell on Monday.

This article is timely to put in perspective the recent market turmoil and how we could prepare ourselves in allocating and rebalancing our asset portfolio.

It is a very important concept to grasp - which eludes most investors – that the ***performance of an investment portfolio over time owes the most to asset allocation/rebalancing (more than 80%)*** than to other factors such as good stock-picking. What this means is that to grow our asset portfolio, we need not be a good stock-picker but merely need to allocate and re-allocate our assets into various asset classes (main ones being stocks, bonds, property, cash) in an optimum mix to be held over time so that the portfolio's growth is optimized.

There are a few ways to do this. Let's take a look at 3 main methods. To make it more realistic, we illustrate the concepts using a simple example. Assuming Mr A has the following portfolio distribution:

Before recent stockmarket turmoil			After recent stockmarket turmoil	
Stocks	$300	30%	$250	26%
Bonds	$200	20%	$200	21%
Property	$300	30%	$300	32%
Cash	$200	20%	$200	21%
Total	$1000	100%	$950	100%

Asset Allocation and Rebalancing Strategies

Method 1: Buy-and-Hold Strategy

This is the method made famous by none other than Warren Buffett. As the name implies, this is a 'do-nothing' strategy where there is no rebalancing required of Mr A. His initial mix of 30% stocks, 20% bonds etc is fixed at the beginning but is allowed to drift after that.

After the recent market turmoil, his portfolio evolves into the one on the right. For instance, stocks now represent 26% of his portfolio whereas the other asset classes (assumed no change in value in the last month) carry more weights. This implies that from asset allocation perspective, the portfolio is less risky as stocks only constitute 26% of his portfolio compared to 30% a month ago.

Conversely, if the stockmarket had appreciated, Mr A's portfolio would have been more skewed towards risk-taking as stocks would have carried a higher weight. This is exactly what happens to a typical investor in a bull run where more and more of his money (in terms of absolute value and percentage) is in stocks until it becomes out of balance for him.

Method 2: Constant-Mix Strategy

This is the method which assumes that given Mr A's risk and returns profile, he intends to hold constant the asset distribution in his perceived optimum mix over time, at least into the foreseeable future.

Hence, it is clear here that rebalancing is required to keep a constant mix (eg ratio of stocks to total assets of 30%). What this holds is that as stock prices increase, stock-to-asset ratio increases, which requires some stocks to be sold to achieve the 30% stock mix. As stockmarket tumbles, as with the recent market turmoil, the stock-to-asset ratio has reduced to 26%, which requires him to re-allocate from cash or to sell other asset classes (likely bonds) to buy stocks to top it up to 30%. In a way, he can be seen as a contrarian in the current market or bottom-fishing. He will have done well, even on an intra-day basis yesterday, not to mention if the market opens strongly on Monday.

Method 3: Constant Portfolio Proportion Insurance (CPPI) Strategy

In this method, which neccessitates the use of an equation to calculate the desired dollar amount of stocks at any point in time. This method is more difficult to explain in layman terms but suffices to say that the CPPI equation dictates that as stockmarket moves up, CPPI aggressively pursues more stocks and conversely as stockmarket tumbles, CPPI dramatically reduces stock holding. This is akin to the increasingly popular momemtum trading strategy and is suspected to have partially contributed to increased volatility in the market as more players such as hedge funds employ similar trading strategy.

Is there a Superior Asset Allocation and Rebalancing Method?

It will have been obvious to assume that the methods perform differently in differing market conditions and suit different investor profiles.

Return Expectation and Market Conditions:

In a Down-Up oscillating market (eg market drops by 10% and then moves up to initial level), Constant Mix strategy will outperform Buy-and-Hold Strategy simply because the investor had added positions when the market was temporarily down.

In a Down-Down market (Down 10%, then further 10% down), Buy-and-Hold Strategy will outperform Constant Mix Strategy, as the earlier avoids depreciation of further stocks being bought.

On the other hand, CPPI does poorly in a flat, oscillating market as it sells on weakness only to have the market rebound; and buys only to see the market falters. For obvious reasons, CPPI does best in a trending market (bull or bear).

Risk Tolerance:

Buy-and-Hold strategy is suitable for an investor who passively assumes that risk tolerance is directly related to wealth (ie as stocks rise, wealth increases, his stocks percentage increases which means increased risk tolerance).

Constant Mix strategy assumes that his risk tolerance is constant regardless of his wealth level.

CPPI is suitable for an investor who actively assumes that his risk tolerance is directly related to wealth level (ie as stocks rise, his wealth increases, so does his risk tolerance, and he buys more stocks).

Market Risk vs Credit Risk

It is important not to be mistaken that a Buy-and-Hold Strategy mentioned in this article implies buying and holding on to a particular stock or handful of stocks. Rather, Buy-and-Hold in this article means constant exposure to a market or index (ie no stock picking involved). Conversely, holding on to a particular stock will expose the investor to increased credit risk as the time horizon increases. Companies of a certain rating have a certain expected probability of default, based on a large database of default and rating migration data that rating agencies such as Moody's and S&P collate over the decades. For instance, if you have invested in a stock of intrinsic credit rating BBB- (which is common in the Asian stockmarkets including Singapore exchange), there is a 7.2% probability that it will default over 10 years. No small risk.

Pulling the Strands Together

There is much to learn from Mr Market and ourselves. Which method we should adopt is dependent on our risk & tolerance profile, returns expectation, investment time horizon and how we handle and react to market ups and downs. It is important o sleep soundly at night. If we focus on periodic asset allocation and portfolio rebalancing, there will be a greater chance of long-term investment success. Frequently, the greatest obstacle is ourselves.

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