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The Art of Profitable Rebalancing

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Raymond Kerzérho, *Director of Research*, PWL Capital Inc. *"The Art of Portfolio Rebalancing"*

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It has been our experience that portfolio rebalancing is one of the very few ways to generate additional returns for a portfolio without incurring any additional risk. It is interesting to note that while rebalancing is a significant source of added value, some of the most popular investment books don't even mention it.

So, what exactly does rebalancing entail?

Larry Swedroe[1] defines rebalancing as "…the process of restoring a portfolio to its desired asset allocation". Let's take the simplified example of a portfolio with a 50% stocks / 50% bonds policy asset mix. If stocks return 25% while bonds produce a 5% return, stocks become overweighted at the end of the year (54% vs. 46%). Rebalancing involves selling 4% in stocks and buying 4% in bonds to bring the asset mix back to the desired 50/50 policy asset mix. This simple stock/bond example can be extended to a multi-asset class portfolio involving Canadian, U.S. and International equities, bonds, high-yield fixed income securities and preferred shares.

What are the advantages of rebalancing?

William Bernstein[2] does a wonderful job of explaining the advantages of rebalancing. "First, it keeps your portfolio's risk within tolerable limits. Second, it generates a bit of excess return. And third, it will instill the discipline and mental toughness essential to investment success."

We have performed some simulations on the risk and return effects of rebalancing. Our historical study shows that a portfolio based on a widely diversified mix of asset classes, using a variety of different rebalancing strategies (e.g. rebalance every year, every second year, every time an asset class becomes misbalanced by 3%, etc.) provides both higher returns (0.50% on average) and significantly lower risk. Our results are depicted on the following page.

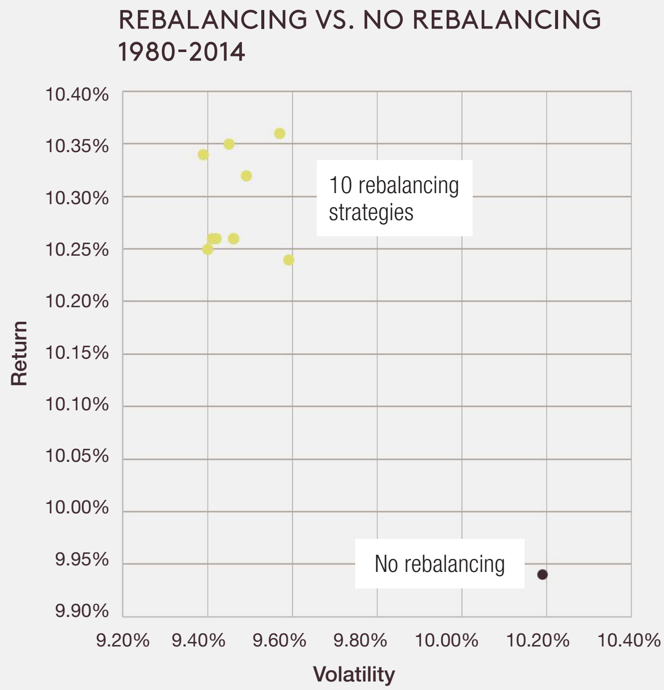
Why higher returns?

Most times, rebalancing a portfolio involves trimming high return assets to plunk money into low return assets. Under such circumstances, the fact that virtually any type of rebalancing strategy we simulated produces higher returns than not rebalancing is startling. The most plausible explanation for this phenomenon is the "mean-reversion" effect.

In other words, outperforming assets tend to overshoot their "true" fundamental value. By rebalancing the portfolio, the investor systematically takes profit in these « expensive » asset classes and reinvests the proceeds into the « cheap » ones. When eventually these « cheap » asset classes revert to their (higher) long-term fundamental values, they help the rebalanced portfolio generate a modest excess return.

[1]Swedroe, L., *What Wall Street Doesn't Want You To Know*, St-Martin's Press, 2001

[2]Bernstein, W., *The Four Pillars of Investing*,McGraw Hill, 2002.



Source: PWL Capital, Morningstar Encorr

The "right" rebalancing frequency

We've established that rebalancing will improve the portfolio's risk and return. Consequently, the appropriate course of action must be to rebalance every year to get the easy return pick-up, right? Not exactly. According to Truman Clark[3]: "No simple rebalancing rule can be in the interest of all clients". The reason being is that there are costs to rebalancing.

First, there are trading costs. For example, let's assume that for a $100,000 portfolio, rebalancing adds 0.50% to risk-adjusted returns, but also involves 10 to 15 trades (buys and sells). Trading costs can amount to upwards of $500, or $500 ÷ $100,000 = 0.50% of the portfolio. This means that if this portfolio is rebalanced yearly basis, the net benefit would amount to 0.50% - 0.50% = 0%. On the other hand, for a $1 million portfolio, these trading costs would amount to 0.05% ($500 ÷ $1,000,000). The expected net benefit of rebalancing on a yearly basis would therefore be equal to 0.50% - 0.05% = 0.45%.

The second key cost of rebalancing is tax costs. Of course this doesn't apply to an all-RSP portfolio. But in contrast, if the investor holds large taxable assets, these costs are of great concern. Thus, if the investor has a lot of unrealized capital gains, tax management strategies will favor a reduced frequency of rebalancing.

There is clearly no « one size fits all » strategy when it comes to rebalancing frequency. Nonetheless, our statistical research indicates that rebalancing once every 3 years produces roughly the same excess return than a monthly, annual or bi-annual rebalancing, with lower trading and tax costs. With this in mind, we tend to favor rebalancing frequencies ranging from 3 years (for portfolios with a larger asset base and smaller unrealized capital gains) to 5 years for the opposite situation.

However, these numbers are not cast in stone. Huge swings in the markets (such as the crashes of 1987 and 2008), may suddenly trigger huge portfolio imbalances, thereby presenting golden rebalancing opportunities. In addition, portfolios that benefit from regular cash contributions (or withdrawals) may be rebalanced more frequently, at no marginal cost, through the purchase (or sale) of the underweight (overweight) assets using new cash.

Conclusion

Rebalancing is one of the very few strategies that can provide higher potential returns and reduced risks. There is, however, no single method of applying the strategy that suits all investors. Transaction costs, portfolio size, asset base held in registered accounts, unrealized capital gains and large contributions or withdrawals are all factors that will determine the appropriate frequency of rebalancing.

[1]Clark, T., *Rebalancing: When, How and Why*, Dimensional Fund Advisors, 2001

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