Portfolio Construction

An Alternative Option to Portfolio Rebalancing

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We explore the use of an option selling overlay to improve portfolio rebalancing. Within a multi-asset class portfolio, portfolio weights deviate from targets as asset values fluctuate. Investors typically use a rebalancing process to bring portfolio weights back to their desired strategic allocations. However, between rebalances, investors are exposed to unintentional timing bets as weights deviate from targets. These timing bets introduce basis risk to their policy portfolio. A short option overlay can assist with hedging this unintentional exposure. We solve for the overlay construction that provides the desired rebalancing trade upon option expiration and backtest an illustrative overlay. Our analysis shows significant reduction in the portfolio's uncompensated timing exposure. Furthermore, by selling options, the overlay earns the volatility risk premium and thereby adds alpha to the portfolio. Lastly, we show that an option overlay for rebalancing is implementable even when considering transaction costs and real-world constraints.

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