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Tim Leung (t12497@columbia.edu) and **Peng Liu*** (pliu19@jhu.edu). *static-dynamic quantile hedging*.

We study the portfolio optimization problem of maximizing the probability to outperform a given random benchmark. In addition to dynamically trading the underlying asset, the investor also holds a portfolio of options. This leads us to introduce and analyze the static-dynamic approach to quantile hedging. Among our results, we find that, for the same success probability, the cost to outperform the aggregate of multiple positive benchmarks exceeds the sum of the costs to outperform the individual benchmarks. Through closed-form formulas and numerical examples, we illustrate the effect of an existing static options portfolio on the probability of outperformance. (Received January 03, 2014)