



Synopsis of Research Reports:

“What’s the Ticker Symbol for Farmland?”

Relatively high recent returns to farmland investments have led to substantially elevated interest in farmland investments by farmers and investors alike. The purpose of this study is to empirically present relevant measures related to farmland returns and other financial assets to provide a broad context for evaluation of farmland investments in a portfolio context. Absent, however, is a well-functioning equity market in farmland real estate, or a well-developed contemporaneous measure of farmland returns that might contribute to the development of tradable shares tied to farmland returns, or to methods to hedge the value of owned agricultural assets.

Returns data from a broad set of financial categories including equities, bonds, treasuries, REITs, gold, international equities, and commercial paper are compared to a broad set of agricultural returns representing state-level and constructed national indexes for farmland. Importantly, agricultural returns are generated on relatively long income cycles (annually) and thus present unique measurement and comparison issues relative to assets with nearly continuous returns generation. Consistent returns measures are developed and presented in multiple frameworks to convey temporal persistence, relatedness, and portfolio considerations related to farmland. To examine appraisal and smoothing bias, and to accommodate differential acquisition and disposition costs, a framework is used that tests sensitivity to differences in effective returns. Most importantly, given the relatively long cycles in agriculture, all possible intervals of holding periods (all acquisition to all possible disposition dates) are examined and compared to alternatives.

Under an extremely wide set of conditions and tests, agricultural real estate investments have performed well compared to most other financial assets on most measures of risk adjusted performance. As shown in figure 1 below, in a traditional E-V (expected return-variance) analysis, agricultural investments consistently place near the efficient frontier and dominate traditional equities and fixed income investments. In optimal portfolio constructs, the implied optimal shares of farmland far exceed their empirical prevalence indicating that there may be market frictions (including thin markets) or significant “alphas” in the historic data. Shown in figure 2, farmland consistently shows low or negative correlation with equities across virtually all possible sample periods, and high positive correlation with inflation. Thus, the advantages of inclusion in an investment portfolio are evident, however, the difficulties in direct investment remain as farmland trades in fairly thin markets with relatively high transactions costs.

Upcoming presentations show measures of variability and risk by holding period, and help provide additional information to relate the composition of returns (income vs. capital gains) to value.

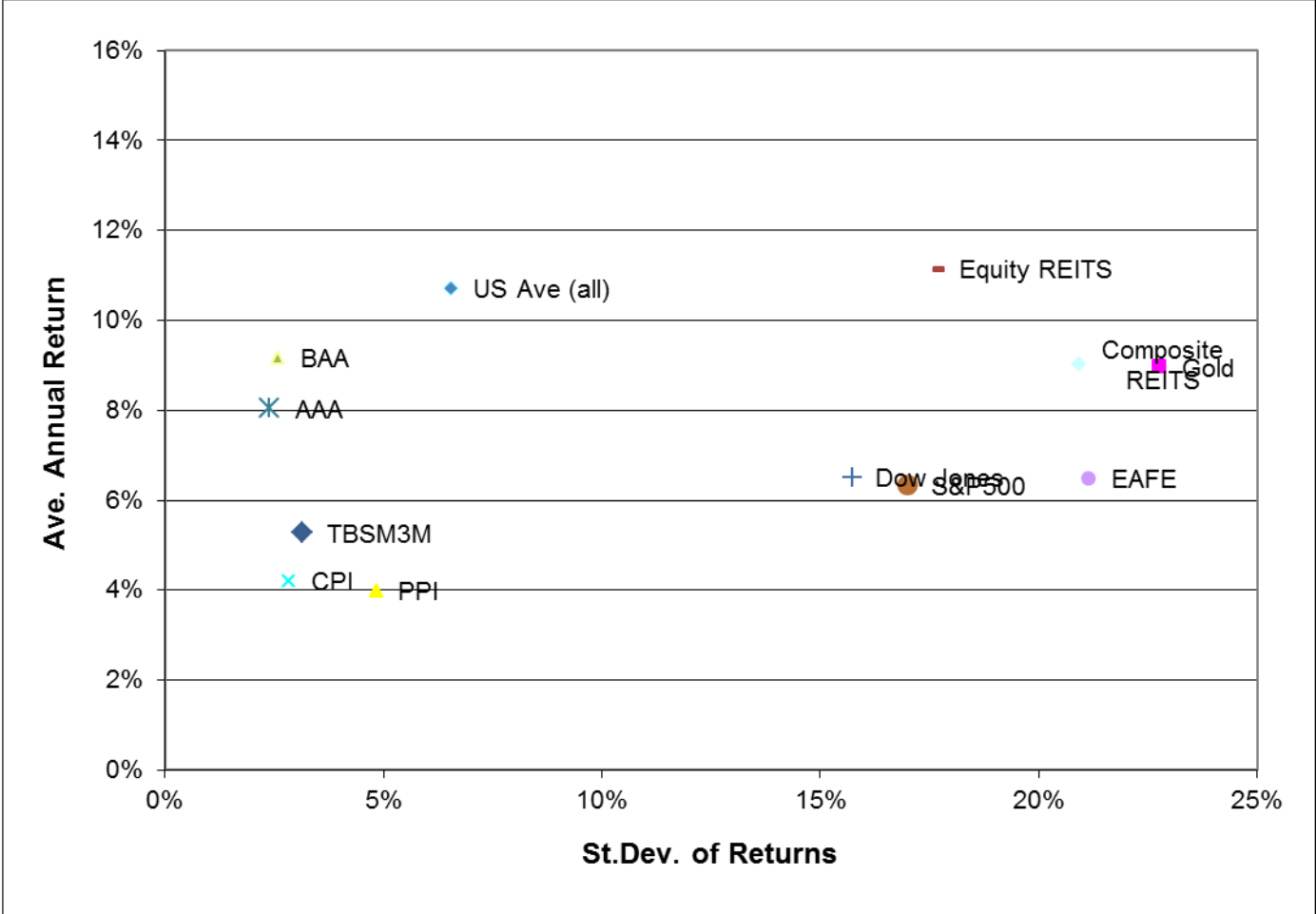


Figure 1. Risk-return patterns for alternative investments, annual basis, 1970-2012.

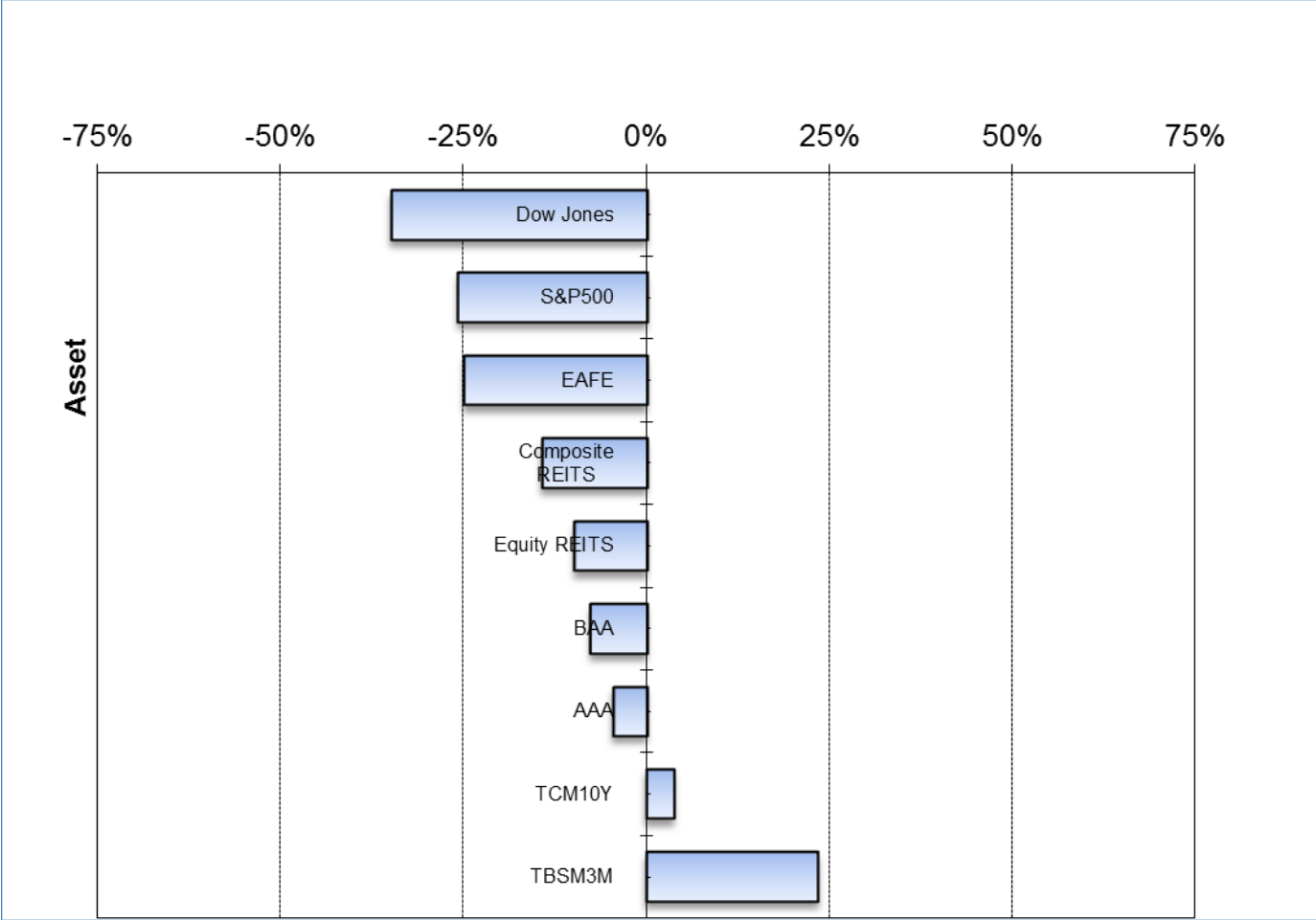


Figure 2. Correlation of returns by Asset Class to U.S. Agriculture, 1970-2012.