Ultimate Guide to Quantitative Forecasting

Overview of the Approach & Key Benefits

How Does It Work?

The MarketDesk Quant Pack uses a quantitative forecasting approach. How does the forecasting process work? It starts with collecting a large amount of data, such as manufacturing and regional Fed surveys, interest rate spreads, building permits, and other leading economic and macro datapoints. The process then uses statistics to uncover hidden relationships between the variables to identify future patterns and trends. An example of a trend is one datapoint, such as a survey reading or interest rate spread, historically leading another datapoint by a consistent number of months. The final step of the process applies those statistical relationships to current data and forecasts future economic trends.

Benefits of Quantitative Forecasting

- **Consistent & Repeatable Framework** – Forecasting is difficult. It involves predicting future events using complex and interconnected variables in a world of changing conditions. There are numerous ways to err in the forecasting process, such as giving too much weight to a certain variable based on current circumstances or ignoring historical relationships and thinking 'this time is different'. Quantitative processes are consistent, repeatable, and emphasize statistical relationships, which standardizes the forecasting process and allows for comparisons across different time periods. The relationship between two variables doesn't change based on current market headlines, the prevailing investment narrative, or other market-moving events such as geopolitical tensions. The process shouldn't change either.
- **Reduces the Amount of Human Input** – The list of human biases is lengthy and includes confirmation bias, overconfidence, anchoring bias, recency bias, and hindsight bias. In addition, financial markets are susceptible to groupthink, herd behavior, and loss aversion. These biases and emotions can significantly impact forecast accuracy by introducing subjective elements and skewing the results. A data-driven approach minimizes human input and increases objectivity. This is particularly valuable in volatile and uncertain market conditions when emotions and fear can drive investors to make hasty decisions. Basing forecasts on objective criteria and statistical relationships increases the reliability of those forecasts and ensures investment decisions are based on rational considerations and sound reasoning, rather than subjective judgments or 'expert' opinions .

Summary

Using a quantitative approach to forecast economic and macro trends offers numerous benefits. It creates a consistent and repeatable framework for analysis and reduces the impact of human bias and emotion in the decision-making process. Quantitative processes leverage the power of data and statistical relationships to produce more accurate and reliable forecasts. It offers investors and traders the ability to anticipate market trends, identify investment opportunities, and make well-informed decisions in a constantly changing marketplace. The alternative is moving from datapoint to datapoint in a subjective manner, potentially missing big trend changes and not taking advantage of investment opportunities.