intended to give participating teams an idea of what sort of trading strategies th competition might value. The second part is intended to provide suggestions fo the components of a good submission. Before reading this section, it is suggest that the readers familiarize themselves with the scoring rubric that will be used b the reviewers to evaluate the submissions, and interpret the content of this guidance within the context of that rubric.

Types of Strategies

The objective of submissions to the Southeastern Hedge Fund Competition is to propose an investment strategy that is attractive to a hedge fund. The types of investment strategies that are of interest to hedge funds are extremely wide ranging, covering all asset classes and markets. However, participants should keep in mind that this is a hedge fund competition. Therefore, in-depth analysi of a single stock with a proposed strategy of being long (or short) that stock is unlikely to score highly.

Additionally, the proposed strategy should be able to deploy enough capital to make it of interest to a small hedge fund. For example, a strategy that earns 20 percent per year on $100,000 but cannot be scaled to deploy more than $100,000 is unlikely to score well. As a general guideline, the strategy should be able to deploy at least $10 million. Finally, the competition is particularly geared toward innovative and novel trading strategies. Participants are encouraged to be creative.

Components of a Submission

The remainder of this section provides guidance on the components of a good submission. As discussed in the rules, the submission document can have up to six pages of written text with up to an additional four pages of tables and charts. The guidance provided here is not intended to provide a strict outline for a proposal. It is merely intended to give some ideas as to the issues that a good proposal should address, along with simple (although by no means complete) examples. The hedge fund strategy used as an example is a simple pairs strategy. A simple pairs strategy is chosen as the example for two

Postulate

Philosophy trades are take on with the goal of increasin the right mass of the return distr more positive skew higher kurtosis

reasons. First, it is sufficient to be illustrative of the suggestions made below. Second, it is too well-known and commonly used to be considered a strong submission. That is not to say that a pairs strategy could not possibly score well. However, a well-scoring pairs strategy would need to be sufficientl different from well-known and commonly used pairs strategies such as the discussed here to warrant a high score. It should also be noted that the examples given here are intentionally short. An actual proposal will likely want to go into more depth on several of the points discussed below. Finally, it should be noted that all numbers in the example are completely made up.

Main Idea

Calculated and intelligent risk taking for alpha generation makes risk management redundant

- The proposal should clearly state the main idea behind the trading strategy.

Example: The main idea underlying our proposed trading strategy is to identify pairs of stocks whose firms are highly similar but whose stocks appear to be priced differently, and to profit from the differential pricing. Specifically, the strategy will take long positions in stocks that appear to be cheap relative to the paired stock and short positions in stocks that appear expensive relative to the paired stock. The strategy will then realize a profit when the differential pricing is corrected.

Economic Hypothesis

The proposal should state the economic hypothesis underlying the proposed investment strategy and provide economic arguments as to why the hypothes

- should hold.

Example: The strategy is based on the idea that stocks of similar firms should be valued similarly. This hypothesis should hold because stocks of similar firm are likely to generate similar cash flows and have similar risk. Since cash flows and risk are the two primary determinants of the value of an investment, if two stocks are similar along these two dimensions, the stocks should be valued similarly.

Option Strategy Box
Volatility / Momentum 3x3 grid
IV vs Realized Volatility
IV Posterior based on Momentum

Bayesian

Portfolio (Options)

options strategies

Entry & Exit

Volatility Regime

KAMA (adaptive)

Implementation

The proposal should describe in detail how the proposed investment strategy will be implemented. This should include a discussion of how trading signals are calculated, how the securities to trade are selected, how the position sizes are determined, the timing and execution of the trades, and all other aspects relevant to the implementation of the strategy.

Greeks

Example: The first step in implementing our pairs trading strategy is to identify pairs of similar firms. We define two firms to be similar if the firms are in the same industry, have similar leverage, and have a high correlation between the stocks' returns. Specifically, at the end of each month, we look at all firms in th S&P 500 index. For each stock we calculate the leverage of the stock as the ratio of the book value of the firm's debt divided by the market capitalization o the firm's stock. We then examine pairs of firms that have the same 4-digit SIC and have a difference in leverage that is less than 0.1. Finally, we use daily returns over the past year to calculate the correlation between the returns of the stocks of each of the pairs of firms that satisfy the same-industry and similar-leverage criteria. We retain only pairs with correlation greater than 0.6.

Having identified the pairs of similar stocks, we then determine whether the stocks are similarly valued using the price-to-earnings ratios of each stock. Fo each stock in each pair, we take the price-to-earnings ratio to be the price of the stock divided by forecast earnings over the next year. We require that ther be at least a difference of 1.0 between the price-to-earnings ratios of the stoc in the pair. Pairs not satisfying this criterion are discarded.

Finally, for each remaining pair, we will take a $1 million long position in the stock with the lower price-to-earnings ratio and a $1 million short position in th stock with the higher price-to-earnings ratio. We will hold the positions for the duration of the next month, at which point the current pairs will be liquidated and we will repeat the process.

Ex: Straddle / Strangle Entry / Exit

a week before earnings

one day after

find/use those that would increase the right mass of the distribution { positive skew higher kurtosis

Greeks

Theta / gamma / Vega

Diversification [time, sector, strategy, moneyness]

Risks

The proposal should describe in detail the risks associated with the strategy and how any unwanted risks will be mitigated.

Example: There are two main risks associated with this strategy. First, there is the possibility that the stocks that the strategy has long positions in have, on average, different betas than the set of stocks the strategy is short. This would result in the portfolio having exposure to moves in the overall market. To remove any potential exposure to moves in the overall market, we will calculat each stock's beta with respect to the S&P 500 index using daily data over the past year. We will then take the portfolio's beta to be the average beta of the stocks the portfolio is long minus the average beta of the stocks the portfolio i short. If the portfolio's beta is not zero, we will hedge the portfolio's exposure t overall moves in the market using S&P 500 index futures.

Second, it is possible that our pairs selection strategy has overlooked something about the firms chosen as pairs and that the firms are not truly similar. To mitigate the possibility that a single pair experiences a large loss, w will monitor the profits of each pair and liquidate the pair if the total losses on the long position and the short position in the pair add up to more than $100,000, or 10% of the initial long (or short) position size.

Liquidity and Capital Considerations

The proposal should discuss how liquidity may affect the implementation of th trading strategy and how much capital the trading strategy might be able to deploy.

Example: Since we will implement our trading strategy only on stocks in the S&P 500 index, the stocks we will trade are very liquid. We therefore expect that we should be able to scale up the strategy quite easily. Since almost all S&P 500 index constituent stocks have more than $100 million in dollar trading volume every day, trading $1 million in any stock should have very little price impact. While the trading strategy as we propose it would take $1 million positions in each stock, there are many ways the proposed trading strategy

→ most liquid options contracts

OI data

could be scaled to take on more capital. Specifically, instead of only trading a the end of the month, we could initiate new positions each day, and then each day only liquidate the positions that were initiated one month prior. Assuming 20 trading days per month, this would scale the strategy from approximately $ million in each stock to $20 million in each stock. Since each month we identif on average 50 tradable pairs, this would enable us to grow the portfolio to hav total long positions of $1 billion and short positions of the same size.

Analysis of Strategy Prospects

The proposal should provide some analysis of the expected returns and risk associated with the investment strategy. In cases such as this pairs trading example, this can be done by simulating the strategy historically. However, for a wide range of strategies, it may not be possible to historically simulate the strategy. For example, the strategy may be particular to current market conditions that have not existed in the past, or the data necessary to simulate the strategy may not be available. If the strategy cannot be simulated, then alternative techniques should be used to, as best as possible, assess the risk and expected returns of the strategy. It may be a good idea to tabulate the results of your analysis. In the example, it is assumed that there is a table accompanying the text.

Example: To assess how the strategy has performed historically, we simulate the strategy during the period from 1980 through 2017. The data used for the simulation come from Bloomberg. The results of the simulations are shown in Table 1. The strategy generates an average monthly excess return of 0.4%. The standard deviation of the monthly excess returns of the strategy is 2.0%. The annualized Sharpe ratio of the strategy is therefore 0.69. The worst drawdown experienced by the strategy began in August 1994. The low point o this drawdown was realized in February 1996, at which point the strategy had lost 14% from its previous high. The drawdown ended in April 1997, at which point the strategy overcame its previous high-water mark.

Submissions will be reviewed by a panel of judges chosen by SEHFA. The tc five submissions will be chosen as finalists and invited to the final competitio

Each submission will be reviewed by several hedge fund professionals and evaluated according to the following six criteria on a scale from 1 to 5, with a score of 1 indicating that the reviewer strongly disagrees with the statement and a score of 5 indicating that the reviewer strong agrees with the statemer The submission's overall score will be calculated by averaging the scores fo each criterion across reviewers, and then taking the average criterion-level score across all six criteria. The teams whose submissions receive the highe five overall scores will be invited to the final competition in Atlanta.

The criteria used by the reviewers to evaluate the submission are as follows:

1. The proposed investment strategy is based on a sound economic hypothesis.
2. The proposed investment strategy is reasonably novel and distinct from well-known and commonly used investn strategies.
3. The proposed implementation of the investment strategy is well-designed to generate alpha if the underlying economic hypothesis holds.
4. The submission has a plan for mitigating risks associated with the investment strategy and for dealing with the situation when the economic hypothesis underlying the proposed investment strategy is proven false.
5. The submission is thorough in assessing the liquidity and capital considerations associated with the investment strategy. This in no way implies giving preference to more liquid or less liquid strategies.
6. The proposal uses appropriate methodologies to qualitatively or quantitatively evaluate the prospects for the proposed investment strategy, and the results of these analyses provide evidence of the viability of the strategy.

7. What happens at the final competition?

Scholarship prizes will be awarded to the top three teams. In addition, hotel accommodations (but not travel) for students on non-local finalist teams will provided.