Buttonwood Group Trading, LLC.
Where Innovation & Excellence Take Root

High Frequency US Equities Trader, Ph. D.   2013 Target Revenues $15M

History & Key Successes

- Extensive experience as a quantitative trader and researcher at Tower Research Capital for two years;
- Responsible for alpha signal generation for multi-asset trading strategy with revenues over 30MM/year, leveraged annualized return on capital of over 700% and combined cross-product Sharpe ratio over 10;
- Prior to Tower spent 8 years as a lead algorithmic execution quant at BNY ConvergeX, responsible for algorithmic execution of over 1B$/daily in client flow in international and domestic equity markets;

Models & Revenue Forecasts

- 2013 Strategy highlights:
  - Intraday, high frequency US equity strategy;
  - Trades hundreds of equities using advanced statistical models;
  - Does not rely on rebates;
  - Live Sharpe ratio is projected in 5-6 range;
  - Expected annualized leveraged return on capital of around 1000%;
  - Expected overall revenue of over 15MM for 2013;

- Resources & Leveraging BGT Infrastructure & Growth
  - Leverage ODIN Trading Platform, Servers & Co-Location (Nasdaq Initially)
  - Access to other major US Equity venues and dark pools may be utilized as part of expansion subject to cost/benefit analysis: ARCA/NYSE, BATS, Direct Edge and etc.;
  - Low latency lines between Carteret, Mahwah, Weehawken and Jersey City utilized as part of the above venue addition;
  - Access to a research server farm with at least 100 available nodes will be a significant benefit in optimizing trading parameters and further improving profitability;
  - Leverage Bloomberg systems for upcoming corporate actions

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Next Steps in 2012 (November & December)

➢ November and early December: complete execution optimization to bring slippage within cost limits, implement live trading API interface.

➢ Mid December: start live trading. Since all simulations use pessimistic execution assumptions, live performance is expected to be very close to backtest at lower exposure levels.

Scaling Up in 2013

➢ January: trade all 200 instruments in mixed lots - there is no odd lot penalty on Nasdaq. This allows to keep Sharpe at the highest level at the sensitive time of initial deployment. Exposure 2-10MM.   Revenue Approx. $ 200K/month.

➢ February-March: exposure 10-20MM.
➢ March: Add all dark pools, BATS and Direct Edge. Revenue Approx.$ 500K/month

➢ April: evaluate cost-benefit of adding NYSE/ARCA
➢ April-May: exposure 30-40MM. Revenue Approx.$ 1M/month

➢ June-July: exposure 50-70MM using all venues. Revenue Approx.$ 1.5M/month

➢ August and beyond: analyze market impact and depending on results scale to 100MM. Revenue Approx.$ 2M/month

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