GSTCAP is a quantitative financial technology company that seeks to provide an edge to investors that are exposed to market risk. We develop algorithms and analytics to help managers and other investors profit from market positioning. The genesis for the company is the belief that advances in data science and computing can improve investment outcomes for fundamentally driven investors. We believe data science and algorithms should augment human intelligence, not replace it.

Background

The market risk premium is the reward for taking market risk. Most managers run strategies as if the market risk premium is constant over an economic cycle, it's not. It increases from peak to trough and decreases from trough to peak. Managers make money in the trough to peak phase and lose money in the peak to trough phase. This is not only true in absolute space but in active space if active market exposure is positive. We can do better.

Products

GSTCAP designs algorithms called ReferencePoint Algorithms to help managers profit from this cyclical behavior. They identify important turning points in market direction. Since the market risk premium is not directly observable, we code underlying models to capture how investors "price risk" when the market environment or economic conditions change. ReferencePoint Algorithms configure and harness model outputs into a single exposure coefficient (called a ReferencePoint Beta) that reflects exposure levels to harvest market returns and limit drawdown.

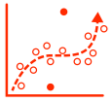
Data

Data captures investor behavior as they vote with capital each day

Models

Models signal investor preferences for market exposure at key turning points

Algorithms



Dynamic algorithms produce ReferencePoint Betas that determine market positionings

US Large Cap ReferencePoint Algorithm (USLC)

The USLC ReferencePoint Algorithm is designed to help managers increase portfolio return contributions from U.S. equity market exposure. We use open source software to produce directional market forecasts that are translated into ReferencePoint Betas for use by managers and other investors for market positioning. USLC targets SPDR S&P 500 ETF exposure as a proxy for market risk. We use the SPY because it captures market risk that a lot of managers are exposed to directly or indirectly.

USLC exposure ranges from zero (market neutral) to one (fully invested). Zero (0) is interpreted as a below average probability of earning a positive rate of return and one (1) as an above average probability of earning a positive rate of return.

Use Cases

GSTCAP ReferencePoint Algorithms are not influenced by emotion or subject to short term bias or noise that can result in investment mistakes Use cases include:

- Alpha generation:
  - Apply USLC to directly replicate market exposure levels and algorithm performance
  - Use USLC as a secondary source to validate fundamentally driven internal market views
- Risk management:
  - Managers ignore ReferencePoint Betas as their own risk. The USLC ReferencePoint Algorithms may see what you don't. They can help reduce drawdown from unanticipated market moves and can give you a reference point to stay in the market when noise is telling you to take risk off.
- Launch financial products

Preliminary numbers are available at 3 EDT and the final numbers are available at 3:45 EDT.

We deliver:
1. Intelligent Beta, a flag specifying the current market state specified by the algorithm, a flag specifying the expected return horizon

USLC ReferencePoint Algorithm statistics[1]

Calendar Year Returns

Year	US Algo	SPY
2018	7.64%	-6.35%
2017	19.38%	19.38%
2016	3.96%	9.64%
2015	-1.71%	-0.81%
2014	6.18%	11.29%
2013	29.69%	29.69%
2012	9.12%	13.47%
2011	26.00%	-0.20%
2010	16.27%	12.84%
2009	16.58%	23.49%
2008	-13.50%	-38.28%
2007	2.85%	3.24%
2006	5.37%	13.74%
2005	2.49%	3.01%
2004	1.23%	8.62%
2003	41.67%	26.12%
2002	-5.93%	-22.81%
2001	-0.98%	-12.87%
2000	1.43%	-10.68%
1999	9.48%	19.11%
1998	19.53%	27.04%
1997	28.89%	31.44%
1996	20.12%	20.10%
1995	34.95%	34.95%
1994	-1.30%	-2.21%

Annualized Returns

	US Algo[2]	SPY
ITD[2]	10.19%	7.40%

Annualized Standard Deviation

	US Algo	SPY
ITD[2]	13.52%	18.4%

Drawdown when SPY is down 10% or more

Begin Date:	End Date:	US Algo	SPY
9/20/2018	12/24/2018	-6.4%	-20.2%
1/26/2018	2/8/2018	0.0%	-10.1%
11/3/2015	2/11/2016	-8.9%	-13.3%
5/21/2015	8/25/2015	-9.6%	-12.3%
4/29/2011	10/3/2011	-2.7%	-19.4%
4/23/2010	7/2/2010	-11.4%	-16.1%
10/9/2007	3/9/2009	-30.4%	-56.5%
11/27/2002	3/11/2003	5.8%	-14.6%
3/24/2000	10/9/2002	-11.9%	-49.1%
7/16/1999	10/15/1999	-15.9%	-11.9%
7/17/1998	8/31/1998	-16.6%	-19.0%
10/7/1997	10/27/1997	-11.2%	-11.2%

1. Returns and risk is live from May 2018 onward. Performance is calculated with data "as stated" historically from 11/1993 until 5/2018.
2. Calculated from 11/11/1993 to 7/31/2019