A Quality managed futures trend following strategy to yield absolute returns in stock / index futures
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samTREND product is meant purely for advisory and research advisory product to hedge funds and I-Banks globally and does not intend to manage or solicitate capital from clients to run a fund.

samTREND is not sponsored, endorsed, sold or promoted by MCX, NSE or any other exchange in the world
The Mandate

- Yield absolute returns for the investors
- Yield alpha irrespective of the equity market directions
- Generate consistent returns with low volatility and significant Sharpe
- Trade only the most liquid equities, which are not subjected to price manipulations / random fluctuations
- 100% systematic and disciplined
About Us

COMPANY BACKGROUND

- Samssara Capital Technologies LLP (“Samssara”) is an investment solutions firm focused solely on developing automated algorithmic and quantitative trading and investment strategies
- It was launched in 2010 by a team of IIM Ahmedabad and IIT Bombay graduates - Rajesh Baheti, Manish Jalan and Kashyap Bhargava
- Samssara caters to its clients' needs of providing an alternative asset management vehicle, with the focus on 100% automated and quantitative trading strategies
- The team at Samssara works on mathematical models and statistics that identify repetitive patterns in equity, commodity and currency markets
- The addressable market for Samssara is global - as the firm can develop and build models which can function in both developing markets with limited competition and developed markets with strong competition
- Samssara’s client base includes the leading international and domestic banks, international and domestic stock brokers, family offices, corporate treasuries and HNIs

PRODUCTS OFFERED

- Samssara’s products vary from pair trading (statistical arbitrage), factor models, Nifty Index beating products to very high frequency trading strategies
- Our key product offerings include samTREND - a trend following strategy in equities, commodities & currencies; samCAP – a systematic portfolio management on large cap stocks with dynamic hedging and samWILLS – a long-short strategy based on statistical arbitrage
- Other products offered include samTREND - a trend following strategy in equities, commodities & currencies and samWILLS – a long-short strategy based on statistical arbitrage
- Samssara also develops in-house products which are used by investors like HNI’s, corporate treasuries, Prop houses of brokers and investors who wants an alternative vehicle for investment apart from equities and fixed income.
- The products are designed to generate consistent returns and ride the volatility of the markets with systematic approach
- Additionally, Samssara works on providing high end services and strategy development consultancy to hedge funds and International Banks globally
Our client base

Corporate Treasuries / Family Offices / Stock Brokers

HNIs (Individuals)

Our client base includes:

- Corporate Treasuries
- Family Offices
- Stock Brokers
- HNIs

HNIs and executives of corporates like:

- Leading Private Equity firm
- Large financial services MNC
- CEO of a leading KPO

- Millennium Stock Broking Pvt. Ltd.
- Bombay Gas Co. Ltd.
- Crosseas Capital Services Pvt. Ltd.
The Team

Manish Jalan

*Director*

Manish is the director and chief strategist of the company. Prior to being in India, Manish was a quantitative equity Trader in Tokyo, with Merrill Lynch Prop Desk for over 4 Yrs where he played a vital role in development and implementation of various factor models and high/medium frequency trading models, which contributed significantly to the prop desk profitability. Manish has worked closely with more then 5 Indian broker shops and numerous International banks in algorithmic trading, high frequency trading, statistical arbitrage, quantitative modeling, back testing, programming, statistical analysis and risk handling. Manish is a B.Tech and M.Tech from IIT Bombay in Mechanical Engineering.

Rajesh Baheti

*Director*

Rajesh is the incubation partner and director of the company. Rajesh, brings with him more then 15 years of experience in trading India markets. He is currently the director and founding member of Crossseas Capital Services (One of the first clients of Samssara). Rajesh established Crossseas in 1995 and since then has been instrumental in providing consultancy to clients in shares, bonds, stock etc. Crossseas currently operates 5 offices in Mumbai and several others across the country. Crossseas provides solutions in systematic trading opportunities to selected clients in India and abroad. Rajesh holds a PGDM from IIM Ahmedabad.

Kashyap Bhargava

*VP, Strategy Development*

Kashyap is a B. Tech. and M. Tech. from IIT Bombay and specializes in development of automated quantitative trading strategies. He has around 7 years of trading experience in Indian Markets and has been developing medium/low frequency trading strategies. He has also worked at the proprietary trading desk of G.H. Financials as a derivative trader for 2 years developing trading strategies for US, UK and European Fixed Income and Equity markets.

Tarun Soni

*VP, Business Development*

Tarun leads the business development initiatives at Samssara. Prior to this, he worked with investment banking team at Anand Rathi Advisors for two years. He also worked with the investment banking team at Avendus Capital for three years and with Bank of America back office for one year. He has a strong experience of working on successful mergers & acquisitions and private equity syndication transactions across various sectors. Tarun is a B. Tech. from IIT Bombay.
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The Universe

- Limited risk of price manipulations and absurd price movements
- Universe chosen to be of extremely liquid stock futures and index futures so that getting in and out of the positions are easy and less prone to slippages
- Universe chosen across varied sectors classes (non-correlated, loosely correlated) like Steel, IT, Real Estate, Nifty and Bank Nifty
Structure and Capital Deployment

- Trends of the equities identified in the candles of 30 min.
- Most equities move 2%-5% on a daily basis and hence, shorter term trend like that of 30 min. and higher frequency needs to be captured in real time
- Making sure that at no time the model exceeds 2x times the leverage on the model so that the strategy is not excessively leveraged

**samTREND**

- Rs. 100 Invested

**Ts**

- Rs. 25 used for MTM Long or Short Stock/Index
- Rs. 75 Kept in FD to yield consistent return

- Max deployment / Exposure = Rs. 200
- May not be used completely at all times / Not a continuous exposure model
Back Testing and Live Market Approach

- Methodology designed to sustain various kind of market environments (Bulling, Bearish and Range Bound)
- Designed to take positions at the start of the trend, so that major moves can be captured
- Trend can be both Upside (Directional long position) or Downside (Directional short position)
- 100% systematic and disciplined strategy
Back-test based on realistic scenario

- *Slippage and Transaction Cost @ 7 BP*
## Back Testing Approach

<table>
<thead>
<tr>
<th>Considerations</th>
<th>Approach</th>
</tr>
</thead>
</table>
| **Back Testing Mechanism**   | • 2 years data on 1 min. closing taken for all the stock / index futures  
• Data cleaned and adjusted for expiry and gaps / outliers  
• Data of all 10 stocks and index futures taken together to test the overall strategy |
| **Asset Positioning**        | • Position of long or short taken on the asset, on 30 min candles, based on the Long/Short signals from the trend following system  
• Correlation of the portfolio checked, to avoid taking positions in highly correlated assets at any given time |
| **Asset Risk Management**    | • Every 1 minute checks are in place for trailing stop loss based on volatility of the asset (More volatile => Higher trailing stop loss) |
| **Asset Unwinding**          | • When the trailing stop loss is hit  
• When the trend reverses in the other direction – the position is unwound |
| **Exposure Limits**          | • Exposure limits is tightly kept in control, so that the leverage of 2x is not exceeded at any given time |
| **Portfolio Weight**         | • Equal exposure of Rs. 3 Lacs, is taken on each single trade so that the portfolio of assets remains equally distributed |
## Trade Characteristics

<table>
<thead>
<tr>
<th>Trade Characteristics</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Value Per Trade</td>
<td>~ Rs. 3 Lacs Notional</td>
</tr>
<tr>
<td>Average Number of Trades Per Month</td>
<td>142 Trades</td>
</tr>
<tr>
<td>Average Monthly Turnover*</td>
<td>~8.5 Cr.</td>
</tr>
<tr>
<td>Average Return Per Trade*</td>
<td>Rs. 510 (~ 17 BP)</td>
</tr>
<tr>
<td>Transactions Costs</td>
<td>3 BP</td>
</tr>
<tr>
<td>Slippage Costs</td>
<td>4 BP</td>
</tr>
<tr>
<td>Recommended Account Types</td>
<td>Client Accounts</td>
</tr>
</tbody>
</table>

*Note: ▪ Historical return generated by back-testing
▪ Slippage & Transaction Cost @ 7bp
Daily Performance Chart (The Equity Curve)*

ROI (%) of samTREND in Stock/Index Futures

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Note: • Historical return generated by back-testing
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Monthly Performance Chart (Stock/Index Futures)

ROI (%) Monthly of samTREND

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## Performance Metrics

<table>
<thead>
<tr>
<th></th>
<th>samTREND Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Monthly Return</td>
<td>6.45%</td>
</tr>
<tr>
<td>Volatility in Monthly Returns</td>
<td>9.9%</td>
</tr>
<tr>
<td>Monthly Sharpe</td>
<td>0.64</td>
</tr>
<tr>
<td>Average Yearly Return</td>
<td>77.43%</td>
</tr>
<tr>
<td>Volatility in Yearly Returns</td>
<td>34.62%</td>
</tr>
<tr>
<td>Annual Sharpe</td>
<td>2.23</td>
</tr>
<tr>
<td><strong>Total Months</strong></td>
<td>29</td>
</tr>
<tr>
<td><strong>Total Performing Months</strong></td>
<td>22</td>
</tr>
<tr>
<td><strong>Percentage of Performing Months</strong></td>
<td>75.0%</td>
</tr>
</tbody>
</table>

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*Note:* • Historical return generated by back-testing  
• Slippage & Transaction Cost @ 7bp
## Exposures, Margins and Limits

<table>
<thead>
<tr>
<th>Terms</th>
<th>Commodities Futures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Capital Investment</td>
<td>Rs. 25 Lacs</td>
</tr>
<tr>
<td>Maximum Overnight Stock/Index Futures Exposure</td>
<td>Rs. 50 Lacs (2x Leverage)</td>
</tr>
<tr>
<td>Distribution between MTM liquidity and FD deposit</td>
<td>25:75 (6.25 Lacs : 18.75 Lacs)</td>
</tr>
<tr>
<td>Peak to Trough Drawdown**</td>
<td>20%</td>
</tr>
<tr>
<td>Peak to Trough Drawdown on Capital**</td>
<td>Rs. 5 Lacs</td>
</tr>
<tr>
<td>Transactions Costs (Brokerage + Exchange Costs)</td>
<td>3 BP</td>
</tr>
<tr>
<td>Recommended Account Types</td>
<td>Clients own Account with Broker</td>
</tr>
</tbody>
</table>

** Based on back-test results from May 2010 to May 2012

*Note:* Historical return generated by back-testing
  *Slippage & Transaction Cost @ 7bp*
Advisory Fee Structure
<table>
<thead>
<tr>
<th>Details</th>
<th>Terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantitative Intelligence &amp; Support</td>
<td>Samssara Capital Technologies LLP</td>
</tr>
<tr>
<td>Minimum Investment</td>
<td>Rs. 25 Lacs (Exposure of 50 Lacs)</td>
</tr>
<tr>
<td>Portfolio Level Stop Loss</td>
<td>Rs. 5 Lacs (20% drawdown)</td>
</tr>
<tr>
<td>Prime Broker</td>
<td>Contingent on the client</td>
</tr>
<tr>
<td>Minimum Investment Period</td>
<td>1 Year*</td>
</tr>
<tr>
<td>Fee Structure</td>
<td>Performance Fees</td>
</tr>
<tr>
<td></td>
<td>- Performance Fee: 25% (Of overall samTREND strategy)</td>
</tr>
<tr>
<td></td>
<td>- Hurdle rate : NIL</td>
</tr>
<tr>
<td></td>
<td>- Management Fees: NIL</td>
</tr>
<tr>
<td></td>
<td>- High Water-Mark: Yes</td>
</tr>
</tbody>
</table>

*Except for 20% draw-down – any other reason to exit within 1 year, will lead to penalty of 2% on the AUM
Contact us

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