QARMIN

Business Description

June 2012
Confidential

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Introduction

Founded in October 2010, QARMIN is a small Paris-based Prop Trading House that specializes in **quantitative systematic fully automatized strategies** with a focus on listed and highly liquid instruments (Europe and US) and medium frequency strategies.

First stage of development was dedicated to development and live-testing of our proprietary trading platform including automated strategies, backtesting tools, risk management engine and execution algorithms.

We have gone live with the founders' private funds and are now looking for a business partner to operate on a larger scale.

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Executive Summary

- Primary objective is to achieve consistent risk-adjusted returns throughout different market cycles, taking advantage of a flexible dynamic allocation process relying on **3 largely uncorrelated investment axes: multi-asset directional, market neutral and volatility arbitrage.**
  We typically target a minimum **Sharpe Ratio of 2**, with an annualized **Return to Max Drawdown of 3.**

- **Custom trading platform**: Research and Development, backtesting and deployment run on a unified platform, hence making possible process streamlining.
  We're maintaining an extensive historical database of prices and fundamentals for 6000+ instruments listed on US and European exchanges, going back more than 15 years.

- QARMIN is a team of experienced prop traders and developers who have committed a significant amount of their wealth in the project, and have worked extensively together in the past. Each team member has a **strong academic background** in mathematical finance and has **extensive experience in the derivatives market.**

A diversified strategy portfolio with high pre-leverage target returns

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Competitive Advantages

- **Strong methodology** and flexible platform allow industrialization of idea generation and testing: time to market from R&D to production is low

- Capacity to create and manage several **uncorrelated bets** by creating nonstandard coherent underlyings (basket, synthetic instruments)

- Large existing (and growing) library of uncorrelated single models/strategies displaying **low pairwise correlation** (-5% average correlation over 10yr period) within each investment axis
  Extensive menu of allotment between each of those models benefiting from our proprietary allocation model therefore increasing Sharpe Ratio compared to any given single strategy's Sharpe
  Total liberty to switch off strategies with low prospective returns

- **Active hedging method for tail risks** via quantitative process involving long only cheap OTM long-term options; focus on macro picture, top down approach and exogenous stimuli analysis therefore departing from the historical bias and enhancing the capital preservation capacity of the portfolio

A flexible platform in the service of a robust and agile investment philosophy

Investment Process

Strategy Development *(cf. Appendix p15)*

- Underlying idea stemming from market experience (risk premium location)
- Historical validation (backtesting, choice of relevant parameters, observed returns)
- Data-mining bias correction (reality check, expected returns, coherence with market fundamentals – is the edge still in place?)

Portfolio Allocation *(cf. Appendix p16)*

- Bottom-up approach using customized allocation algorithms at each allocation step
- Top-Down approach adjusting marginal weights of single models and investment axes via our own proprietary risk index

Risk Management *(cf. Appendix p18)*

- Single model dedicated risk management (stop-loss, volatility/VaR adjusted size by instrument)
- Specific risk manager for each investment style (directional, market neutral, volatility arbitrage)
- Global aggregation for ultimate capital preservation constraint

Execution Management *(cf. Appendix p21)*

- Specific algorithms for each investment style
- Transaction costs analysis (brokerage, slippage, rebates) for best execution algorithm selection and trades/performance reconciliation

Identification of alpha at each step of the process

Strategies Description
Overview

- 3 Investment axes whose relative weights are controlled via a **proprietary portfolio allocation model**; directional, market neutral and volatility arbitrage are effectively uncorrelated through different market cycles

Investment Axis	Description	Asset Class	Horizon
Directional	Technical and fundamental short/medium term pattern coherent with behavioural finance, market macro/micro structure and directional events	Equities, Equity Index, Fixed Income, Commodity, Currency Futures and ETFs. Options on these asset classes. Geographic positioning: Europe, US and Emerging Markets (via ETF)	From 2 hours to several weeks
Market Neutral	Adaptive statistical analysis to capitalize on local divergence and mean reversion nature of risk neutral baskets	Equities, Equity Index, Fixed Income Futures Geographic positioning: Europe, US	From 10 minutes to 2 weeks
Volatility Arbitrage	Arbitrage of the volatility curve mispricing (local vol, skew, kurtosis, term structure) of an underlying compared to its peers, both using fundamental and statistical approach	Equities: main indices and their stock components, VIX, V2X, Main Currencies, Commodities, ETF Volatilities VXX, VXZ, Listed vanilla options Geographic positioning: Europe, US and Emerging Markets (via ETF)	From 1 week to 1 month

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Strategies Description
Directional

Directional			
Strategy Sample*	Strategy Description	Underlyings	Horizon
Mean Reversion	Take advantage of short term negative autocorrelation using specific volatility analysis	Large Cap Equities Equity Futures	1 to 5 days
Trend Following	Exploit long term trend following nature of capital markets; overlay via tactical options writing	Equity Index Futures Commodity Futures FX Futures Fixed Income Futures Emerging Market ETFs	5 days to several weeks
Macro Events	Capitalize on over/under-reaction of various indices around macroeconomic announcements	Equity Index Futures Fixed Income Futures	2 to 10 hours
Gap	Exploit statistical patterns of gaps at open	Equity Index Futures	2 to 10 hours
Seasonality	Benefit from intraday and extraday seasonality due to structural imbalances	Equities Equity Index Futures	2 hours to 5 days

* non-exhaustive list of currently available live strategies

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Strategies Description
Market Neutral

Market Neutral			
Strategy Sample*	Strategy Description	Underlyings	Horizon
Equity vs. Volatility Arbitrage	Exploit local relative mispricing of equities and volatility as an asset class	Volatility Index Futures Equity Index Futures	10 minutes to 1 day
Equity Statistical Arbitrage	Take advantage of temporary divergence within a bespoke basket constructed via various statistical methods	Equities	1 day to 2 weeks
Cross Asset Futures Arbitrage	Take advantage of temporary divergence within a bespoke basket of instruments from different asset classes constructed via adequate statistical methods	Equity Index Futures Commodity Futures FX Futures Fixed Income Futures	2 hours to 3 days

* non-exhaustive list of currently available live strategies

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Strategies Description
Volatility Arbitrage

Volatility Arbitrage			
Strategy Sample*	Strategy Description	Underlyings	Horizon
Single Stocks Relative Value	Benefit from implied volatility curve mispricing of an underlying compared to its peers (L/S volatility, Dispersion)	Equity Options Equity Index Options	1 week to 1 month
Short term options expiration effect	Take advantage of large time decay effect for short term options around expiration; identify behaviours of underlyings on expiration date deriving from large options positions hedging	Equity Options	1 day to 1 week
Event Driven	Exploit volatility curve dislocation around idiosyncratic events	Equity Options	1 week to 1 month

* non-exhaustive list of currently available live strategies

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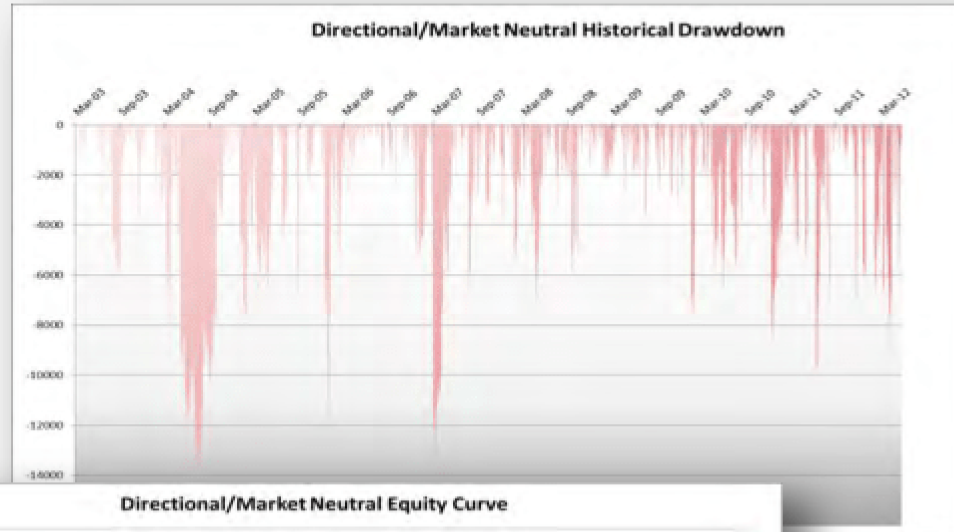
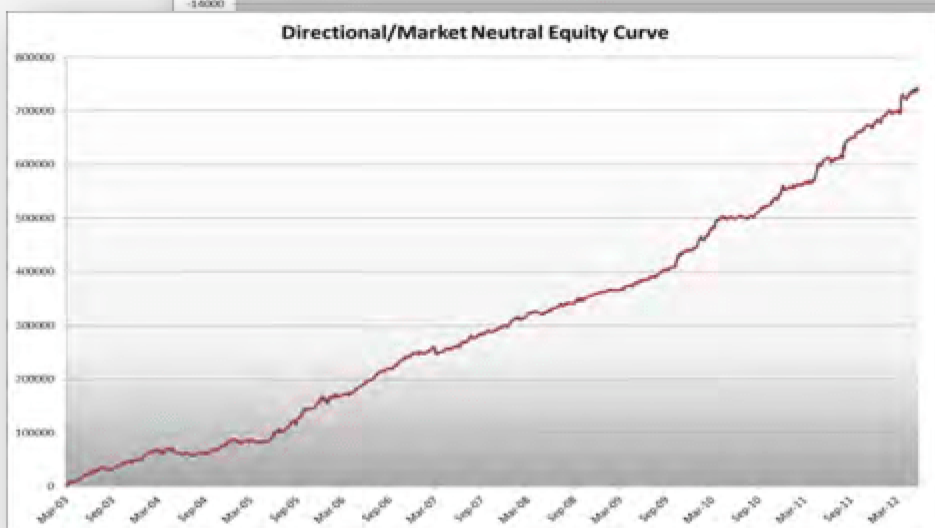
Performance
1/2

Consistent risk-adjusted returns over a 10yr backtest period with no sign of abating in the recent past

Sharpe	3.92
Yearly Return to Max DD	5.34
Avg Yearly Return	22.8%
Profitable Days %	59%
Avg Daily Return	0.08%
StDev Daily Return	0.37%
Best Daily Return	2.91%
Worst Daily Return	-2.24%
Worst DD	-4.27%
Max DD Duration	136 days
Avg Worst 10 DD Duration	62.9 days





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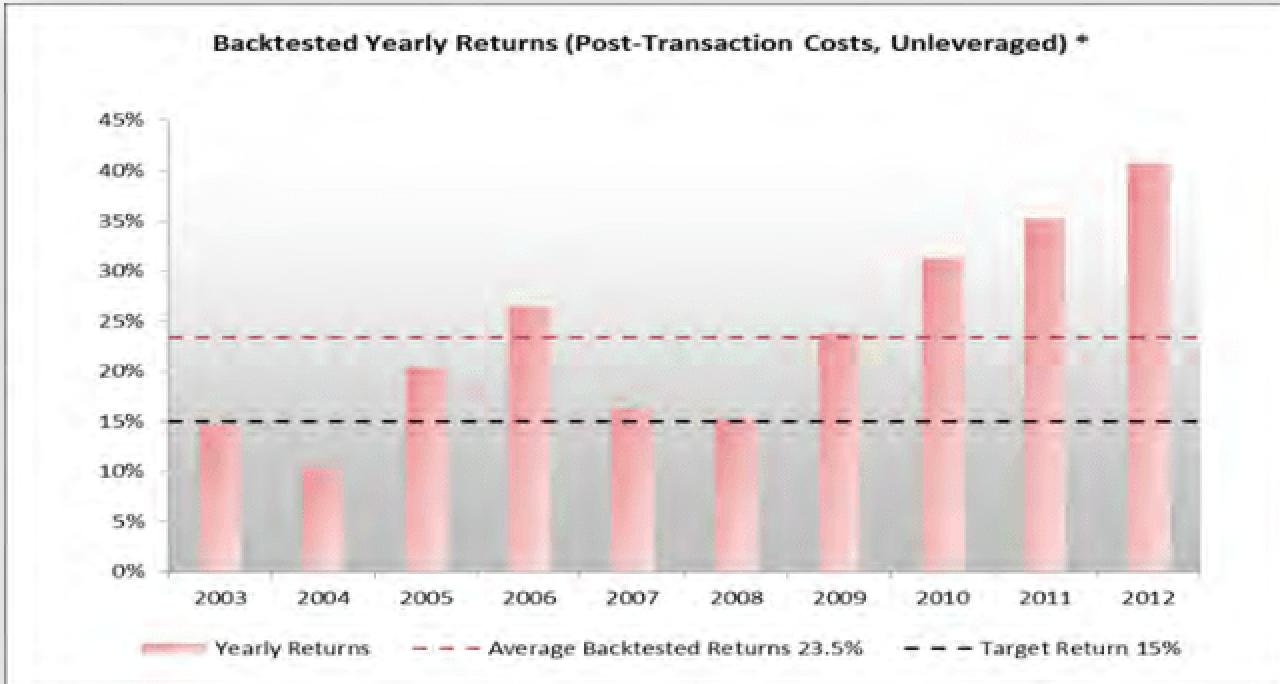
Performance
2/2



Y2012 performance has been frozen as of May 31st and extrapolated for the remainder of the calendar year

The backtest is presented with an equal-weighted allocation method; live allocation will tweak the relative weights of each strategies and each investment style, hence improving the risk profile of the portfolio; weight of any given axis will never represent more than 50% at any given time with the exception of Volatility Arbitrage which will be limited to 25% relative weight

Volatility Arbitrage investment axis is not represented on this chart as backtesting remains difficult to achieve; however the expected performance is in line with the above-presented result and should add an extra layer of diversification, therefore improving the overall profile of the portfolio

- Margin of safety built into target return expectations moving forward; **15% yearly target performance has been reached 9 years out of the last 10**; it is a large 7.8% (or 0.85 std dev) below average over the entire period
- 15% target return is coherent with 4.27% max backtested drawdown, hence allowing us to construct a **portfolio with an expected Return to max drawdown higher than 3**
- Strategy can be leveraged up to 5 times (margin to equity < 100%) to achieve an iso return-to-max-drawdown couple with no significant foreseeable loss of performance (besides marginal funding costs)

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Appendix

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Team Bio

- **Bertrand LOUVARD**, Founding Partner
  Bertrand joined Société Générale in 2000 as a trader on the US Indices Derivatives Trading Book in NY. In 2003, he became Head of the US Indices Flow Business Trading Book before being appointed Head of the US Equity Flow Business Trading Book in 2005. He expanded the Hedge Fund Client Business in the US for vanilla derivatives products. He then joined the Lyxor Structured Product Solutions team in 2009 to develop the structured products active management offer within the Quantitative Asset Management team of Lyxor.
  Bertrand Louvard is a graduate of the École Centrale Paris and has a Master's degree in Mathematics, Probability and Statistics from the University of Jussieu (Paris VI).

- **Francois-Charles SCAPULA**, Founding Partner
  Francois-Charles was a fellow associate at the CEREG between 2001 and 2004 and a professor of Econometrics and Quantitative Techniques at University Paris IX Dauphine. He has spent the last 7 years as a prop trader for Fortis and Société Générale focusing on quant equity derivatives strategies, where he traded listed and OTC stock and index options, variance swaps, futures from all asset classes. He was also responsible for setting up the trading platform at Lyxor for the quant asset management department.
  Francois-Charles is a graduate of the École Normale Superieure and ESSEC. He has an « Agrégation » in Economics, a Master's degree in Applied Mathematics and a Master's degree in Finance from Paris IX Dauphine. He was a PhD candidate in Mathematical Finance at the University of Paris IX Dauphine.

- **Sylvain Rey**, Founding Partner
  As a graduate of Telecom SudParis with a specialty in parallel and distributed system, Sylvain has been a Software Consultant in the San Francisco Bay Area from 2000, then in Paris, France from 2003. As a seasoned Application and Systems Architect, he has designed and developed many solutions for various banking and financial institutions such as BNP Paribas, AXA Investment Managers, Banque de France and the European System of Central Banks.

Each Partner has committed a substantial amount of his personal wealth to the venture.

Sylvain and Bertrand have known each other for more than 15 years. Bertrand and Francois Charles were working together at Société Générale. Sylvain, Bertrand and Francois Charles have founded QARMIN in October 2010 and have worked extensively since then to build a cutting edge systematic platform.

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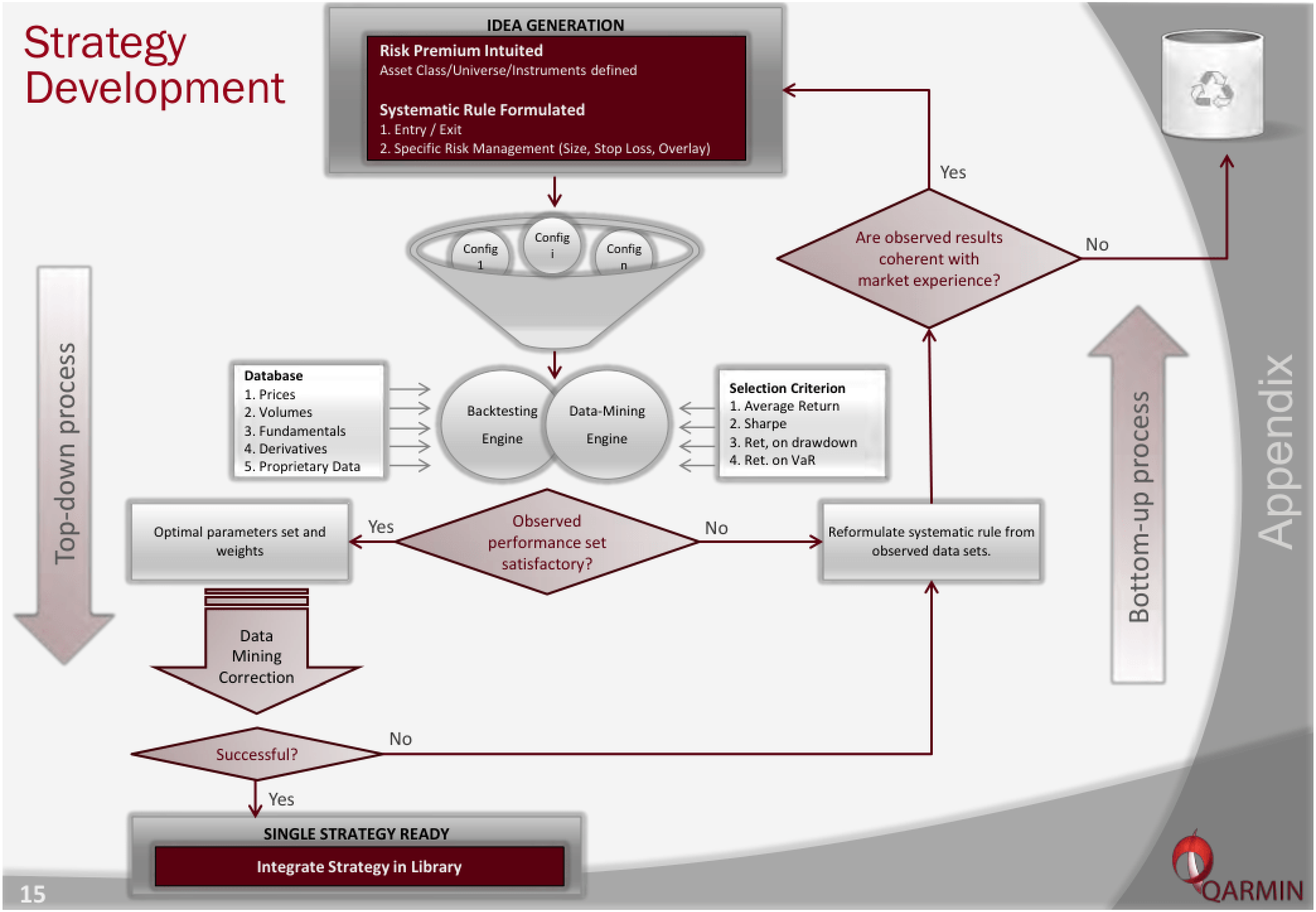
Strategy Development



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STEPWISE PROCESS	BOTTOM UP CONTROL	PORTFOLIO ALLOCATION			TOP DOWN CONTROL
		DIRECTIONAL LIBRARY	MARKET NEUTRAL LIBRARY	VOL ARB LIBRARY	
INITIAL STEP 0	Single Strategy Generation Process *Cf. Strategy Development*	Direct. 1 · Direct. i · Direct. n	Neut. 1 · Neut. i · Neut. n	Neut. 1 · Neut. i · Neut. n	Single Strategy Generation Process *Cf. Strategy Development*
STEP 1	**STATISTICAL EQUITY CURVES ANALYSIS** Including: 1. Mean Variance Optimization over various horizons 2. Maximum diversification under performance constraint 3. Maximization of various performance measures in walk forward process	Alloc.	Alloc.	Alloc.	**EXOGENEOUS CRITERIA ANALYSIS** Including: 1. Strength of Risk Premia underlying each of the single strategies (e.g. IV %ile vs. RV, frequency of channel borders crossing, high volume in bear market, etc.) 2. Liquidity of traded instruments
INTERMEDIATE RESULT 1		Directional	Market Neutral	Volatility Arbitrage	
STEP 2	**STATISTICAL EQUITY CURVES ANALYSIS** Kelly Criterion, Markowitz Portfolio Allocation	Allocation			**EXOGENEOUS CRITERIA ANALYSIS** Including: 1. Macro/Flow Environment (e.g. Economic Indicators) 2. Volatility/Credit Conditions (VIX, iTraxx) 3. Fear/Greed Index, Deal Index (Proprietary index) 4. Crowding out trades (recent HF performance vs. LT mean) **Decision to tilt allocation towards better historically performing strategies in identified conditions**
INTERMEDIATE RESULT 2		Directional aggregation	Market Neutral aggregation	Volatility Arbitrage aggregation	

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Risk Management

1/2 Ex-ante and ex-post approaches

Ex-ante approach

- Portfolio allocation taking decisions based on past performance analysis under risk constraints
  - Variance minimization of the portfolio for a given performance target via Var-Covar matrix for strategies equity curves and underlyings historical return
  - Minimum ex-ante diversification required for inclusion of a given strategy in the meta-portfolio
- Sentiment Index adjusting notional at risk based on fundamental and technical data keeping the margin to equity relatively constant (and targeting stable risk return profile)
- Hedging macro picture with "long-only" cheap long term OTM options via fundamental and quantitative screening of underlyings with available derivative markets (see focus)

Ex-post approach

- Single position aggregation and real-time dedicated risk metrics for each business line…
  - Multi Directional: Tenor notional exposure (via Var-Covar Matrix for underlying return)
  - Market Neutral: Notional Replication, Spread Risks
  - Volatility Arbitrage: Volatility, Kurtosis/Skew Exposure (Tail Risks)
- …and at the global level for ultimate risk control and capital preservation
  - Greeks, beta-adjusted notional exposure, dispersion risks
- Stress-testing of all positions via adverse relevant / historical scenarios, VaR, etc.

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Risk Management

2/2 Macro Picture - Options

- « Buy only» long dated out-of-the-money options
- For a wide variety of asset classes and instruments, identify cheap options in terms of current implied volatility vs. universe (universe-relative cheapness at a given time) and long term average (self-relative cheapness over time)
- Analyze technicals, fundamentals and sentiments, leveraging our platform and proprietary database via a quantitative process that allows us to screen hundreds of assets
  Come up with a list of instruments in a position to capitalize on high potential global macro situations
- **« Be fearful when others are greedy and greedy when others are fearful » (W. Buffet)**
  - Market psychology is the motor of the performance: we try and benefit from fear, greed, hysteria and mania
  - Options are often mispriced during periods of irrationality hence providing great risk/reward opportunities
- Actively manage options
  - Long term only options in order to reduce adverse time decay impact: we do not keep options with time to maturity lower than 1 year
  - Profit-taking/Stop-loss methodology: we seek to return 5/10 times the original investment on any given bet; as soon as intermediary targets are reached, we deleverage part of the bet
- Risk management/performance enhancement process
  - Our general investment philosophy is to look for statistical anomalies and capitalize on it by designing systematic strategies; although an adaptive process, it is bound to be historically biased
  - These strategies are often - not always- based on cashing in risk premia (implicit or explicit)
  - Buying cheap OTM options allows us to hedge both biases (historical and short risk/premium) via a deductive approach that covers any unpredictable events that June fall out of historical scope

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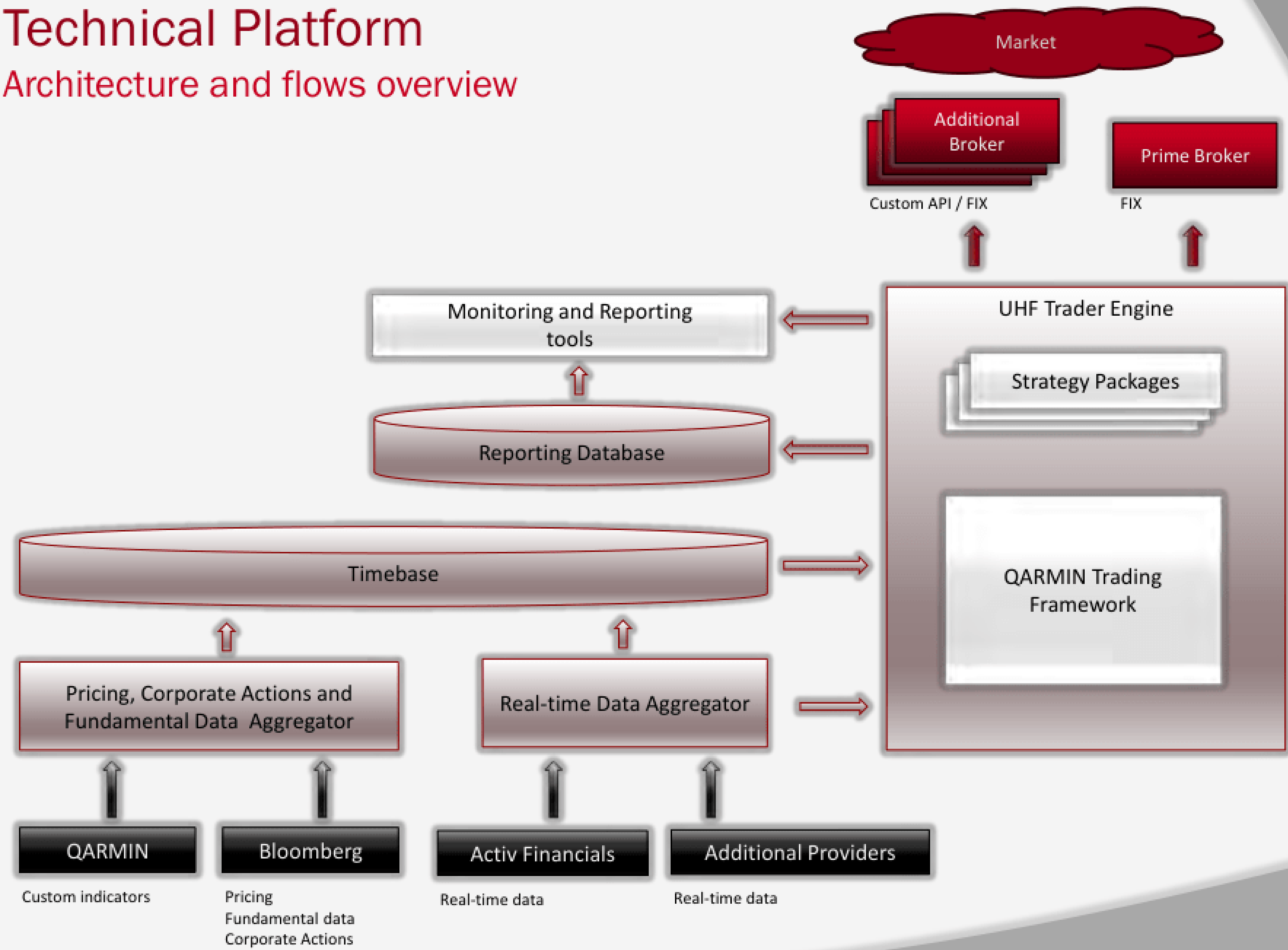
STEPWISE PROCESS	BOTTOM UP CONTROL	RISK MANAGEMENT			TOP DOWN CONTROL
INTERMEDIATE RESULT 2		Directional aggregation	Market Neutral aggregation	Volatility Arbitrage aggregation	
STEP 3	**NO CONTROL** Risk ex-ante has been measured and calibrated at STEP 2	Directional Risk Engine	Market Neutral Risk Engine	Volatility Arbitrage Risk Engine	**RISK CONTROL BASED ON CALCULATED MEASURES** Including: 1. VaR, Capital at risk under adverse scenarios 2. Greeks 3. Notional replication, spread risks 4. Tenor Notional on uncorrelated instruments Each axis is managed separately as they are incurring different types of risk
INTERMEDIATE RESULT 3		Global Aggregation			
STEP 4	**NO CONTROL** Risk ex-ante has been measured and allocated at STEP 2	Global Risk Engine			**RISK CONTROL BASED ON CALCULATED MEASURES** Risks are aggregated at the top level to ensure global capital preservation
INTERMEDIATE RESULT 4		Target Positions			

STEPWISE PROCESS	BOTTOM UP CONTROL	EXECUTION MANAGEMENT	TOP DOWN CONTROL
INTERMEDIATE RESULT 4		Target Positions	
STEP 5	**SLIPPAGE & TCA FOR ALL EXECUTIONS METHODS** 1. Simulated 2. Real We allocate more to the best recent execution method while keeping minimum diversification. Those measures give us a hint as to what the street is doing in regards to our trading signals.	**<u>Execution Algorithm Library</u>** Directional library → Alloc. Market Neutral library → Alloc. Volatility Arbitrage library → Alloc.	**LIQUIDITY, LEVEL 2, BOOK ANALYSIS** Analysis of book order, market microstructure, number of trades at the bid/offer over last relevant bar
FINAL ORDERS		Combination of algorithmic orders for single instruments Pair trading and basket algorithms Aggressive vs. passive algorithm for directional trades Execution Engine → Market Execution Engine → Market Execution Engine → Market	

Technical Platform

Architecture and flows overview



Appendix

Technical Platform
Features 1/2

- **Custom integrated Platform**
  - Fully mastered internally
  - Modern software methodologies
    - Every team member is a developer
    - Code base is managed, factorized and peer reviewed
    - Fast development cycles using agile methodologies
- **Based on QuantServer / QuantOffice from Deltix**
  - Well renown software, powering various Institutionals, Funds and Proprietary Trading Houses
  - Complex Event Processing architecture
  - Heavily parallelized, high performance system
  - Modern foundation with highly optimized, managed processes
  - Tight technical partnership with Deltix
- **Modern tools for business development**
  - Instrument / Universe / Calendar Managers
  - Strategy Manager
  - Integrated Development Environment based on Microsoft Visual Studio
  - Visual Alpha tool for fast prototyping
  - Strategy Runner for backtesting
  - Database administration tools

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Technical Platform

Features 2/2

- QARMIN interoperability layer
  - Flexible architecture allowing us to plug-in within various environments
  - Real-time data connectors
  - Pricing, corporate actions and fundamental data connectors
  - Proprietary engine for index and scoring indicators generation
- QARMIN Trading Framework
  - Extensive financial and mathematical library
    - Integrated with well established Econometry, Statistical, Financial and Solver libraries.
    - QARMIN own library with custom indicators
  - Signal Instrument facility, providing directly usable meta instruments for signal processing (chain management, corporate action adjustment, pairs, baskets)
  - State-of-the-art Meta Models facility for static and dynamic discovery/aggregation/allocation of strategies
  - Real-time Risk Engines, enabling proactive decisions
  - Order Processors, with custom execution algorithms and operational costs management
- Monitoring / Reporting tools
  - Integrated within Hyperic HQ monitoring suite / alert center
  - Real-time Trading Console
  - Reporting engine with realtime charts
  - Audit trails / logs

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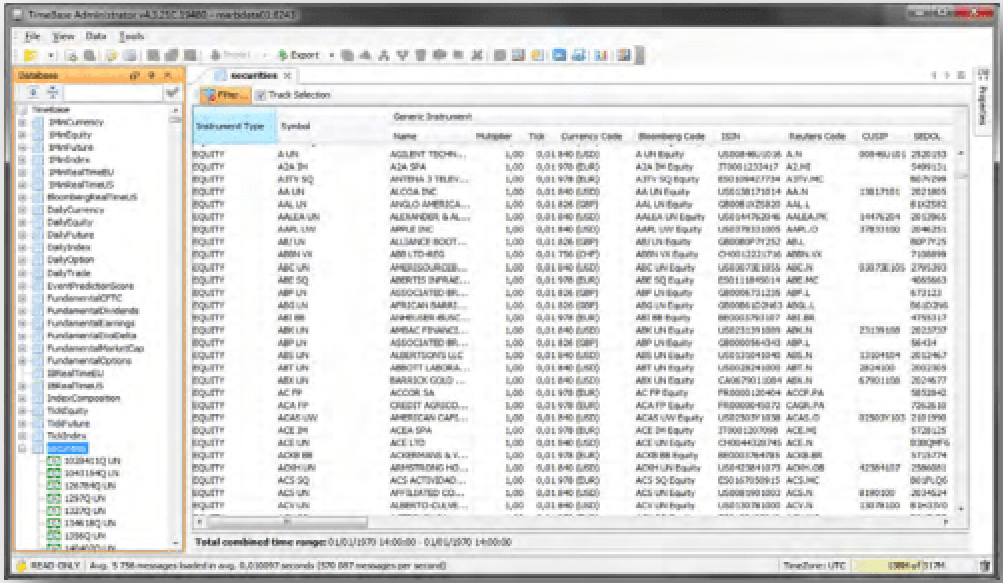
Technical Platform

Database Features



Timebase administrator

- **High performance, hybrid database system**
  - Very fast, polymorphic, NOSQL database system optimized for Time Series data (TimeBase)
  - Object relational database system optimized for reporting data (MS SQL Server)
- **Time Series scope**
  - Daily, Intraday, Tick, Level 2 and Order Book Data
  - Fundamental data streams
  - 6000+ instruments (Index, Currencies, Equities, Futures, Options) over 35 markets
  - Span from 17+ years (intraday) and 12+ years (tick)
  - TeraBytes of data

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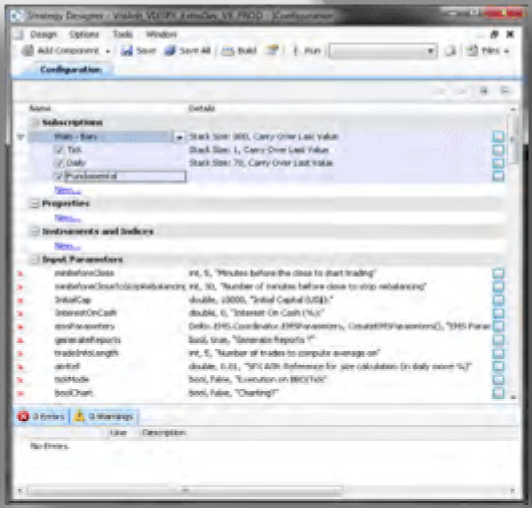
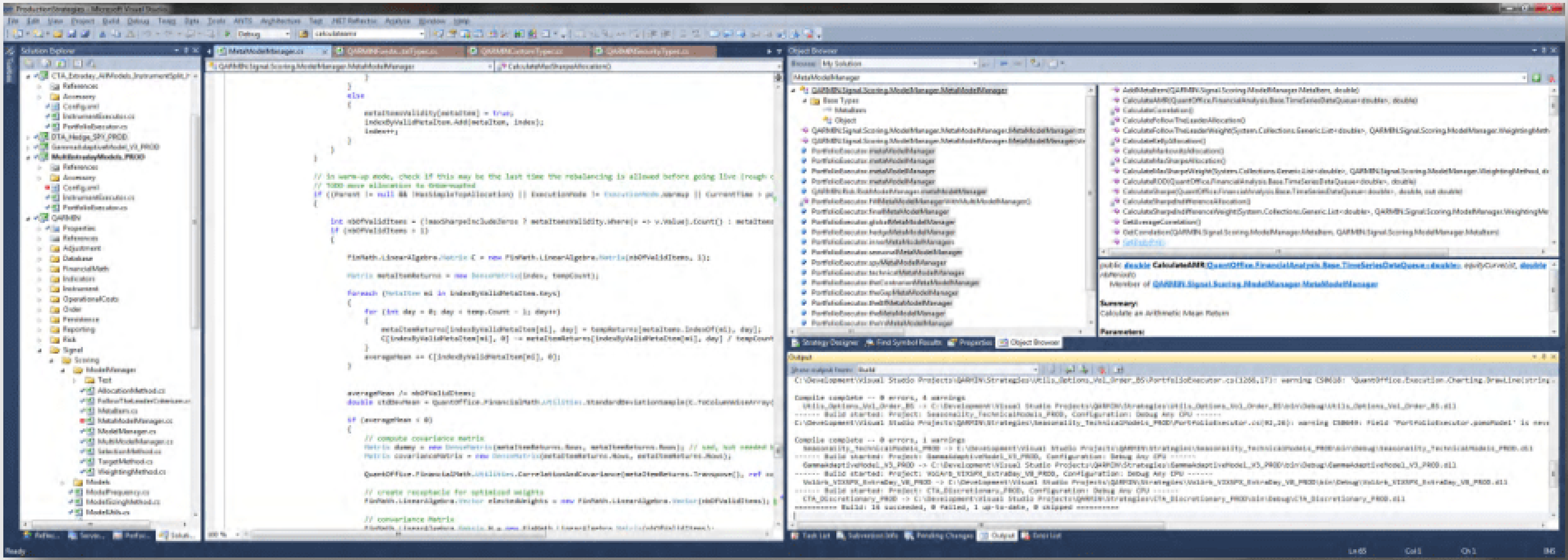
Technical Platform

Development tools

Visual Alpha



Strategy Designer



Visual Studio integration

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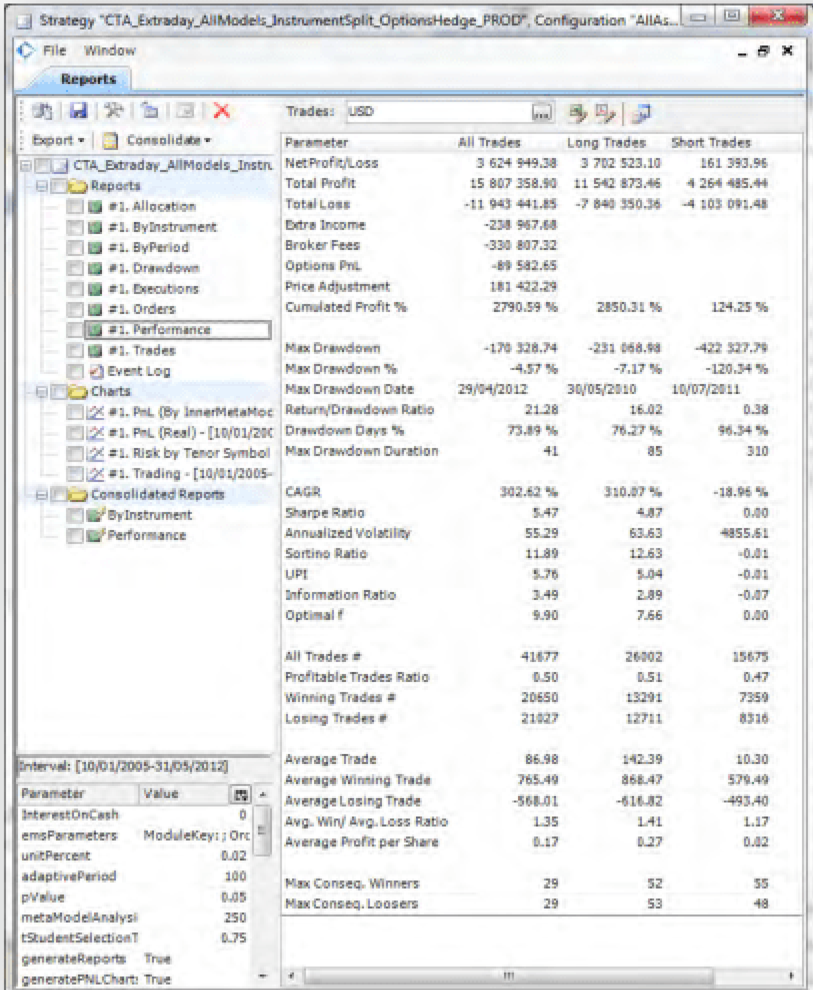
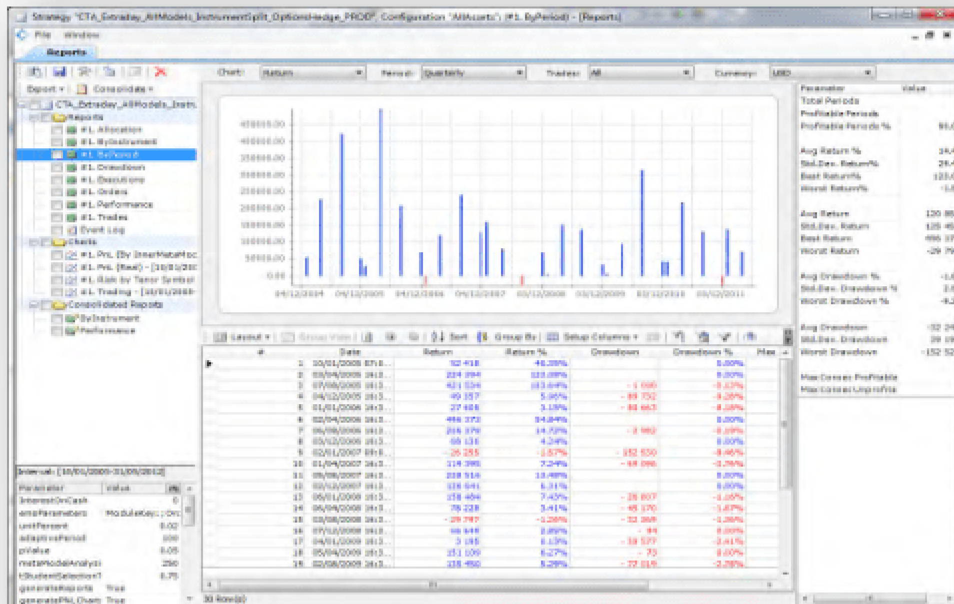
Technical Platform

Backtesting tools



Performance overview

PnL Chart



Breakdown by period

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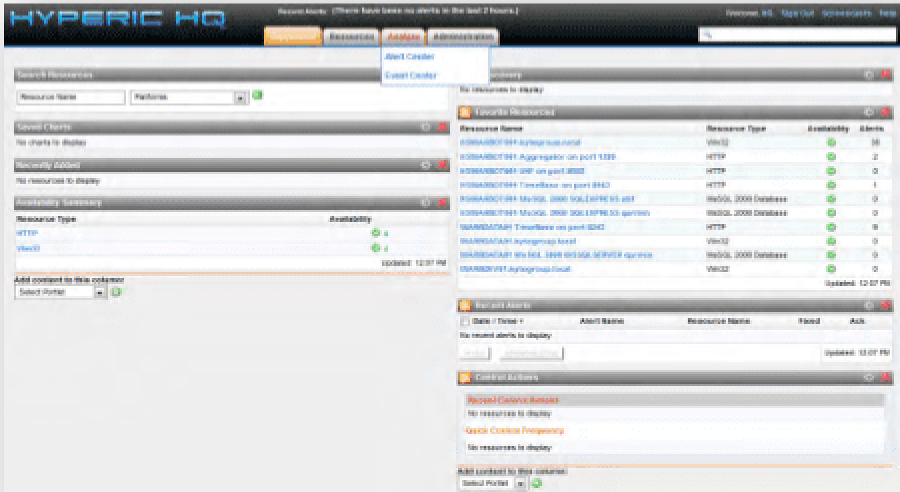
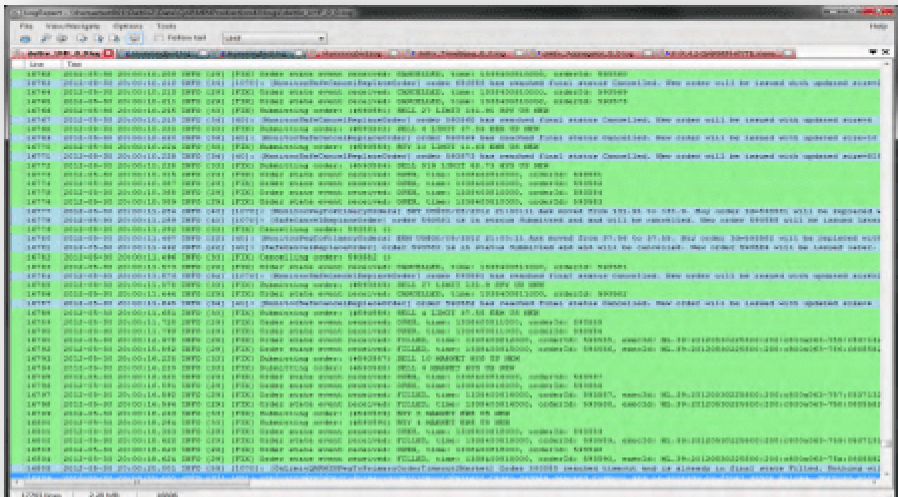
Technical Platform

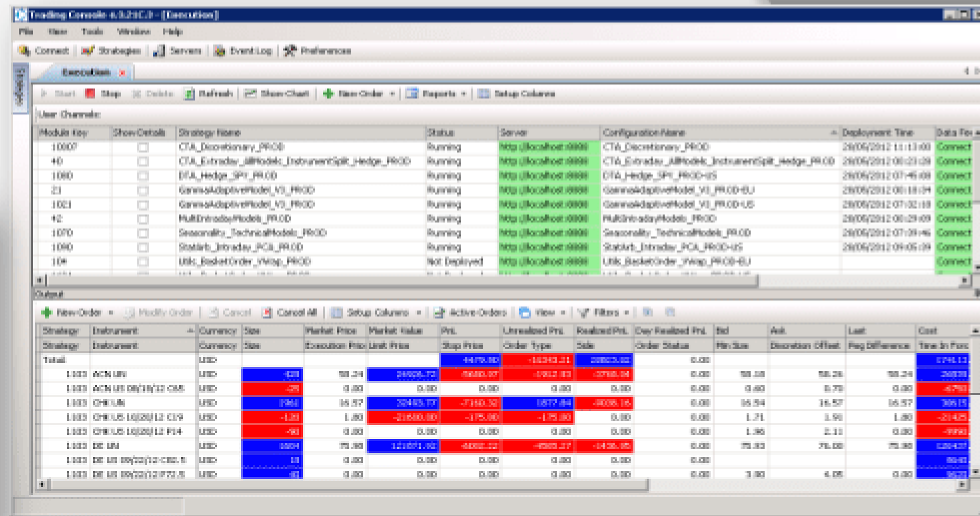
Monitoring tools



Alert Center



Audit trail



Trading Console

Realtime charts

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Backtested Performance

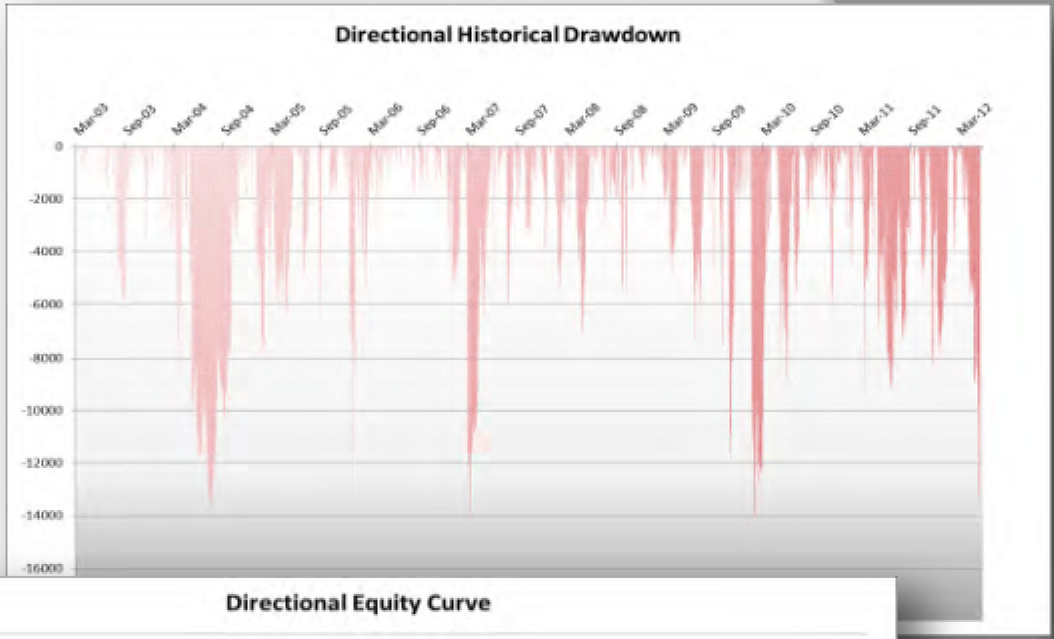
Directional Focus 1/2

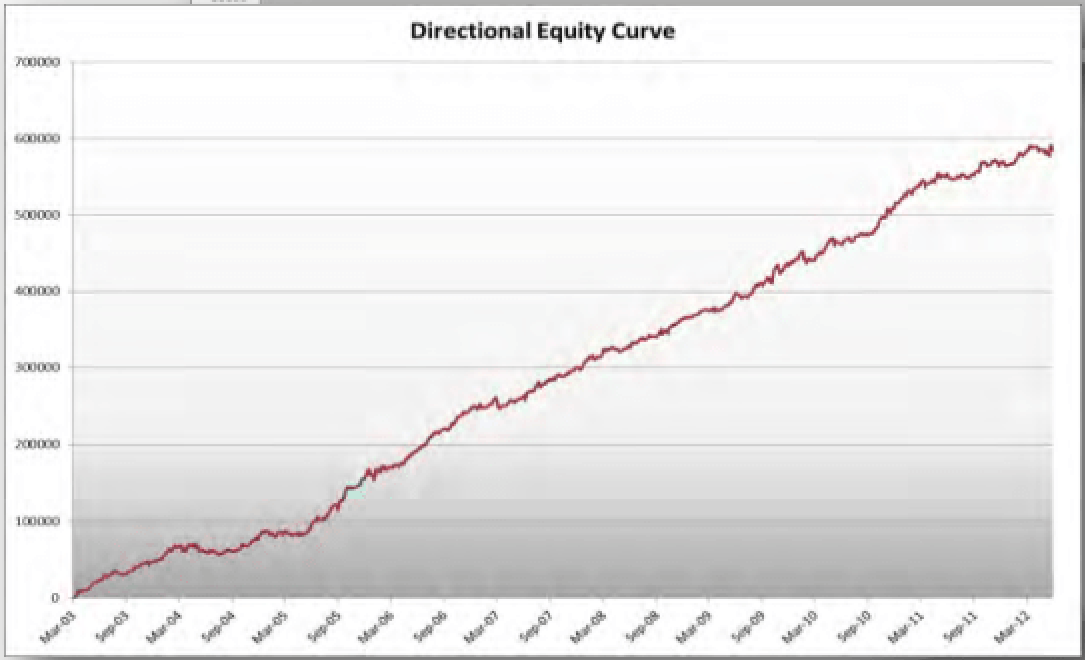
Sharpe	3.22
Yearly Return to Max DD	3.18
Avg Yearly Return	28.90%
Profitable Days %	57%
Avg Daily Return	0.10%
StDev Daily Return	0.57%
Best Daily Return	5.85%
Worst Daily Return	-4.62%
Worst DD	-9.08%
Max DD Duration	136 days
Avg Worst 10 DD Duration	75.6 days

Performance measurement reflects how the directional pocket of the model portfolio would have performed.

Projected performance is likely to be slightly degraded as part of the data-mining bias is bound to remain in the backtested performance.

Expected out-sample performance is expected to come in 20-25% lower than the presented observed performance (while keeping volatility constant).





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Backtested Performance
Directional Focus 2/2

	Directional Strategy	Benchmark	
	Yearly Performance*	HFR Macro/CTA Index	S&P 500
2003	24.67%	14.61%	26.38%
2004	17.22%	-0.32%	8.99%
2005	33.99%	6.67%	3.00%
2006	44.24%	5.61%	13.62%
2007	27.07%	3.19%	3.53%
2008	27.60%	5.61%	-38.49%
2009	35.64%	-8.78%	23.45%
2010	37.84%	-1.73%	12.78%
2011	15.95%	-4.88%	0.00%
2012	24.30%	-1.25%*	3.94%*
Average	28.85%	1.87%	5.72%
Std. Dev.	9.04%	6.68%	17.85%

Key Points

- Average Net Return of 28.85% per year in the past 10 years (assuming margins to equity 15-20%)
- 100% of years with positive return
- Daily returns correlation of 19.0% with S&P 500 since backtesting inception
- Strategies pairwise correlation of 7.30% since backtesting inception
- Outperformed HFR Macro/CTA Index by an average of 19.5% per year when reduced to similar volatility

* Y2012 performance has been frozen as of May 31st and extrapolated for the remainder of the calendar year

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Backtested Performance

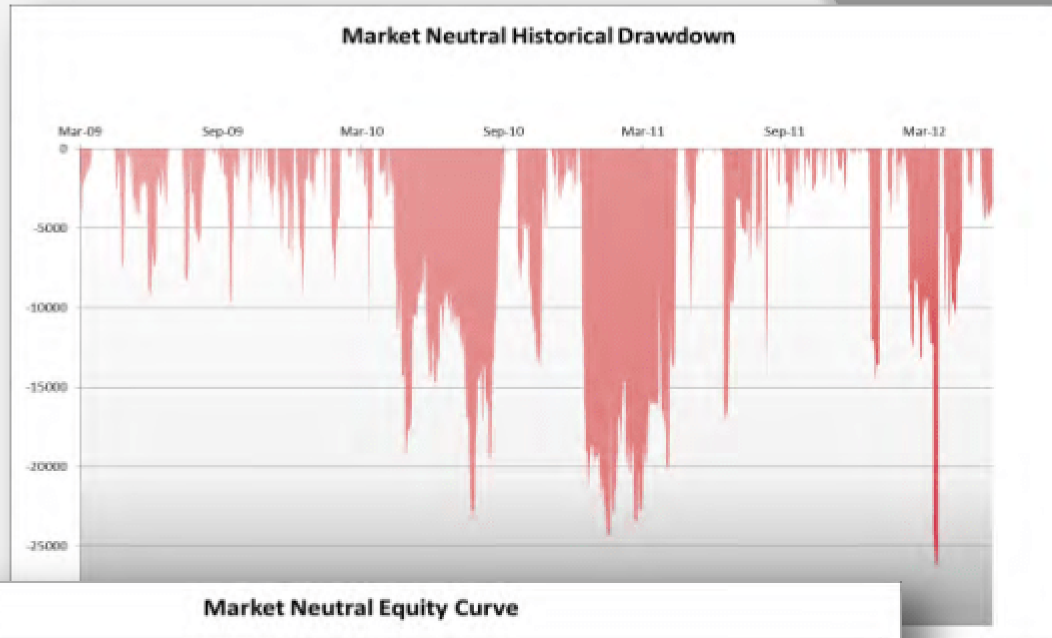
Market Neutral Focus 1/2

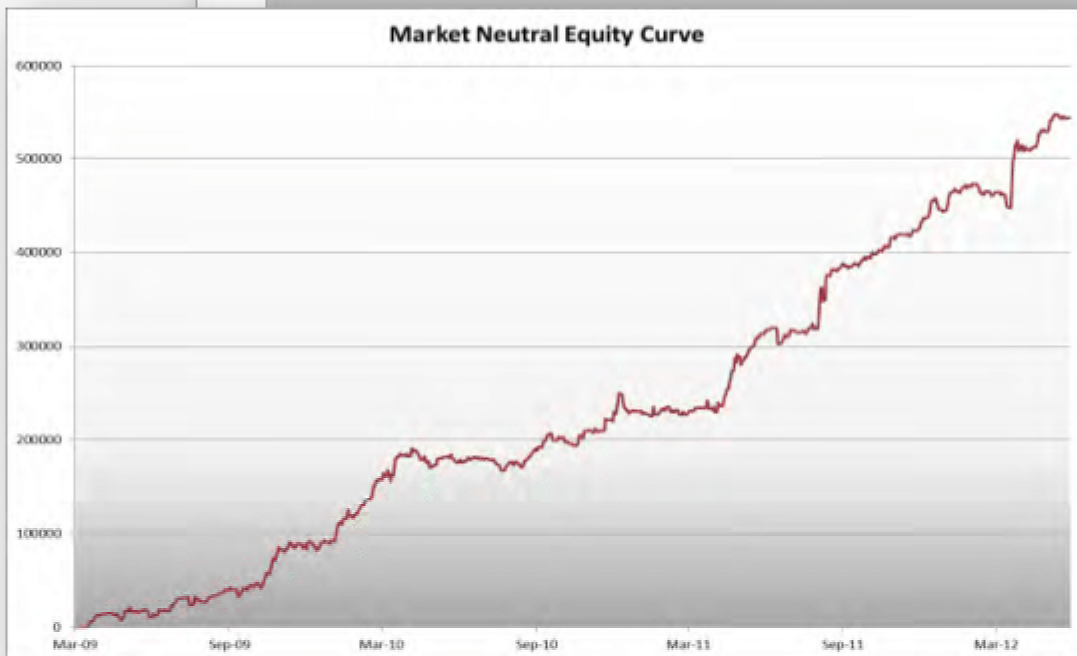
Sharpe	3.82
Yearly Return to Max DD	6.41
Avg Yearly Return	30.20%
Profitable Days %	59%
Avg Daily Return	0.10%
StDev Daily Return	0.50%
Best Daily Return	3.76%
Worst Daily Return	-2.62%
Worst DD	-4.63%
Max DD Duration	125 days
Avg Worst 10 DD Duration	47.3 days

Performance measurement reflects how the market neutral pocket of the model portfolio would have performed.

Projected performance is likely to be slightly degraded as part of the data-mining bias is bound to remain in the backtested performance.

Expected out-sample performance is expected to come in 20-25% lower than the presented observed performance (while keeping volatility constant).





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Backtested Performance
Market Neutral Focus 2/2

	Market Neutral Strategy	Benchmark	
	Quarterly Performance*	HFR Equity Market Neutral Index	S&P 500
Q2 – 2009	3.10%	-1.01%	15.25%
Q3 – 2009	2.88%	-2.93%	14.98%
Q4 – 2009	8.51%	0.79%	5.49%
Q1 – 2010	17.06%	1.01%	4.87%
Q2 – 2010	-0.94%	0.91%	-11.86%
Q3 – 2010	3.96%	-1.96%	10.72%
Q4 – 2010	5.21%	2.70%	10.20%
Q1 – 2011	0.88%	2.81%	5.42%
Q2 – 2011	14.53%	-0.09%	-0.39%
Q3 – 2011	13.87%	-6.05%	-14.33%
Q4 – 2011	8.81%	0.60%	11.15%
Q1 – 2012	12.45%	-1.63%	12.00%
Q2 – 2012	7.64%	-2.81%*	-9.93%*
Average	7.54%	-0.59%	4.12%
Std. Dev.	5.64%	2.49%	10.21%

Key Points

- ❑ Average Net Return of 7.54% per quarter (i.e. 30.15% per year) in the past 3 years (assuming margin to equity 15-20%)
- ❑ 12 out of 13 quarters with positive return
- ❑ Daily returns correlation of 2.2% with S&P 500 since backtesting inception
- ❑ Strategies pairwise correlation of -2% since backtesting inception
- ❑ Outperformed HFR Equity Market Neutral Index by an average of 3.90% per quarter (i.e. 15.60% per year) when reduced to similar volatility

* Q2-2012 performance has been frozen as of May 31st and extrapolated for the remainder of the period

Appendix

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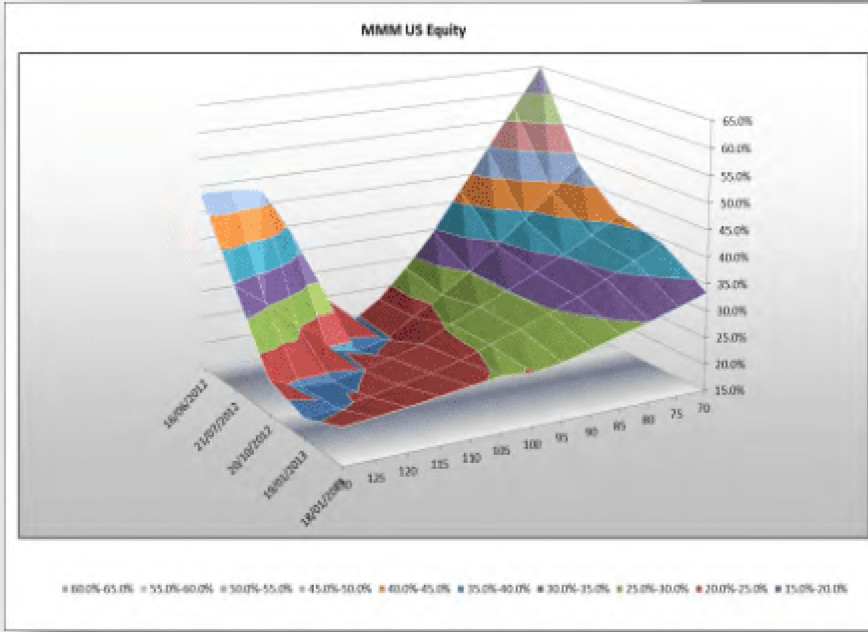
Expected Performance

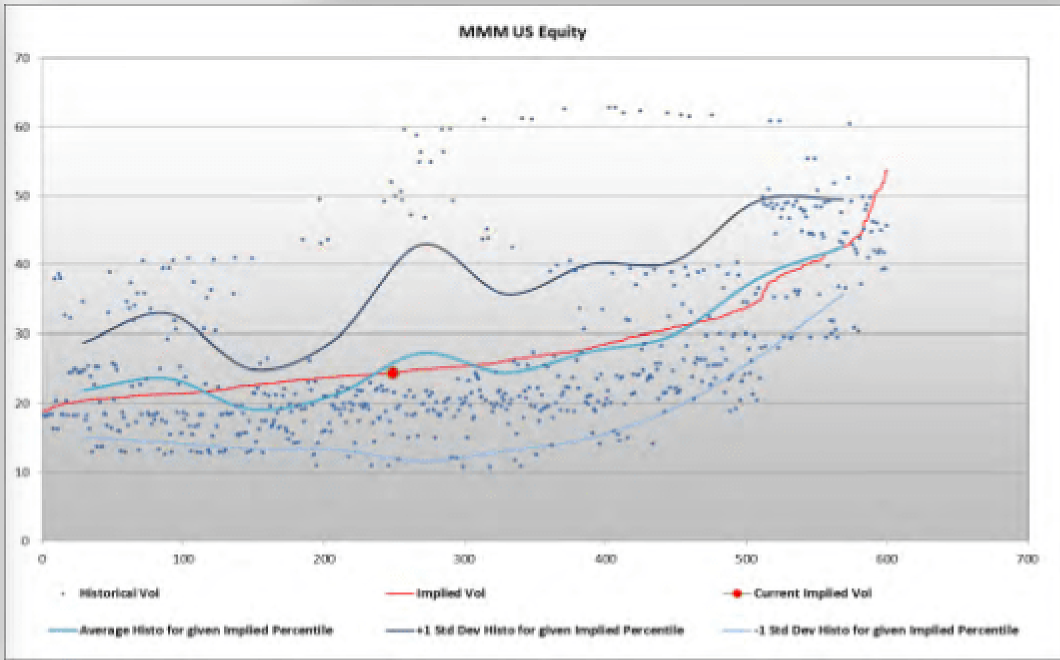
Volatility Arbitrage – Relative Value Focus



Relative Value - Long/Short Equity Volatility

- 6 months or less ATM options
- Expected Performance: 2 volatility points on a standardized reference volatility at 25 locked in via delta hedging and adequate rebalancing when implied volatilities have converged
- Keeping margin to equity ~ 15-20%, expected performance translates into 20% ann. performance with 15% realized volatility

	ICB_INDUSTRY _NAME	EXPECTED REAL VOL ALL MODELS	NORMALIZED VOL PTS DIFFERENTIAL	POTENTIAL REALIZED VS UNIVERSE %	COMPOSITE SCORE
LLY US Equity	Health Care	20.04%	6.5	0%	-24%
PGR US Equity	Financials	26.75%	-0.7	84%	-13%
XOM US Equity	Oil & Gas	23.52%	-0.2	79%	-14%
ACE US Equity	Financials	25.21%	0.6	60%	-12%
MMM US Equity	Industrials	23.54%	0.8	54%	-11%
BLK US Equity	Financials	38.26%	-2.6	98%	-8%
BIIB US Equity	Health Care	30.22%	0.8	56%	-14%
ORCL US Equity	Technology	33.93%	-0.5	82%	-8%
ECL US Equity	Basic Materials	27.39%	-2.4	96%	9%
OXY US Equity	Oil & Gas	37.78%	-0.1	77%	-6%
YHOO US Equity	Technology	31.72%	2.5	23%	-9%
CL US Equity	Consumer Good:	16.57%	3.6	11%	-8%
FCX US Equity	Basic Materials	44.88%	0.1	72%	-5%
COV US Equity	Health Care	28.64%	-2.1	95%	-3%
DE US Equity	Industrials	30.77%	1.2	47%	20%
AGN US Equity	Health Care	17.52%	5.8	1%	20%
DFS US Equity	Financials	32.63%	1.3	43%	23%
DELL US Equity	Technology	33.27%	2.3	28%	22%
NWSA US Equity	onsumer Servic	29.60%	1.6	39%	22%
M US Equity	onsumer Servic	36.01%	1.2	46%	26%
BA US Equity	Industrials	26.57%	2.3	26%	22%
AET US Equity	Health Care	30.88%	2.5	24%	20%
HSY US Equity	Consumer Good:	16.53%	3.4	12%	22%
MJN US Equity	Consumer Good:	23.09%	4.0	8%	24%
SLE US Equity	Consumer Good:	20.45%	2.0	33%	28%
CBS US Equity	onsumer Servic	36.75%	0.6	61%	28%
WMB US Equity	Oil & Gas	29.79%	2.0	31%	23%
MSI US Equity	Technology	27.85%	0.2	69%	28%
KO US Equity	Consumer Good:	13.67%	4.1	6%	26%
F US Equity	Consumer Good:	34.29%	-0.3	81%	32%



Appendix

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