

CETUS FUND Overview

ETF Arbitrage Trading Strategies

Paul Constantino Frederick Weiss

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PROBLEM

Given the uncertainty in the world and current risk-off environment, it is difficult to find a safe haven to earn a decent return without taking considerable risk.

Even star fund managers are having a very difficult time finding opportunities in the market and executing in a timely manner. Market experts are now stating that active management is going to be the way to find return for the next couple of years. We agree wholeheartedly with this solution.

The problem is how to find these opportunities with the many possible investment choices while limiting exposure to market moves in an often volatile market environment.

SOLUTION

To address these problems, we have developed an AI-based model that incorporates the many considerations when deciding on what to invest in while at the same time executing instantaneously.

Through the use of technology, imagine having a personal trader executing each trade independently and considering all of the market, risk, and data factors necessary to result in the best possible outcomes. This is now possible with AI.

Our model executes ETF arbitrage trading strategies on the Russell 2000 Index by executing long/short positions in IWM ETF and its component stocks and in investment grade corporate bonds by executing long/short pairs in the LQD ETF and its component bonds. We deploy a trading method that is delta neutral (ie. long and short positions have the same notional value) using an entirely automated process.

BACKGROUND STORY

Our trading model was designed and developed by Paul Constantino in 2013, after spending many years as an experienced institutional trader in fixed income, derivatives, and structured products. Since then, various iterations of the model have been deployed several times executing live trades in the US credit markets. While the model has consistently generated returns of between 25 – 40% per annum, with maximum drawdowns in the 5% range, this was prior to incorporating the latest Al and automation methods. Upon completion of new iterations, ROI increased significantly, generating 284% gross annualized return in testing phases.

Next, in June 2023, we deployed the model in the equities markets. We selected the IWM ETF as our target market and honed the model throughout the year. Our testing results from the end of June through November of 2024 showed a gross return of 350% with no monthly drawdown.

The returns were generated entirely by the model with no human intervention other than updates to factor inputs. As we are constantly looking to improve the model, our next phase of development will be to deploy machine learning which will adjust factor inputs using model training methods that will optimize factor inputs and further improve model performance. While there are other models out there, we know of no other model that truly deploys AI in replicating the full thought process and discipline of a professional trader in a total automated solution.

MODEL DEVELOPMENT 2013 - Present

Paul Constantino started his career as an institutional trader, dealer and arbitrageur in fixed income, derivatives and structured products. Inspired by his boss, who recognized the need for automation in the opaque world of fixed income trading, Paul embarked on a journey in building automated trading models, culminating in our current Al-based models which drive the Quantiverse-ai ETF arbitrage trading strategies.

As we expand our AUM, we will launch new ETF arbitrage trading strategies and innovative structures, such as our STIV (short term investment trust) and a new ETF dedicated to executing ETF arbitrage beginning in the EU and expanding to US and other global markets.

Quant Trading Model Overview

The model deploys a proprietary, AI-based approach that encapsulates trader logic in technical objects executing across the universe of liquidity and is only bound by access to data and technical resources (grid). Logical processes include the following components: rating, structure, curve, liquidity, risk, exposure, flow, momentum and relative strength, fundamentals, position, capital limits, maximum loss, profits target, stop loss, hedging, hedge composition and value, bid/ask spread capture, securities lending, corporate actions, and holding period. The model can be deployed in ETF arbitrage create/redeem, market making, flow trading, basket trading, and relative value strategies.

Current Quant Trading Model Overview – continued

The current version of the model deploys Python Al-based objects with a SQL back end. Future versions of the model will use machine learning and deploy across a virtual environment.

To demonstrate the effectiveness of the trading models, the Quantiverse-ai team launched "Bond Trader" and "Al Stock Trader" available on the App Store or Google Play Store. Both Apps have been running since Q1'23 (Bond Trader) and Q2'23 (Al Stock Trader) and are essentially a live, running back test. Data metrics such as PnL and Sharpe Ratios are provided in subsequent slides.

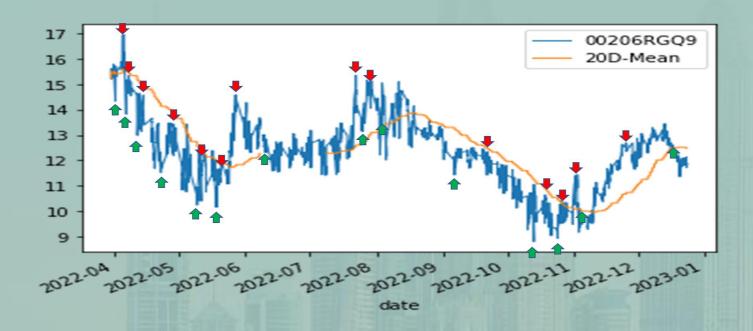
IWM ETF Arbitrage Illustration

The trade involves buying and selling the spread between IWM ETF and AAON as determined by the model. At the beginning of the month (5/2), the model generated a buy spread order (buy IWM, sell AAON) and closed the trade on 5/3 upon reaching its profit objective. Next, a new sell spread order was entered on 5/15 as the model determined the spread was rich and closed the trade on 5/28 achieving its profit objective as well. Finally, a new sell spread order was entered on 5/31.



LQD ETF Arbitrage Illustration

LQD ETF Arbitrage – In this trade example, we execute an arbitrage trade in ATT 4.3% Feb 15 2030 vs LQD ETF. The red arrows indicate selling the spread (sell LQD buy ATT) and the green arrows represent buying the spread (Buy LQD and sell ATT). From the observed period (Apr-Dec 2022), 14 trades resulted in 1.25% profit average per trade.



RESULTS – AI Stock Trader

Forward-looking test of the equity trading strategy deploying model parameters for trade entry and exit, which resulted in a 292% gross ROI.

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	#	%	%	Gross	Net	ROI Gross	
Capital (Avg)	Trades	Winners	Losers	PnL	PnL	(%)	ROI Net (%)
50,000	811	62	38	78 313	75 952	292	283

MTD

	#	%	%	Gross	Net	Capital	ROI Gross	ROI Net
Month	Trades	Winners_	Losers_	PnL	PnL	(Avg)	(%)	(%)
Nov	93	65	35	16,825	16,545	50,000	33.65	33.09
Oct	173	62	38	21,360	20,848	50,000	42.72	41.70
Sep	199	64	36	5,143	4,579	50,000	10.29	9.16
Aug	258	57	43	27,026	26,288	50,000	54.05	52.58
Jul	80	68	33	4,293	4,051	50,000	8.59	8.10
Jun	8	75	25	3,666	3,641	50,000	7.33	7.28

AI Stock Trader Sharpe

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Sharpe					17.89
2023					

Month

Jul Aug Sep Oct Nov

AI Stock ROI_	Risk Free_	Excess Return_
8.59	0.44	8.15
54.05	0.44	53.62
10.29	0.44	9.85
42.72	0.44	42.28
33.65	0.44	33.21

RESULTS – AI Bond Trader

Forward-looking test of the fixed income trading strategy deploying model parameters for trade entry and exit, which resulted in a 207% gross ROI.

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		%		Gross		ROI Gross	ROI Net
Capital (Avg)	# Trades	Winners	% Losers	PnL	Net PnL	(%)	(%)
150,000	892	86.21	13.79	262,633	209,719	207	166

MTD

		%		Gross		Capital	ROI Gross	ROI Net
Month	# Trades	Winners % Lo	sers	PnL	Net PnL	(Avg)	(%)	(%)
Nov	18	67	33	(362)	(842)	150,000	-0.24	-0.56
Oct	142	82	18	23,175	18,976	150,000	15.45	12.65
Sep	33	94	6	8,921	7,700	150,000	5.95	5.13
Aug	100	96	4	38,883	23,274	150,000	25.92	15.52
Jul	101	84	16	27,367	25,852	150,000	18.24	17.23
Jun	97	77	23	24,445	22,298	150,000	16.30	14.87
May	189	87	13	57,053	38,845	150,000	38.04	25.90
Apr	62	94	6	22,837	19,393	150,000	15.22	12.93
Mar	150	87	13	60,316	54,223	150,000	40.21	36.15

Bond Trader Sharpe

Sharpe	17.03
2022	

Time	Al Bond ROI_	Risk Free_	Excess Return
Mar	40.21	0.40	39.81
Apr	15.22	0.40	14.83
May	38.04	0.42	37.62
Jun	16.30	0.42	15.88
Jul	18.24	0.44	17.81
Aug	25.92	0.44	25.48
Sep	5.95	0.44	5.51
Oct	15.45	0.44	15.01
Nov	-0.24	0.44	-0.68



MEET OUR TEAM

PAUL CONSTANTINO

President – Portfolio Manager

Paul Constantino is a native of Charlotte, North Carolina. He is married and a father of three, is a former football player and avid fan, and enjoys golfing in rain and sunshine on the weekends. He operates CTT Advisors, and looks forward to a full-time commitment to managing the disruptive bond and equities trading models for institutional and high net worth investors worldwide. Paul also plans to adopt the model for high yield, convertible, and municipal bonds as well as use these same concepts and level of automation for European and Asian bond markets. The investment-grade bond market in the US alone has a notional value of USD 10 trillion, so the liquidity of this market can support a large trading fund. In late 2022, Paul entered into a Joint Venture agreement with Frederick Weiss of Luxembourg to execute a managed account program for investors worldwide, and transitioning into a fully managed and regulated fund at the appropriate time and venue.



MEET OUR TEAM

FREDERICK WEISS

Chairman – Management Board

Frederick Weiss has resided in Luxembourg since 2002. He is married and a father of two sons, an avid sculling enthusiast, and currently serves on the Committee of the Luxembourg Rowing Federation. He enjoys playing Rhapsody in Blue on the clarinet, as well as playing with the local conservatoire. Frederick is a private investor engaged in M&A advisory transactions in the European markets, and is currently looking to acquire AUM through M&A with underperforming existing funds. In addition, Frederick interfaces with Hedge Funds, Family Offices and HNWI through the world. Frederick and Paul are both members of the Hedge Fund Group. Frederick is primarily responsible for business development and Legal and Corporate Structure of the JV as AUM evolves.

Offering Summary

Investor accounts are managed in a US Fund Advisor setup on Interactive Brokers. Minimum Account Size is \$500,000 USD for IWM and \$1,000,000 USD for LQD.

Management fees for Investor Accounts are 2% p.a administration and 25% of net profit generated.

Minimum initial lockup period is 90-days and 30 days thereafter. For more information on account setup or on Cash Management Accounts, with 30-day options to redeem to cash, contact Frederick Weiss at Frederick.weiss@guantiverse-ai.com



AT A GLANCE



Minimum investment -USD 500,000 equities, USD 1,000,000 bonds



Minimum lock-in period – 90 days. Cash Management Accounts - 30 days.



Management Fee – 2% p.a.



Performance incentive – 25%



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