Alpha Research & Management

Feb 2025 - <u>PlusAlpha Systematic Active Model Portfolios</u>

The Active Model Portfolios are getting some interest, and I am in the process of onboarding 2 more clients. As mentioned previously, we custody at Schwab, with execution via their Block desk, and rebalancing using Schwab's iRebal systems.

I moderated and spoke at a few conferences recently, and the Fixed Income Risk and Equity Beta charts from last month's newsletter were found very interesting by many attendees.

The equity markets started selling off last month, and there is a continuing flight into USTs as a result. The AGG and other fixed income assets have rallied. Our risk-targeting portfolios are currently in short duration ETFs, some with credit exposure, so we've finally underperformed bond market benchmarks as credit spreads have widened.

ARAM PlusAlpha Active Fixed Income Model Portfolios

	Net Return Summary							Stats to Bloomberg Aggregate Index				
ARAM Model Portfolio Name	Feb 2025	2025 YTD Net %	1 year Net %	3 year Net %	5 Year Net %	Cum Net % since 1/2016	Positive Return Months	Alpha since 1/2016	12mo Alpha	12mo Beta	12mo Correl	12mo Ret/ StDev
Baseline	0.70%	1.7%	8.6%	15.3%	35.2%	70%	71%	5.1%	8.2%	0.05	0.39	10.2
Aggressive	1.32%	2.5%	11.6%	18.5%	73.7%	153%	67%	9.7%	11.1%	0.09	0.29	6.3
Scalable UST	0.28%	0.6%	4.5%	-2.5%	7.5%	22%	66%	1.2%	4.5%	0.00	0.01	29.7
Scalable IG	-0.17%	0.7%	6.3%	8.9%	19.2%	39%	63%	2.7%	6.2%	0.01	0.05	3.7

	Net Return Summary							Stats to SPY ETF				
ARAM Model Portfolio Name	Feb 2025	2025 YTD Net %	1 year Net %	3 year Net %	5 Year Net %	Cum Net % since 1/2016	Positive Return Months	Alpha since 1/2016	12mo Alpha	12mo Beta	12mo Correl	12mo Ret/ StDev
EquityPlus	-2.97%	-1.8%	26.8%	55.5%	247%	440%	61%	9.1%	15.4%	0.59	0.46	1.8
Multi-Asset	-2.97%	-1.8%	26.3%	47.6%	261%	553%	62%	13.2%	15.1%	0.58	0.46	1.8

The tables below show how the benchmarks have performed.

Those who have read my newsletters and Crisis Notes know that I've been talking about the risk of the Yen-Carry Trade unravelling and markets deleveraging for quite some time. <u>That risk is here now</u>. I'd recommend a substantial exposure to Yen (ETF: FXY) for now, and will soon also have a Model Portfolio which has some protection using Yen.

Benchmark Passive Fixed Income Indices

	Return Summary							Stats to Bloomberg Aggregate Index				
Passive Fixed Income Index	**Feb 2025**	**2025 YTD Net %**	**1 year Net %**	**3 year Net %**	**5 Year Net %**	**Cum Net % since 1/2016**	**Positive Return Months**	**Alpha since 1/2016**	**12mo Alpha**	**12mo Beta**	**12mo Correl**	**12mo Ret/ StDev**
Aggregate	**2.20%**	**2.7%**	**5.8%**	**-1.3%**	**-2.6%**	**17%**	**55%**	**0.0%**	**0.0%**	**1.00**	**1.00**	**1.0**
U.S. Treasury	2.16%	2.7%	4.9%	-3.5%	-5.6%	11%	49%	-0.4%	-0.4%	0.93	1.00	0.9
Govt-Related	1.89%	2.5%	5.4%	1.2%	-1.0%	20%	63%	0.5%	0.5%	0.84	1.00	1.1
Corporate	2.04%	2.6%	6.6%	1.1%	0.4%	31%	60%	0.9%	0.5%	1.04	0.99	1.1
Securitized	2.47%	3.0%	6.6%	-0.6%	-1.9%	12%	57%	-0.3%	0.2%	1.10	1.00	1.0
MBS	2.55%	3.1%	6.5%	-1.0%	-2.4%	11%	55%	-0.5%	-0.1%	1.14	1.00	1.0
High Yield	0.67%	2.0%	10.1%	15.6%	27.2%	77%	69%	5.3%	7.1%	0.49	0.90	3.0

Benchmarks - Multi-Asset and Equity

	Return Summary							Stats to SPY ETF				
Equity and MultiAsset Benchmark	**Feb 2025**	**2025 YTD**	**1 year**	**3 year**	**5 Year**	**Cum% since 1/2016**	**Positive Months**	**Alpha since 1/2016**	**12mo Alpha**	**12mo Beta**	**12mo Correl**	**12mo Ret/ StDev**
SPY ETF	**-1.27%**	**1.4%**	**18.4%**	**42.2%**	**117%**	**240%**	**71%**	**0.0%**	**0.0%**	**1.27**	**1.00**	**1.7**
EQ/FI 60/40	**0.10%**	**2.0%**	**13.3%**	**23.8%**	**60%**	**128%**	**72%**	**0.0%**	**-0.2%**	**1.00**	**0.97**	**1.6**

Tracking Error and Information Ratios

Tracking Error and Information Ratio since 1/2016

	Tracking Error	PlusAlpha Cum return	Cum Return Agg	Cum Return SPX	Diff Cum Return	Information Ratio
FI-Baseline	1.5%	70.3%	16.3%		54.0%	**36.5**
FI-Aggressive	2.5%	153.3%	16.3%		137.0%	**55.3**
FI-Scalable UST	1.1%	22.1%	16.3%		5.8%	**5.4**
FI-Scalable IG	1.2%	38.7%	16.3%		22.4%	**18.6**
FI-Scalable Broad	1.4%	32.2%	16.3%		15.9%	**11.4**
EquityPlus	4.9%	**439.7%**		240.1%	199.6%	**41.1**
MultiAsset EQ+UST	4.8%	**552.7%**		240.1%	312.6%	**65.4**

An Active Benchmark

Last year we created some Active Fixed Income Benchmarks that should be used to verify if any Active Fixed Income fund or ETF is actually generating Alpha. The benchmark we created does not use our eCIO algorithm, and can be easily replicated by anyone, generating about 1% Alpha over the AGG, with 0.5 Beta – this uses simple Markowitz portfolio construction using Benchmark ETFs that can be created in Excel.

ARAM FI Active Index - IG

	Return Summary							Stats to Bloomberg Aggregate Index				
Equity and MultiAsset Benchmark	**Feb 2025**	**2025 YTD**	**1 year**	**3 year**	**5 Year**	**Cum% since 1/2016**	**Positive Months**	**Alpha since 1/2016**	**12mo Alpha**	**12mo Beta**	**12mo Correl**	**12mo Ret/ StDev**
ARAM ActiveIndex - IG	**-0.13%**	**0.8%**	**7.1%**	**4.2%**	**1.9%**	**21%**	**66%**	**1.1%**	**6.9%**	**0.03**	**0.08**	**3.3**

The current version is slightly different from that described in our White Paper, Benchmarks for “Active Fixed Income Funds, but the concept is the same.

The problem with this index is that almost no current Active Fixed Income manager will manage to beat it, since most use a Graham-Dodd framework which will converge to passive returns in the current volatile environment. This explains why I could not get any interest from Index providers, as they are in the business of selling the Index for fund managers to use as a benchmark to be beaten.

If you are an allocator or consultant who wants to understand how your fixed Income managers are performing and what their risks are, I’m happy to share the Index.

A very good alternative is to use 3yr and 5yr cumulative returns of funds and compare them to the passive benchmarks like the AGG. This will show that most existing “Active” funds have converged to the AGG’s returns, and are not generating any Alpha.

Some repeated information from the December 2024 newsletter:

What is Direct Risk Targeting?

Harry Markowitz introduced Modern Portfolio Theory (MPT) in his seminal 1952 paper, "Portfolio Selection". A number of other papers from the same period on probability, risk, and utility by Samuelson, Arrow, Friedman and others probably led the way or were complementary.

Prior to Markowitz, investing was, and still is, largely based on Graham and Dodd's 1934 book "Security Analysis".

The difference in portfolio construction can be summarized as 'Security Selection' versus 'Risk Selection'.

Fixed Income investing is still largely based on a Graham and Dodd framework – security selection and relative value choices made by Yield, Yield Spread, and Duration of bonds, with spreads and duration indicating Risk.

My quantitative interests and studies in computer science as an undergraduate, and operations research and econometrics in graduate school at UChicago, combined with the flaws in Fixed Income Market Structure and investing that I have observed and experienced in over 30+ years in markets, have resulted in my seeking a better way to invest in Fixed Income.

I have been researching Macro and Market Risk since 1988 and have concluded that historical securities covariance has predictive power in Fixed Income, making Markowitz ideal for Fixed Income.

I have been developing and testing such an MPT framework since 2016, creating Active Fixed Income Model Portfolios. This has evolved into ARAM's "Direct Risk Targeting" for Active Fixed Income Portfolio construction.

Markowitz portfolio construction views Risk as volatility or standard deviation of returns, and has 2 steps:

1. Compute Market Risk – the Risk Target - and also Identify the Risk of individual securities (to build a covariance matrix), using historical returns data
2. Construct an 'Optimal Portfolio' using Portfolio Optimization to match Market Risk; varying Risk Levels creates an 'Efficient Frontier'

We modify Markowitz Optimization into ARAM's 3-step "Direct Risk Targeting":

1. **Compute Market Risk using a Benchmark Security or Index, Portfolio, or Macro input, and also construct a covariance matrix based on the historical risk of securities to be used – we select these using parameters for liquidity, sector, etc**
2. **ARAM's innovation: Our eCIO module algorithmically computes a "Direct Risk Target" based on every period's Market Risk input from Step 1, which imposes an Environment Risk Suitability decision to the portfolio's target risk. This is based on our experience over many cycles. The Direct Risk Target can differ significantly from the computed Market Risk input.**

3. **The Direct Risk Target is then used as the input to an optimizer to construct an Optimal Portfolio and generate weights for security selection for the portfolio construction**

We rebalance periodically, repeating Step 1, to stay ahead of Risk decay, making our portfolios Active and able to respond to changes in Risk. While Macro Risk can be predictive, it becomes unnecessary to monitor when one rebalances frequently.

Our Active portfolios are constructed Systematically, with no biases, emotions, or interference, unlike human CIOs and portfolio managers.

The predictive power of Markowitz in Fixed Income (and now Equities), combined with rebalancing allows a quantitative Systematic Active approach to generate significant Alpha and Returns.

None of our model portfolios use any leverage – leverage is not the source of our Alpha.

The Alpha of our portfolios is generated through systematic Active Management, by using the portfolio construction process and algorithms derived from our research on FI market structure and behavioral biases.

All the model back-test total returns are 'out-of-sample', with implied fees, after systematic rebalancing creates the following period's portfolio. The only risk to these return numbers that we can identify come from execution risk.

We believe this is the only true Active Fixed Income strategy offered in the market – our research on the Active Fund universe is available in our paper 'Are "Active" Fixed Income Funds Active?'.

Quick takeaway – if a fund is truly 'Active', it will have volatile Beta and low correlation with its benchmark.

Our strategy was conceived in 2016 as a result of our research into Behavioral Biases in Fixed Income and Flaws in the Market Structure. **Our systematic solution takes advantage of biases and flaws** in Fixed Income management to realize the potential returns available in Fixed Income, and to capture the attendant benefits to portfolio construction and asset allocation (low correlations, positive skewness, higher Sharpes).

The long-term Alpha is significant. The Risk Targeting algorithms are continuously improved, and the Alpha has been persistent.

Unlike many quant strategies, we expect the Alpha in our Systematic Fixed Income Strategy to remain persistent.

Our Active Model Portfolios are available on Schwab's iRebal, Interactive Brokers, and Indexone.io.

Our Model Portfolios are ideal for independent Wealth Managers and RIAs who are not limited to the offerings from their custody platforms.

We also use our algorithms to create Active model portfolios using an individual Advisor's fund products (eg Vanguard, JP Morgan, Blackrock, PIMCO, Capital Research, etc). These Advisor portfolios significantly outperform an Advisor's own Active and Multi Asset funds created by their internal groups. We have supplements to our decks for these Advisor-specific products.

These can be used by Advisors and other investor types like Foundations, who are limited to their custody platform's products, but are Fiduciaries and want to deliver returns. We are also looking to be Sub-Advisors for the Advisors, creating funds from the model portfolios described above.

We can customize portfolios for specific needs. Our Model Portfolios are starting points for a conversation about a customized portfolio.

We are seeking institutions, wealth managers and TAMPs that might have interest in licensing our customizable Model Portfolios.

Please call with questions.

Regards, Samir

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