

Introduction

Autonomous Fund Management (AFM) is a portfolio and fund-management procedure designed for the digital marketplace. Instead of relying on traditional research and analysis, it uses algorithms and safety nets to obtain better and more stable results.

Detailed information is provided on the AFM website afmsa.ch
The March 2021 newsletter focuses on two subjects **safety & performance.**

Safety

Once AFM is set up, it functions autonomously with a series of built-in safety nets and constant supervision. Safety is defined by Standard Deviation - how far AFM-managed portfolios stray from the index of choice. If the SD is high, the portfolio is volatile. And vice versa.

AFM is an enhanced indexing procedure where measures are undertaken to outperform the index. Results compared to 5 funds in the same field for 2020 are as follows:

Source: finance.yahoo.com

		2020		
	Strategy	Average monthly difference to index	Standard Deviation (monthly difference)	% outperfm. months
AFM	Enhanced Indexing	0.37%	0.51%	83%
IVV	Indexing	0.00%	0.23%	42%
PREIX	Indexing	-0.05%	0.30%	67%
SPHQ	Enhanced Indexing	-0.12%	1.26%	33%
GSPFX	Enhanced Indexing	-0.32%	0.89%	25%
GINDX	Enhanced Indexing	-0.83%	1.55%	25%

Enhanced Indexing (EI) is a management approach that attempts to amplify the returns of an underlying portfolio or index and outperform strict indexing. It also attempts to minimize tracking error.

This type of investing is considered a hybrid between active and passive management; it combines elements of both approaches.

EI is used to describe any strategy that is used in conjunction with index funds for the purpose of outperforming a specific benchmark.

<https://www.investopedia.com/terms/e/enhanced-indexing.asp>

Fund description

IVV **iShares Core S&P 500 ETF** . The Fund seeks to track the investment results of the S&P 500.

PREIX **T. Rowe Price Equity Index 500** . The fund uses a full replication strategy, which involves investing substantially all of its assets in all of the stocks in the S&P 500 and seeking to maintain holdings of each stock in proportion to its weight in the index.

SPHQ **The Invesco S&P 500 Quality ETF** is based on the S&P 500 Quality Index. The Fund will normally invest at least 90% of its total assets in common stocks that comprise the Index. The Index tracks the performance of stocks in the S&P 500® Index that have the highest quality score, which is calculated based on three fundamental measures, return on equity, accruals ratio and financial leverage ratio.

GSPFX The **Gotham Enhanced S&P 500** Index Fund is a value weighted long-only U.S. equity strategy that selects primarily from the S&P 500 investment universe. The Fund seeks long-term capital appreciation by investing in long positions of equity securities that comprise the S&P 500 Index in weights based on Gotham's assessment of value and the security's weight in the index.

GINDX The Gotham Index Plus Fund was created as an investment that seeks to more closely track an index than purely active funds by combining an index investment with an active long/short overlay. The Fund generally seeks 100% net long exposure by being 190% long vs. 90% short (100% index + active long/short overlay). The Fund seeks to outperform the S&P 500 over most annual periods. The Fund is not a passive index fund.

For each \$100 invested in Gotham Index Plus, we start with \$100 of U.S. stocks that seek to track the S&P 500® Index. Next, we select long and short positions (from a large cap investment universe) that we believe are the cheapest and most expensive, respectively, relative to our assessment of value. Finally, we net positions that appear in both the index portion and the actively managed long/short overlay, with the result being a portfolio with an overall exposure of approximately \$190 long and \$90 short.

For the active long/short overlay, the Co-CIOs and their team of equity analysts employ Gotham's proprietary analytical framework to evaluate stocks within the coverage universe on measures of absolute and relative value.

Monthly comparative performance

Source: finance.yahoo.com

	Monthly absolute performance													2021	
	2020													2021	
	J	F	M	A	M	J	J	A	S	O	V	D	2020	J	F
SPX	-0.2%	-8.4%	-12.5%	12.7%	4.5%	1.8%	5.5%	7.0%	-4.0%	-2.7%	10.8%	3.7%	16.3%	-1.1%	2.6%
AFM	-0.3%	-8.2%	-11.2%	14.0%	5.4%	1.4%	5.7%	7.1%	-3.9%	-2.4%	11.1%	3.9%	21.5%	-0.3%	2.5%
IVV	0.00%	-8.5%	-12.7%	12.7%	4.8%	1.5%	5.9%	7.0%	-4.2%	-2.5%	10.9%	3.3%	16.3%	-1.0%	2.8%
PREIX	-0.1%	-8.3%	-12.8%	12.8%	4.7%	1.5%	5.6%	7.2%	-4.2%	-2.7%	10.9%	2.9%	15.5%	-1.0%	2.8%
SPHQ	-1.0%	-8.4%	-9.7%	12.3%	5.3%	0.2%	4.1%	8.0%	-2.9%	-4.2%	9.8%	3.4%	15.1%	-0.5%	2.0%
GSPFX	-1.6%	-8.7%	-10.6%	12.2%	3.9%	2.3%	5.3%	7.1%	-4.3%	-3.0%	9.8%	2.0%	12.4%	-1.1%	2.0%
GINDX	-3.6%	-9.8%	-10.3%	12.1%	2.9%	2.0%	5.3%	8.4%	-4.2%	-4.2%	8.1%	1.6%	5.6%	0.2%	1.8%

	Monthly relative to SPX													2021	
	2020													2021	
	J	F	M	A	M	J	J	A	S	O	V	D	2020	J	F
AFM	-0.14%	0.22%	1.33%	1.29%	0.85%	-0.43%	0.19%	0.10%	0.08%	0.34%	0.33%	0.23%	5.20%	0.84%	-0.07%
IVV	0.16%	-0.05%	-0.17%	-0.00%	0.29%	-0.36%	0.34%	-0.01%	-0.23%	0.22%	0.15%	-0.39%	0.0%	0.08%	0.15%
PREIX	0.10%	0.16%	-0.27%	0.13%	0.21%	-0.32%	0.11%	0.17%	-0.26%	0.06%	0.18%	-0.83%	-0.7%	0.08%	0.14%
SPHQ	-0.82%	-0.01%	2.80%	-0.42%	0.74%	-1.67%	-1.36%	1.04%	1.03%	-1.45%	-0.94%	-0.30%	-1.1%	0.59%	-0.61%
GSPFX	-1.45%	-0.26%	1.95%	-0.47%	-0.60%	0.48%	-0.22%	0.08%	-0.36%	-0.30%	-0.97%	-1.66%	-3.9%	-0.04%	-0.65%
GINDX	-3.44%	-1.36%	2.18%	-0.60%	-1.62%	0.16%	-0.17%	1.39%	-0.24%	-1.47%	-2.63%	-2.10%	-10.62%	1.34%	-0.85%

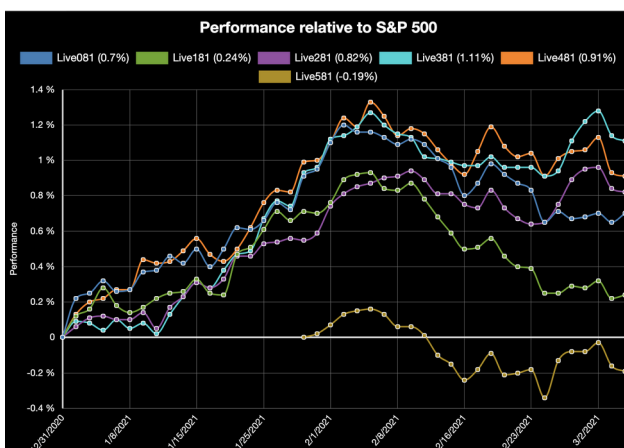
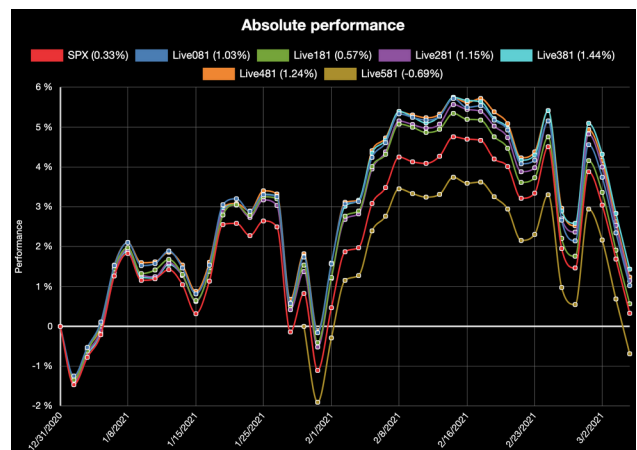
2021 Year-to-date performance

Existing portfolios under AFM management increased to approx. \$18M at the beginning of the year.

January was an outstanding month and aggregated accounts outperformed the S&P500 by an exceptional 0.84%.

February was not so good, but still better than the other enhanced indexing funds (see charts).

Markets were erratic during these first 2 months of the year, so why the difference in performance between January and February?



Although it has not been definitely established, certain AFM parameters were not able to keep up when the large tech stocks (FAANG) parted ways during February (Alphabet/GOOGL for example outperformed Apple by more than 25%) and portfolios ended by underperforming the SPX by **0.07%**.

Changing the setup might solve the problem in this particular case but would be counterproductive when things return to normal.

AFM has suffered under these occasional hiccups in the past, but on the whole has been extremely satisfactory.

Comparative performance data last 12 months



The above chart compares the Average Monthly Difference to the S&P500 index and the Standard Deviation of four AFM-managed portfolios and two similar funds as described on page 1.

- The 4 AFM-managed portfolios have shown to be stable and therefore less subject to large fluctuations as well as good performance results.
- GINDX with a high Standard Deviation of 1.55% is the most volatile of the 6 portfolios.

The purpose of enhanced indexing is to outperform an index without incurring the risks involved in traditional management.

AFM provides one of the safest and most productive enhanced index-tracking management tools available.

Using AFM

AFM requires an account at a brokerage firm providing an API link (see Note)
Apart from funding the account, AFM takes care of the next steps.

Standard setup

For best results, AFM-managed accounts should be separated into 2 categories:

1. A **Master Account** under control of the owner to receive funds. AFM has no access to the MA.
2. Owner distributes funds to the **sub-accounts** (usually 3-6) and grants trading permission to AFM.
3. AFM sets up the sub-account portfolios using different configurations, algorithms and parameters to stabilize long-term performance.
4. The procedure is launched.

Master account	
sub-account	1
	2
	3
	4
	etc.

Constraints

Account holders can view sub-account activity through the AFM website with a username and password. For security reasons the website is purely consultative. To intervene the owner needs to pass through the broker website.

Accessing sub-accounts through the broker website needs to be handled with care:

- Interfering with sub-accounts under AFM control is not recommended. Such action will cause the program to dysfunction.
- The same applies to transferring funds and/or securities in/out of a sub-account. AFM needs prior notification in order to reconfigure the setup.

... other

The investor retains full ownership of his account at all times.

- AFM's objective is to outperform an index of choice over time on a relative basis.
- The AFM website provides detailed information not generally available on the broker website.
- An investor can follow the performance (both in relative and absolute terms) of his portfolios in real time. And much more.

Fees

Investors pay a monthly oversight fee depending on the sub-account net worth. No performance commissions or other expenses are charged.

There is a one-time portfolio configuration fee of 0.025% which also applies to any increase/decrease in portfolio assets by the investor when under AFM management.

No termination charges are applied.

AFM does not share in broker commissions or other retro-commission arrangements.

For help and further information info@afmsa.ch.

Note: API is the acronym for Application Programming Interface, a software intermediary that allows two applications to talk to each other. Brokerage firms usually provide such a link.