styles4u

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DISCLOSURES: Between 2018 and 2022, I was with AQR and worked on, among other things, styles research, including research that flowed into QSPNX, one of the products I mention below. I hold VMNFX in my personal portfolio. This analysis is not sponsored, commissioned, or vetted by any financial advisor or investment manager; I have not and will not get paid to say or imply anything below; and I have no commercial interests in its publication, circulation, or effects.

DATA SOURCES: QSPNX, QMNNX, VMNFX, and SPY live adjusted close price history is from Yahoo Finance.

1 First things first: Remember the portfolio food pyramid!

https://github.com/sparshsah/foggy-demo/blob/main/demo/finance/pflio-food.pdf.

2 Setting

2.1 What is the goal of styles in the long term?

Styles are systematic, intuitive, and well-documented sources of expected returns uncorrelated with stock-, bond-, or commodity-market returns. (Note that because of their structure, implementing styles at scale generally requires the use of Leverage, Shorting, and/or Derivatives. I always tell people, if your returns are too low, try LSD.)

Say uncorrelated alternatives like styles and global macro have long-term Sharpes of 0.30 each (so that an equal-risk blend of the two—which since they're uncorrelated scales up by $2^{0.5}$ —gives a bit more than 0.40), whereas a balanced blend of global stocks, bonds, and real estate can give you a long-term Sharpe of 0.65. Even then, the alternatives are valuable diversifiers: The saying goes "don't put all your eggs into one basket", not "find the best basket and stuff all your eggs into it". You don't want to go crazy with the low-Sharpe stuff, but they're a nice garnish.

2.1.1 An aside: What makes a "good" Sharpe?

Notice that none of the Sharpes above is anywhere close to 1. Despite what your favorite amateur blogger on SeekingAlpha would have you believe, the fact that something individually has a Sharpe less than 1 doesn't automatically make it a "bad investment", and in fact most "good investments"—reasonable, high-capacity investments—have Sharpes less than 1. Even legendary portfolios like Buffett's at Berkshire or Dalio's at Bridgewater haven't hit 1. Indeed, some great hedges like tail-risk funds actually have slightly negative long-term Sharpes, and are worth it simply because they're so anticorrelated with the rest of your portfolio that they go from losers individually to lifesavers in context.

2.2 What might styles look like in the short term?

During times when the *conditional* (short-term) Sharpe of stocks and bonds is low or even negative, the uncorrelated alternatives we were considering can become conditionally even more valuable, as they're the only game in town: It's them (expected nonnegative profit) or cash (guaranteed zero profit). (Now notice I didn't say they're suddenly *guaranteed* or even *extremely certain* sources of profit: They're uncorrelated alternatives, not anticorrelated hedges!)

For some background about the current state of the union for styles (particularly Value), have a listen to Morningstar's Long View podcast with Cliff Asness from 2022 May.

3 Candidates

I will compare (without making any remarks, comments, conclusions, or recommendations!) the live net-of-fee net-of-tcost performance of three styles-driven mutual funds available to individual investors in the US as of 2022-06-09.

3.1 QSPNX, "AQR Style Premia Alternative Fund": AQR's Market-Neutral Stock-Selection-and-Global-Macro Styles Mutual Fund (N share class)

• Offering documents

• Profiles: Morningstar, Fidelity

3.1.1 Fast facts:

• Manager: AQR

• Manager inception date: 1998 (24 years ago)

• Fund Category: Core liquid-alternative

• Fund target volatility (stated): 10%

• Fund inception date (for earliest share class): 2013-10-30 (9 years ago)

• Fund AUM (across all share classes): \$943M

• Minimum investment (N share class via JPMorganChase YouInvest): \$1M

3.1.2 Strategy:

• Four styles (Value, Momentum, Carry, and Defensive including BAB & Quality) across five asset classes (Single-name stocks & industries, Stock indices, Yield curve, Currencies, and Commodities).

3.2 QMNNX, "AQR Equity Market Neutral Fund": AQR's Market-Neutral Stock-Selection-only Styles+Alpha Mutual Fund (N share class)

- Offering documents
- Profiles: Morningstar, Fidelity

3.2.1 Fast facts:

- Manager: AQR
- Manager inception date: 1998 (24 years ago)
- Fund category: Liquid alternative Market-neutral stock selection
- Fund target volatility (stated): 6%
- Fund inception date (for earliest share class): 2014-10-07 (8 years ago)
- Fund AUM (across all share classes): \$146M
- Minimum investment (N share class via JPMorganChase YouInvest): \$1M

3.2.2 Strategy:

- Four styles (Value, Momentum, Carry, and Defensive including BAB & Quality) in a single asset class (Single-name stocks & industries).
- AQR Global Stock Selection team's market-neutral systematic alpha signals in single-name stocks & industries.

3.3 VMNFX, "Vanguard Market Neutral Fund": Vanguard's Market-Neutral Stock-Selection Mutual Fund (F share class)

- Offering documents for advisors and investors
- Profiles: Morningstar, Fidelity, Two Sigma

3.3.1 Fast facts:

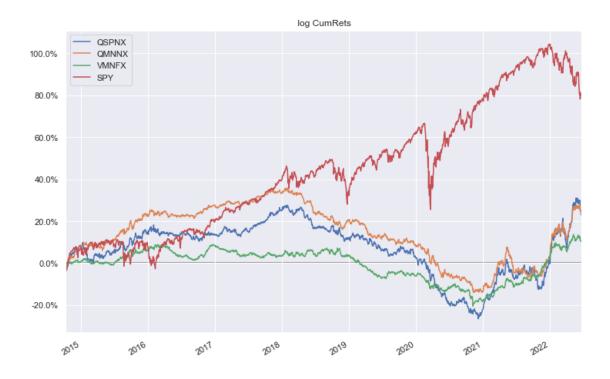
- Manager: Vanguard
- Manager inception date: 1975 (47 years ago)
- Fund category: Liquid alternative Market-neutral stock selection
- Fund target volatility (inferred): 7%
- Fund Inception date (for earliest share class): 1998-11-11 (24 years ago)
- Fund AUM (across all share classes): \$630M
- Minimum investment (F share class via JPMorganChase YouInvest): \$0

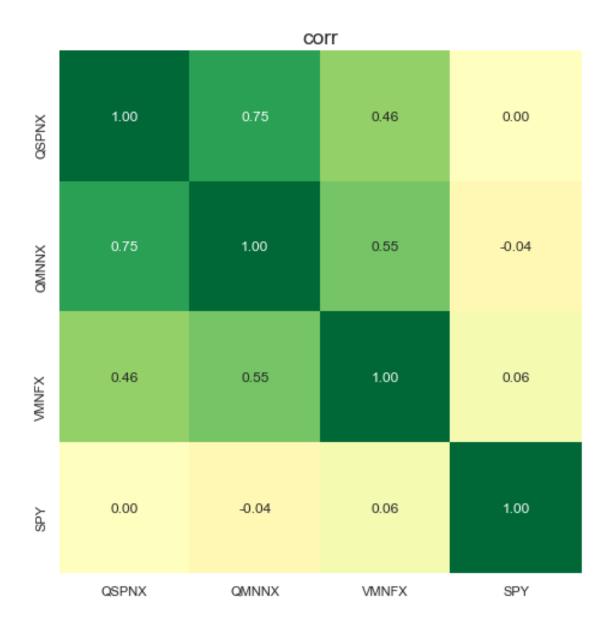
3.3.2 Strategy:

- Market- AND industry- AND size-neutral styles (such as Value, Momentum, and Quality) in a single asset class (US large-, mid-, and small-cap single-name stocks).
- Vanguard Quantitative Equity Group's market- AND industry- AND size-neutral systematic alpha signals in US large-, mid-, and small-cap single-name stocks.

4 Visualization

```
[1]: import pandas as pd
# https://qithub.com/sparshsah/foggy-lib/blob/main/util/foggy_pylib/fin.py
import foggy_pylib.fin as ff
TICKERS = ["QSPNX", "QMNNX", "VMNFX", "SPY"]
def _get_pnl(ticker="QSPNX"):
    px = pd.read_csv(f"data/yahoo-finance_{ticker}_px.csv", index_col=0,_
 →parse_dates=True)["Adj Close"]
    pnl = ff._get_r_from_px(px=px, seed_value=None)
    pnl.name = ticker
    return pnl
def get pnl():
    pnl = {ticker: _get_pnl(ticker=ticker) for ticker in TICKERS}
    pnl = pd.DataFrame(pnl, columns=TICKERS)
    # ignore the stuff prior to the last-to-show-up active fund or after the last-to-show-up active fund or last-to-show-up
 \rightarrow first-to-drop-out active fund
    start_date = max(_pnl.first_valid_index() for ticker, _pnl in pnl.
 →iteritems() if ticker != "SPY")
    end_date = min(_pnl.last_valid_index() for ticker, _pnl in pnl.iteritems()__
 →if ticker != "SPY")
    pnl = pnl.loc[start_date:end_date, :]
    return pnl
pnl = get_pnl()
ff.chart_r(pnl)
```





783-horizon rolling-window



	Sharpe	t-stat	ER	Vol	Frac valid	obs Total	valid obs	Total obs	\
QSPNX	0.28	0.75	0.031	0.1126		1.0	1938	1938	
QMNNX	0.35	0.96	0.0319	0.0902		1.0	1938	1938	
VMNFX	0.22	0.61	0.0137	0.0617		1.0	1938	1938	
SPY	0.63	1.71	0.1087	0.1727		1.0	1938	1938	

	First obs	First valid obs	Last valid obs	Last obs
QSPNX	2014-10-10	2014-10-10	2022-06-22	2022-06-22
QMNNX	2014-10-10	2014-10-10	2022-06-22	2022-06-22
VMNFX	2014-10-10	2014-10-10	2022-06-22	2022-06-22
SPY	2014-10-10	2014-10-10	2022-06-22	2022-06-22