

The portfolio food pyramid

Sparsh Sah

YOU ARE DOOMED

Read William F Sharpe's "Arithmetic of Active Management". You. Will. Not. Beat. The. Market.

OK, MAYBE YOU'RE NOT *completely* DOOMED – WHO'S ON THE OTHER SIDE?

You can make money by being on the good side of a factor—which means you need someone to be on the bad side of that factor. If you're being offered a fair deal, you need other buyers to be reluctant to accept it, empowering you to negotiate a discount with the seller. If you're deciding between two similar pools of projects, you need people to systematically overpay (rsp underpay) for the first (rsp second), lowering (rsp raising) its cost of capital (hence its hurdle ER), allowing you to snap up the second (or, even better, pick up the spread between the two!). If you're making a pitched bet, you need some cocky hotshot to take it.

Why would they do this? Maybe they're just stupid, or careless, or simply not paying attention. This is probably 50% of it. Couple candidates (that you could test with real-world data for any given factor!) for the other 50%:

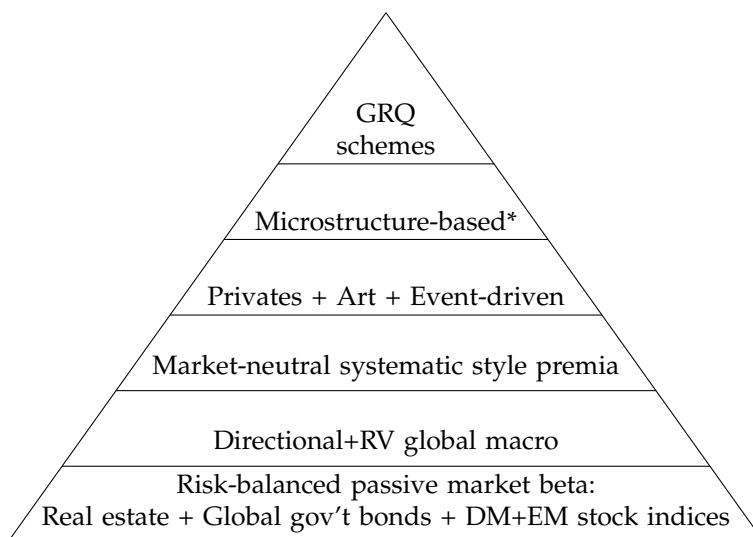
- Risk aversion: People might refuse to bear risk at all (potential reason for the global equity risk premium); or dislike negative skew (potential reason for the value style premium); or hate the thought of going underwater and therefore prefer to juice returns by tilting toward high-risk projects than by leveraging low-risk projects (potential reason for the BAB style premium); or be willing to pay a premium for insurance against blowups (potential reason for the short-vol risk premium).
- Liquidity demand: Sometimes people need to hold fire sales. It happens. You just need to lurk around so you can be there when it does.
- Behavioral bias: The carry style premium could be induced by people's underestimation of the probability that things will actually just sort of... stay the same as they are (that doesn't mean things have to be *absolutely likely* to stay the same – just *relatively more likely* than people reckon). The value style premium could be induced by (in addition to or instead of the risk-aversion story above) people's irrational love for flashy form-over-function high-fliers above beaten-down-but-solid groundlings.
- Information or technical disadvantage: High-quality, up-to-date data might just be too hard-to-access or expensive for investors to get or process – which gives an edge to those who can afford it. Or, people might just not have fast-enough computers to run HFT bots. We live in the real world, not some ideal fantasy land.

THE IMPORTANCE OF DISCIPLINE

Before making any financial or investment decision, ask yourself whether it supports a portfolio that is, bottom-up:

- Transparent
- Low-churn (hence, low-tcost and low-tax)
- Diversified
- Risk-managed (controlling volatility, skew, kurtosis, value-at-risk, and stress losses)

If the answer is "no", DON'T DO IT!



*Things like stat-arb and HFT

As you go rightwards and up the pyramid, asset classes become increasingly hard-to-access and low-capacity. Each layer of the pyramid should be long-term-uncorrelated with—or point-in-time-hedged against—moves in the layers below. Otherwise, all you're doing is adding an expensive, illiquid, undiversifying version of the same stuff you could have gotten below!

For example, a lot of corporate-bond funds mainly just load up on single-name credit risk (which is highly-correlated with single-name equity risk, which is highly-correlated with global equity risk, which is easier and cheaper to get from liquid stock-index ETF's or futures) and global yield-level risk (which is easier and cheaper to get from liquid government bonds or interest-rate swaps).

Now some more bad news that's actually good news: Along with the climb comes the reality that high-quality, up-to-date data on the asset classes toward the tip of the pyramid is expensive and requires a careful understanding of each asset class. Management skill has not yet been commoditized in these markets. So, if you can find a good and trustworthy manager with a real information advantage, going upward offers more opportunities to harvest true "alpha" (differentiated, proprietary, and reliable bets on idiosyncratic returns) rather than just getting scammed by expensive blackboxes full of "beta" (well-known long-term-compensated global risk factors).

And who's going to take the other side of those good managers? Some cocky hotshots who think they have skill but actually have none. What's going to happen? When they think an asset is a good long (rsp short), they're going to try to buy (rsp sell) it. Of course, they have no skill, so half the assets they think are good longs are actually bad longs (good shorts) that the good manager will be happy to sell to them. Similarly, half the assets they think are good shorts are actually bad shorts (good longs) that the good manager will be happy to buy from them.

On the other hand, a quarter of the assets they think are good longs will, by good fortune, actually be good longs—but not so good as they think. They'll buy them from the good managers at a too-high price. Similarly, a quarter of the assets they think are good shorts will, by good fortune, actually be good shorts—but not so good as they think. They'll sell them to the good managers at a too-low price.

Even still, they'll end up right about the last quarter of the assets, and make a bit of money based on that. Indeed, if they have a long bias in an asset class like private equity (which just loads up on global equity risk, which is one of those well-known long-term-compensated global risk factors—beta!—I was talking about), they might even make enough to stay above water – not enough to beat the market, not even enough to match it, but enough to stay afloat.