The portfolio food pyramid

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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 systematically on the good side of a factor—which means you need someone to be on the other side, systematically on the bad side of that factor.

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

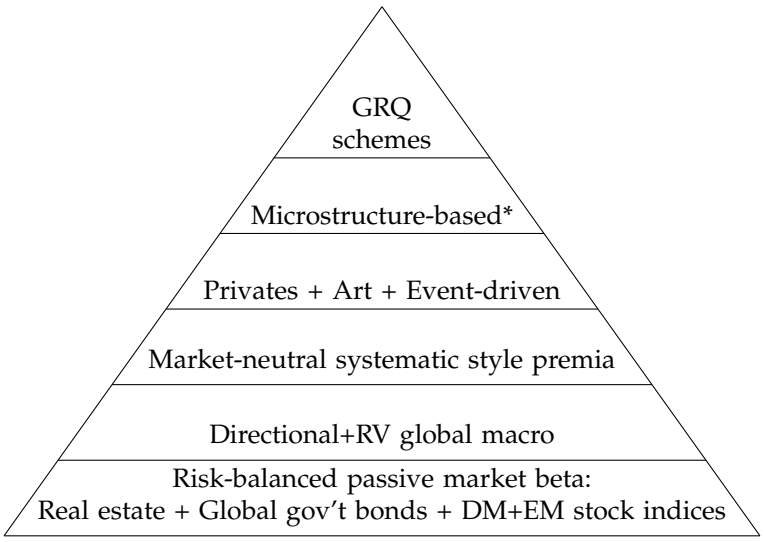
- Risk aversion: People are risk-averse and either won't bear risk (potential explanation for the global-equity risk premium), or will pay a premium for insurance against it (potential explanation for the short-vol risk premium). Another flavor of this is leverage aversion, something that even smart quants get wrong all the time. Quants will point out that people are irrationally leverage-averse and therefore unwilling to lever up low-volatility stocks to juice returns – instead, they'll load up on high-volatility stocks. In the absence of this effect, the Sharpes of both low- and high-vol stocks should be roughly equal, so the leverage-averse investors' shunning of the low-vol stocks makes those stocks undervalued, therefore higher-Sharpe. Quants eagerly snap up those stocks, levering them up to earn higher returns. But this kind of misses the point: If you assume that a notional asset's value has a zero lower bound, then levering a low-vol stock to the same vol as a high-vol stock introduces some excess skew: With the high-vol stock, you could go bankrupt; But with the levered low-vol stock, you could go *underwater*.
- Liquidity demand: Sometimes people need to hold fire sales. It happens. You just need to lurk so you can be there when it does.
- Behavioral bias: E.g. The value premium might be explained by investors' love—and willingness to overpay for—for flashy high-fliers, or The carry premium might be explained by people's underestimation of the probability that things will actually just sort of... stay the same as they are (that doesn't mean that things have to be *absolutely likely* to stay the same – it just means that things have to be *relatively more likely* to stay the same than investors think).
- Information or technical disadvantage: High-quality, up-to-date data might just be too hard-to-access or expensive for investors to buy – 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 you make any financial or investment decision, ask yourself whether it maintains 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 default 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-curve 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. So, if you can find a good and trustworthy manager with a real information advantage, going upward offers more opportunities to generate true "alpha" (proprietary and reliable bets on idiosyncratic returns) rather than just scamming you with expensive blackboxes full of beta (well-known long-term-compensated global risk factors).

And who's going to be on 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 that 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 that 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 that 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 that 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—and if they have a long bias in an asset class like private equity that just loads up on global-equity risk (which is one of those well-known long-term compensated global risk factor—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.