The portfolio food pyramid: A harmony of flavors for a smoother bite

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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 taking the other side?

You can make money by getting on the good side of a factor—if someone is there to get on the bad side of it.

- 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 to buy into: You need other fellow buyers 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 (with a high cost of capital, only high-ER projects get done, which means less total projects get done but the ones that do have higher expected profit margins).
- If you're making a pitched bet: You need some cocky hotshot to take it.

Why would they do this? Perhaps 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%:

- <u>Risk aversion</u>: People may refuse to bear risk at all (potential reason for global equity risk premium); or dislike negative skew (potential reason for value style premium); or hate the thought of going underwater[1] (potential reason for BAB style premium); or seek insurance against blowups (potential reason for short-vol risk premium).
- <u>Structural dynamics</u>: E.g. Some institutions hold themselves to a 60+40 notional-allocation policy that generates rhythmic and predictable month-end rebalancing flows.
- <u>Behavioral bias</u>: 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[2]. The value style premium could be induced by[3] people's irrational love for flashy form-over-function high-fliers above beaten-down-but-solid groundlings.
- <u>Information or technical disadvantage</u>: High-quality, up-to-date data might just be too expensive or complicated for regular people to get or process, ceding an edge to those who can afford it. Or, people might just not own fast-enough computers to run HFT bots.
- <u>Liquidity demand</u>: Sometimes people have to hold fire sales[4]. It happens. You just have to lurk around so you can be there when it does.

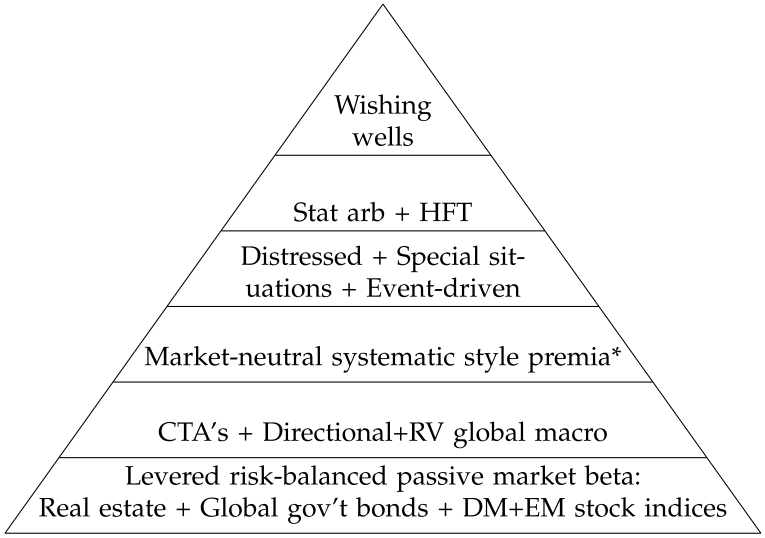
The importance of discipline

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**[5]
- **Risk-managed** (controlling volatility, skew, kurtosis, value-at-risk, and stress losses)

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

[1] And therefore hate leverage, preferring to juice returns by tilting toward high-risk projects rather than by levering low-risk projects.
[2] That doesn't mean things have to be *absolutely likely* to stay the same – just *relatively more likely* than people reckon.
[3] In addition to, or instead of, the risk-aversion story above.
[4] Or cover oversqueezed shorts...
[5] Ref. Asness, Cliff. 1996. "Why Not 100% Equities?". Leverage can be your friend if it stops you from resorting to concentration!



**E.g. Defensive (Quality + BAB), Carry (EM-DM currency funds, short contango rolldown, etc), Momentum, Value.*

Beta doesn't count as alpha... 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).[6][7]

... *Alpha* counts as alpha... 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 market risk factors).

... But anything that isn't beta is zero sum. So, 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[8], 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.

[6]And what if your manager admits, "Yes my expensive US IG credit fund is highly-correlated with SPX, but my Sharpe is way higher" – Do you give him a pass? No! Mathematically what he's saying is, "Yes my expensive US IG credit fund's performance is primarily explained by cheap beta to SPX, but it also has excess alpha over and above that". It's a bit like saying, "Yes my $20 deli combo's main course is this run-of-the-mill prepackaged sandwich, but it comes with this homemade iced tea that's delicious". Well great, but I already have plenty of that exact same sandwich at home, and if I ever run out Vanguard sells them at 50¢ for a 10-pack – So how about you hedge out the sandwich and quote me a fair price for just the tea!

[7]Same goes for buying your employer's stock – It had better be worth the risk that going belly-up means losing your job *and* your savings!

[8]Which just loads up on global equity risk, one of those well-known long-term-compensated market risk factors—beta—I was talking about!