

Prix Fixe vs. A la Carte (or, Asset Classes vs. Risk Premia)?

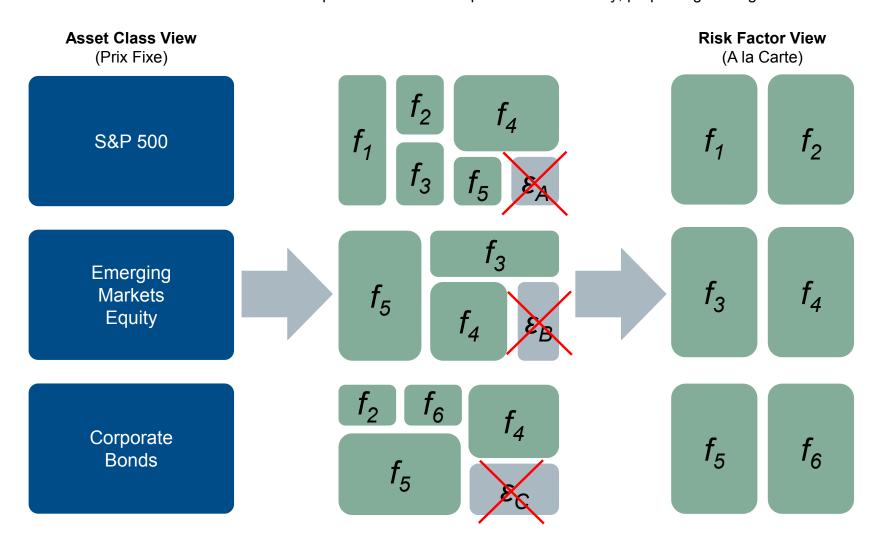
April 13, 2016

SPEAKER'S NOTES: Asset classes comprise numerous risk factors. Using economic principles and empirical analysis, we can break asset classes into their more primal drivers: risk factors.

Theme: Asset classes are similar to a prix fixe menu, whereas risk factors are akin to a la carte menu items.

A Different Perspective

Conventional assets and asset allocations deliver priced factors – "risk premia" – in arbitrary, prepackaged weights.





SPEAKER'S NOTES: Not all risks are compensated risks. All assets can be thought of as vehicles to defer consumption (spending) from one period to another. Only assets that correlate with the inherent uncertainty of [aggregate] consumption are compensated risks. Conversely, risks that stabilize consumption volatility will require a risk premium to be paid (e.g., long puts). When we leave the comfortable asset class space, we must understand why a certain risk should be a priced risk to determine whether it offers an enduring risk premium.

Does Risk Drive Return? Consider...

Risky assets are compensated based on their correlation with consumption.

If consumption is made... Risk premium is... Example

More volatile Larger/positive Stocks

Less volatile Smaller/negative Insurance

We know that risks are **not compensated equally** and may not be compensated at all.

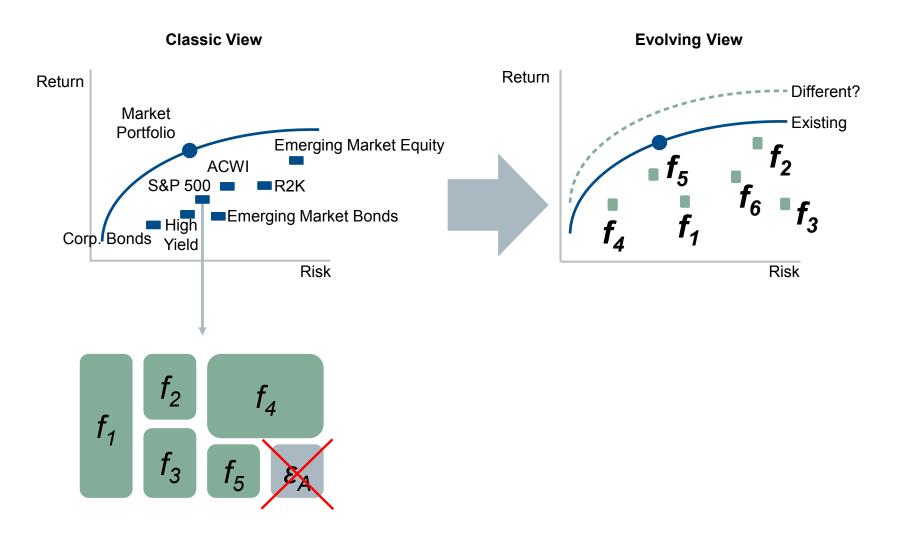
An asset's compensation is determined by the priced factors that reside within it.



SPEAKER'S NOTES: Instead of building a portfolio from asset classes, what if we build it up from the underlying risk premium strategies? Can we improve our portfolio's risk/reward? Is this a violation of equilibrium theory that tells us the market portfolio should have the highest risk-adjusted return?

A note on equilibrium: In theory, investors with identical risk preferences and expectations hold identical risky portfolios. This must be the market portfolio since all assets must be held. The elegance of the market portfolio is that idiosyncratic risk disappears through diversification. So, only covariance with the market portfolio (a proxy for wealth, which proxies for consumption, which proxies for marginal utility of consumption) matters.

The Classic View vs. An Evolving View

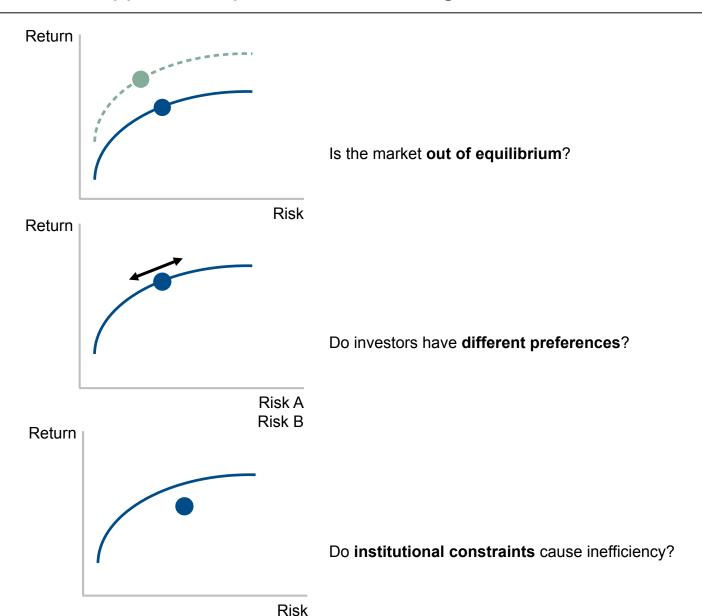




SPEAKER'S NOTES: Three (non-mutually exclusive) reasons are offered why the risk premium-based approach can potentially improve the portfolio:

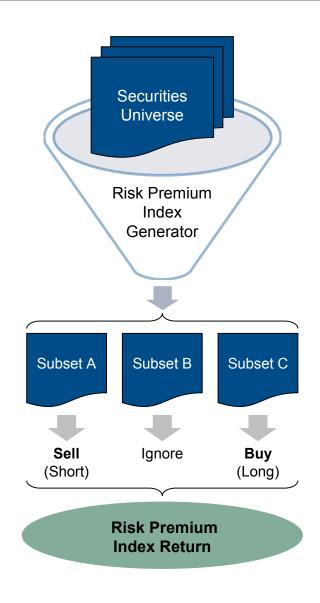
- 1. The market is out of equilibrium certain factors are under/over-appreciated by the market.
- 2. You are not the marginal investor. Your consumption volatility is different than others, resulting in different risk preferences. (Think of an investor who has real assets that do well in down equity markets, for example.)
- 3. Institutional constraints cause inefficiencies. (Think taxes, leverage limits, regulations, etc.)

Can the Risk Factor Approach Improve Portfolio Design?





A New Dish: Risk Premium Indices



Asset classes

- Equities
- Fixed income
- Commodities
- Currencies

Rules/Algorithms

- Filters
- Signals
- Rankings
- · Scaling factors

Index Portfolio

- Long/short positions
- Roll rules
- Transactions costs
- Financing costs
- IP costs



SPEAKER'S NOTES: But the devil is in the details. Finishing off with a faux online review, we look at the pitfalls of these strategies and how they can be addressed in practice.

But...How Was the Service?

Estimation Risk:







That asset is **NOT a priced risk!**

Strategy Selection:







I guess I didn't really understand the indices.

Execution Framework:







These sure don't trade like conventional instruments.

Portfolio Monitoring:









We couldn't replicate the index calculations. I hope the dealer got it right!

Factor Crowding:







The **compensation changed** as investors adjusted their portfolios!

Market Distortion:









Who knew that activity in thin markets could distort returns?



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