*How Can “Smart Beta” Go Horribly Wrong?*

* Is the “alpha” generated from factor/smart-beta investing being driven by structural alpha or rather an inflated valuation level in these factors? **Arnott argues the latter**
* Many examples of reported figures that don’t account for rising valuation, which the paper argues is the main driver of “alpha” for factor investing
* Investors are increasingly becoming more aware (since the financial crisis) that they must
  + Adjust past performance for rising levels of valuation over the same time period
  + Adjust expected future performance to reflect the likelihood of mean-reversion
  + Just because a smart-beta portfolio’s performance is strong over a long amount of time (i.e. 50 years), doesn’t “guarantee a correct conclusion” about the future likelihood of success
  + Both academics / practitioners fall into these traps
* The paper finds that the “efficacy of factor-based strategy or factor tilt” (for all factors in the factor zoo) “is strongly linked to changes in relative valuation, that is, whether the strategy is becoming more richly priced or becoming cheaper”
  + Academics / practitioners both use past performance to determine how the strategies work, but often forget to adjust for rising levels of valuation
* The paper examines six factor portfolios: value, pos. momentum, small cap, illiquid, low beta, and high gross profitability
  + All but momentum and low beta show strong correlation with rel. valuation levels
  + Momentum / low beta share a common trait that portfolios exhibit rapid turnover
  + Analysis shows that as the market evolves, the “normal” valuation level for a strategy may change. This is especially true in the low-beta portfolio case. Over the last 15 years (two bear markets included), large asset flows into low beta products are now driving valuation levels far above their historical norms: “Low beta’s end-point in rel. valuation is near an all-time peak, meaning the historical link between relative valuation levels and returns will seem weak, even if it’s not”
* The paper then examines six “smart-beta” portfolios to determine if a similar patterns is revealed: “equal weight”, fundamental index, risk efficient, maximum diversification, low vol., and quality. Their methodology for reweighting these portfolios is on an annual basis from a universe of 1000 largest market-cap stocks
  + General results are similar to those described above: the cumulative performance of each smart beta strategy largely co-moves with changes in valuation. Some observations are noted below.
    - For equal weight / fundamental index, a wedge between performance and valuation develops over time (i.e. they become less “correlated” over time)
    - For Max diversification / risk efficient strategies, the return due to changes in valuation is significantly more volatile than for the other strategies. The volatility is being driven by substantial changes in portfolio composition (high turnover)
  + Refer to Table 1 for “valuation adjust performance” of the portfolios considered
* Punchline: Factors are becoming expensive, which in turns is why they seem attractive in terms of “alpha”. Researchers must adjust past returns via rising valuation levels. See the first paragraph in the “Conclusion” section of the paper

*Timing “Smart Beta” Strategies? Of course! Buy Low, Sell High!*

* This paper is the third in the series of three papers: the first paper was the one reviewed above, the second was title *To Win with Smart Beta, Ask if the “Price is Right”*. The first paper discusses what is summarized above, according to this paper, the second demonstrates that valuations are predictive of future returns and this result is robust over time. It also notes that many smart-beta strategies are trading in the top quartile/decile of historical valuations, and cautions investors who believe “past is prologue” (an expression I really enjoy)
* This paper shows that active timing of smart-beta strategies / factor-tilts, that is putting higher weight on those that are trading cheap and lower weight on those that are overvalued, will ultimately improve performance.
* Everyone is timing the market, and has been doing so since these “factors” arrived in academic literature. Many investors are often deteriorating their Sharpe ratios buy investing in expensive factors that may not be poised for continued growth rather than investing in “newly cheap” factors
* The paper asserts: “Relative valuation can be used to tactically time alpha from smart beta strategies [the caveat being that this] leads to a more concentrated risk profile”
* The paper considers 8 smart-beta (Equal Weight, Fundamental, Low vol, FTSE RAFI Low vol, Quality, Dividend, Risk Efficient, Max Diversification) and 8 factor strategies (Value [blend], Value [B/P], Mom., Small Cap, Illiquidity, Low-beta, Gross profitability, investments); the smart-beta strategies are long-only portfolios whereas the factor strategies are long-short (top-third long; bottom-third short)
  + Diversification easily seen: the information (Sharpe) ratio of the equally-weighted blend of smart-beta (factor) strategies is stronger than the individual smart-beta (factor) strategies alone; somewhat expected, good sanity check
* For the “Active Timing” section of the paper, the paper considers “a trend chaser who invests of three (of the eight) smart-beta strategies (or factors) having the best blend of 1, 3, 5, and 10 yr performance at the beginning of each year. They note, this is not the best move but this is often how many investors actually invest. The paper then performs the analysis but the takeaways are summarized below:
  + Contrarian investing works across factors and smart-betas
  + Trend-chasing in factors/SBs creates a drag on performance
  + There is a tradeoff between factor timing and factor diversification
  + See Figure 1 on pg. 6 that nicely summarizes the results of a trend-chasing investor (described above), the equally weighted portfolio, and the contrarian
* The paper then goes on to explain a variety of drivers for this behavior, the main one of course is what is mentioned in the summary of the paper above: accounting for rising relative valuation levels is VERY important (i.e. consider the trend-chase investor, who will be systematically “missing” the trend)
* One interesting phenomena the paper notes, that is useful for understanding changes in a given factor/SB strategy, is looking at the how a factor/SB performs **before** and **after** it was published in academia literature: see Table 4 Panels A/B