New Frontiers in Portfolio Management

Rose Mary Cosio, Javier Estrada, and Mark Kritzman

The Applied Finance Conference has become an annual event in which academics and practitioners converge to discuss issues of interest to both. On May 15, the 2015 meeting took place at the new facilities of St. John’s University in downtown New York. One of the two practitioner-oriented panels of the conference, ‘New Frontiers in Portfolio Management,’ dealt with current trends affecting the practice of portfolio management.

The panelists, in the same order as they presented, were Rose Mary Cosio, Executive Director, Ultra High Net-Worth Clients, UBS Wealth Management; Javier Estrada, Professor of Finance, IESE Business School, and partner and financial advisor, Sport Global Consulting Investments (SGCI); and Mark Kritzman, Founding Partner and CEO, Windham Capital Management.

This brief article summarizes the main issues discussed in the panel for readers of the Journal of Applied Finance. It does not aim to give a comprehensive view of the issues addressed during the one-hour session; rather, it merely aims to briefly condense the main arguments put forth by the panelists.

I. Smart Use of Diverse Financial Instruments

Rose Mary Cosio discussed in her talk her approach to deal with ultra-high net-worth investors. She described some characteristics of these investors, the way portfolios are built for them, and some recent trends on sustainable investing.

A. Ultra High Net-Worth Investors

Ultra-high net-worth investors are individuals or families that usually have complex financial structures, are quite knowledgeable of the markets, have investment experience, and ideally will want to have broad diversification. Their wealth can range from $100 million to the billions.

The role of a financial advisor in this space is to come up with a tailored investment plan with a holistic approach, starting from succession planning, considering their liquid and non-liquid assets, and building a proper asset allocation to manage their wealth. When building this asset allocation, it is important to keep in mind their investments in the real economy and in real estate, as well as the family’s goals and aspirations.

In order to create a tailored solution, it is important to establish a comprehensive investment profile, for which it is necessary to learn the client’s investing experience, level of sophistication, risk tolerance, investment horizon, liquidity needs, and succession plans. The client’s level of sophistication helps define the type of specialists that will come together to help him or her, and these may come from the areas of wealth management, asset management, or investment banking.

B. Portfolio Construction

Although the weights of different asset classes in ultra-high net-worth investors have not changed substantially in the last few years (apart from the fact that these portfolios have become more skewed towards equity, even in the case

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of conservative investors that have traditionally favored fixed income instruments), what has changed are the financial instruments at the investors’ disposal and the way they are applied.

To illustrate, sometimes a client’s currency exposure when the portfolio is invested in regions with different currencies (euro, pound, yen) can be hedged with either forward contracts or hedged exchange traded funds (ETFs). Other times a structured note can provide both market exposure in a volatile environment and protection against unforeseen downturns. And other times liquid alternatives can be useful to investors that look for uncorrelated asset classes to help mitigate portfolio volatility because of their bad experience with hedge funds during 2008, when these imposed gates, side pockets, or suspensions.

A portfolio with an open architecture approach can be built either with different fund families or with separate managed accounts (SMAs). In fact, SMAs have been a popular option for those investors that seek more transparency. In the past, a client would have a traditional managed portfolio or a self-directed brokerage account; nowadays, a client can mix both approaches.

**C. Sustainable Investing and Its Three Pillars**

There has recently been a growing interest in sustainable investing, which is defined as any investment that has three components: Positive environmental impact, positive social impact, and good governance. Sustainable investing rests on three pillars, namely, exclusion, integration, and impact investing, which are briefly defined as follows.

*Exclusion* is related to achieving peace of mind by keeping out of the portfolio companies that deal with activities that conflict with the investor’s values. This process involves negative screening. *Integration* is related to the combination of sustainability and financial analysis. And *impact investing* is related to the generation of positive environment or social impact as well as financial return. The niche of impact investing is growing fast; examples include community investing, variants of microfinance, and private equity-like deals investing in sectors such as education, healthcare, basic infrastructure, and clean energy.

Sustainability-themed investing identifies themes related to environmental, social, or governance factors, determines which industries and companies are positioned to benefit from these trends, and constructs portfolios that factor in such insights. Examples of such themes include water and waste management; food scarcity; energy efficiency of climate change on the environmental side; supply chain management of access to finance, housing, education and healthcare on the social side; and board diversity and corporate transparency as far as governance is concerned. This market is being driven by institutional clients and Europe is ahead of other regions in this area.

**II. Smart Beta: Landscape and Assessment**

Javier Estrada discussed in his talk the increasingly popular ‘smart beta’ products. He outlined the characteristics of these funds, described some of the products currently offered in the market, and briefly assessed their performance.

**A. Changes in the Market**

Over the last few years several interesting changes in the market have been taking place. Three of these changes are the following:

- Early passively-managed products provided broad exposures, and the assets in them were weighted by market cap; over time, the exposures have become increasingly narrow, and alternative weighting schemes have been introduced.
- Early passively-managed products were introduced long after indices were created; currently, indices are created after a soon-to-be-launched ETF with an active built-in strategy has been devised.
- Early smart beta products (defined below) exploited only the size and value factors; over time, exposures to other factors, such as momentum, low volatility, and quality have been introduced.

These (and other) changes have had the effect of blurring the lines between active and passive management. Consider: Is a product that aims to simply *track* an index that has an *active* exposure an active or a passive product? If an individual *passively* invests in a product that has a built-in active exposure, is he a passive or an active investor? There are no clear cut answers to these questions; in fact, many practitioners seem to have simply agreed to disagree.

**B. What Is Smart Beta?**

Smart beta lies in the intersection between passive management and active management. It has elements of both a rules-based, passive approach and a bet-against-the-market, active approach. Because the definition of smart beta is arguable, and different companies define it in different ways, it may be more useful to outline some of their most common characteristics:

- They combine elements of active and passive management.
- They feature a transparent active strategy.
- They offer a rules-based exposure to risk factors.
- They have lower fees than actively-managed products.
- They track indices not weighted by market cap.
- Relative to cap-weighted indices, they seek to increase
returns or lower risk, thus aiming to deliver higher risk-adjusted returns.

Interestingly, Morningstar prefers to refer to products in this space as ‘strategic beta’ products, to highlight the fact that not necessarily all the embedded strategies are smart per se. Similarly, Rob Arnott, from Research Affiliates, highlights that there is nothing inherently dumb about cap-weighted indices; in fact, he argues that if an investor wants to own the broad market, pay next to nothing for the exposure, and stay away from trying to beat the market, a cap-weighted product is the smartest choice.

Of particular interest are the weighting schemes of the products currently offered in the industry. Dividends and earnings, alone or in combination with other variables, are two of the variables most commonly used to weight the assets in an index. To illustrate, the WisdomTree Total Earnings Fund (EXT) weights companies by earnings; the WisdomTree Global Equity Income Fund (DEW) weights companies by dividends; and the PowerShares FTSE RAFI US 1000 Portfolio (PRF) weights companies by a combination of book value, cash flow, sales, and dividends.

C. Performance of Smart Beta Products

The early discussion on smart beta strategies focused on whether they outperformed cap-weighted indices. That discussion has largely ended; the evidence rather clearly shows that smart beta strategies outperform cap-weighted indices by some 200 basis points a year, depending on the country and time period considered.

The discussion then moved to assess where the outperformance stems from. Is it alpha? Is it simply compensation for well-known risk exposures? Early proponents of smart beta products seemed to be inclined towards the former. However, over time, it became increasingly accepted that most smart beta products have a clear value tilt and to a lesser degree a size tilt. In other words, once the exposures to the size and value factors are accounted for, the alpha decreases substantially, and in most cases is rendered not statistically significant.

Advocates of smart beta strategies nowadays largely admit that these products obtain their outperformance by loading on the value and size factors. However, they argue that there still are good reasons to consider these funds, such as obtaining a transparent, rules-based, and low-cost exposure to a value oriented approach.

III. The Divergence of High and Low Frequency Estimation: Causes and Consequences

Mark Kritzman summarized in his talk his recent research on the scaling of volatility and correlation across different time frequencies. He discussed common errors made by analysts and the implications they have for portfolio construction and performance measurement.

A. A Common Mistake

Financial analysts typically estimate risk parameters, such as standard deviations and correlations, from monthly or higher-frequency returns. They then extrapolate these risk measures to longer intervals such as years or multiple years, in order to construct portfolios, determine optimal currency hedge ratios, and measure performance.

Although it is widely acknowledged that these measures are not necessarily stationary across samples, most analysts implicitly assume that, within sample, standard deviations scale with the square root of time, and correlations estimated from high-frequency returns are similar to correlations estimated from low-frequency returns.

The evidence does not support this view. Instead, the evidence shows that actual standard deviations of lower-frequency returns often are significantly different from the standard deviations implied by higher-frequency returns. It also shows that correlations often differ significantly based on the return intervals used to estimate them.

It can be shown mathematically that the relation between the higher- and lower-frequency standard deviations depends on the auto-correlations of returns, and that the relation between higher- and lower-frequency correlations depends on the auto-correlations of returns as well as the lagged cross-correlations between returns.

Kinlaw, Kritzman, and Turkington (2014, 2015), referred to as KKT from here on, introduce a statistic called excess dispersion, which they define as the density of the one-standard deviation tails of the actual distribution of lower-frequency returns that falls outside the distribution implied by higher-frequency returns. They present empirical evidence showing that the significant non-normality of lower frequency returns arises, not from non-normality at higher frequencies, but rather from non-zero auto-correlations and lagged cross correlations.

B. Some Implications

KKT also discuss the practical implications of the distortions caused by lagged correlations. They first address

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portfolio construction and provide evidence that lower-frequency portfolio risk is often much greater than what one would infer from higher-frequency risk. Moreover, they show that optimal portfolio weights based on higher-frequency risk estimates are significantly sub-optimal over lower frequencies. They suggest that investors may want to augment the portfolio construction objective function by including two covariance matrices, one estimated from higher-frequency returns and one estimated from lower-frequency returns.

KKT also discuss the implications for hedging a portfolio’s currency exposure. Again they find that hedge ratios based on higher-frequency returns understate lower-frequency risk. They also find that risk estimated from higher-frequency returns suggests that investors should hedge a greater fraction of currency exposure than risk estimated from lower-frequency returns.

Finally, KKT discuss the implications for performance measurement. They show that auto-correlation of hedge fund returns introduces significant distortion to Sharpe ratios. The migration across quantiles of performance as one transitions from monthly Sharpe ratios to three-year Sharpe ratios is about twice as great as should occur randomly.

KKT find the same pattern for mutual fund information ratios, which are subject to three sources of distortion: the auto-correlation of the mutual funds’ returns, the auto-correlation of the benchmarks’ returns, and the lagged cross-correlations of the mutual fund and benchmark returns.

KKT conclude by showing that the popular strategy known as risk parity, contrary to received wisdom, underperformed a 60-40 stock-bond portfolio from 1929 through 2010 by about the same amount as it was previously shown to have outperformed. This reversal in performance occurred because the significant positive auto-correlation of bond returns throughout this period caused lower-frequency risk for bonds to be much greater than the risk implied by higher-frequency returns.

IV. Assessment

The panel on ‘New Frontiers in Portfolio Management’ in the 2015 Applied Finance Conference dealt with three independent but ultimately related topics on portfolio management. The issues discussed focused on recent approaches to deal with clients, new products in the market, and both portfolio construction and performance evaluation. The ultimate message of the discussion is clear: The area of portfolio management is changing, it is changing fast, and companies have to adapt and deliver what the market is requesting, and do so after a sound analysis of what is good for investors.