



Deconstructing *Beta*: From Broad *Beta* to Factor *Beta*

Now that investors are in a higher interest rate environment, it's never been more pertinent to re-evaluate factor suitability across different economic scenarios.

Extensive research has revealed that factors are the major Alpha determinants. So, when looking at pension plan maturities and solvency over time, it's important to understand how prime factors influence broader benchmarks and Beta, and above all, how these different factors can be strategically aligned to match objectives.

Identifying Alpha and Beta can also help to answer two burning questions - Who *actually* beat the benchmark beyond sheer luck? And how did they manage to do it?

In a *Benefits and Pensions Monitor* Meetings & Events webinar, Mark Webster, Director of Institutional & Advisory at BMO Exchange Traded Funds leads an exclusive panel discussion that delves into deconstructing Beta.

Webster is joined by Jin Yan, CFA, Director and Portfolio Strategy at CIBC Capital Markets, Ian de Verteuil, Managing Director & Head of Portfolio Strategy at CIBC Capital Markets, and Chris Heakes, CFA, M.Fin, Head, Disciplined Equity and Portfolio Manager at BMO Exchange Traded Funds.

Mark Webster: This notion of an Investable Market Index is very, very appealing - the ability to track something from being a small cap all the way up to a mega cap...But there are some practical considerations to take [into account] when comparing an MSCI EAFE index versus the MSCI EAFE Investable Markets Index. Maybe you can explore some of these for us and what people should be aware of?

Yan: There is quite a bit of overlap between the two indexes. And they are highly correlated, but they are not the same. If you look at the performance metrics, the returns do fluctuate from time to time, especially when you look at shorter time periods. And then also the IMI, which includes the small caps, tends to be a little bit more volatile. So you do get a slightly different Sharpe ratio as well.

Webster: What about tradability when volatility is high?

Yan: During normal market conditions,

including the small caps doesn't necessarily increase your trading costs materially, and we've seen that the spreads tend to be quite similar for products tracking the large cap index compared to products tracking the broader IMI index... But in extremely volatile periods the spreads tend to widen for all products, and that's especially more significant for ETFs with exposure to less liquid markets.



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-Ian de Verteuil

Webster: There's a distinct difference between the methodologies that are used and the parameters to determine constituents. Can you explain why we see this market outperformance over the long term?

Heakes: You can see the S&P small cap indexes have much better performance than the Russell 2000 indexes. And that's the first lesson with factor investing or otherwise - take a look what's under the hood.

And just because there are several indices in a certain exposure, doesn't mean they're all created the same, even in the case of small cap, broad data. They're certainly not the same. So what's the reason driving this?

And it's, in fact, [that] the S&P indexes have a couple of extra features, but most importantly it's profitability - that in order to be in their index, whether it's small or large, a company has to have a year of positive earnings... There's also a couple other characteristics. There's liquidity constraint that doesn't get talked about as much, but that might be playing a small role here.

Webster: Maybe you can launch into the low volatility anomaly and the notion of lower volatility, or the correlation between risk and return.

Heakes: First and foremost, low volatility strategies are going to try to preserve capital when market volatility is higher. How do you do that? You invest in more defensive sectors, more defensive stocks, and there's different ways to do that. That doesn't necessarily create a factor, that just means you're taking less risk to preserve capital.

What I think creates the factor is the low volatility anomaly. And a traditional capital pricing model would say, you take less risk. If you have a lower beta portfolio, you get a lower beta return. If you have a higher beta portfolio, you get a higher return. That sounds all very reasonable.

But what happened is, when they actually tested the data against that assumption, they found it doesn't quite work out like that in practice. And actually, lower risk stocks - lower beta stocks - have not just lower risk but better return as well.

Webster: Factors are also cyclical, but we can see that they demonstrate some very good, long-term persistence in achieving a risk adjusted return.

De Verteuil: Yeah, I would say so. One of the single, biggest drawbacks for fundamental analysts is the question of emotion. We get caught up in something that is done well... [But] when something goes wrong, we all sell stocks after they're down... The excellent feature of factor-based investing is really the discipline that comes into it.

So, it's not surprising when you look at this chart, and as longer and longer the periods go on, these factors tend to outperform particularly well simply because they are removing the element of emotion from it... Once you come up with one of these factor-based portfolio construction processes, once you have put that in place and you rigidly lead with that, it ensures that you're not subject to the vagaries of the market. Factors are rules-based.

It does not mean that everything works all the time... As Jin mentioned, interest rates having an impact on maybe value performing well versus growth - absolutely the case. But these factors, if you stick with them over long periods of time, they do particularly well from my experience.