Investment Acumen

WHITE PAPER

from AXA Investment Managers

Investing in Credit: **Smart Beta** or Dumb Beta?

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Whatever way you look at it, it is extremely difficult to justify market capitalisation as the basis for allocating one's assets between the various securities in a universe. In particular, does an investor in credit markets really want to make his/her biggest allocations to what are often the most indebted sectors and companies? This approach seems neither logical nor prudent. This paper sets out why those who agree that this is a particularly dumb way of allocating money in the credit market can now raise a cheer: there is a smart alternative.

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The Global Financial Crisis which started to impact our lives in 2007, and has yet to play itself out, posed a number of fairly fundamental questions to investors. For twenty-five to thirty years prior to this, the period of the "Great Moderation" was a time when, with the notable exception of Japan, the rising tide lifted all boats. In such a forgiving environment it was easy to tolerate investment strategies that were sub-optimal but convenient. The onset of the Global Financial Crisis and the stress it placed on markets started to reveal the fault lines of subpar strategies such as the widespread practice of index tracking in the credit market. Many in the industry—supplier, consultant and client—had been well aware of the shortcomings inherent in tracking a market capitalisation-weighted index in bond markets. Yes, for reasons of convenience and the absence of a credible alternative, this practice was, and continues to be, prevalent.

The old familiar formula

Traditionally, the investment industry divides return between two components - alpha (an active manager's outperformance) and beta (market return). Beta is essentially the premium (over the risk-free rate) which an investor receives from investing in a given market. Alpha is the additional premium an investor receives from using skill to be selective in the way in which he or she invests in that market, typically through taking on idiosyncratic risk. Alpha strategies seek out the winners and/or try to avoid the losers. The key difference between alpha and beta strategies is that, whereas good beta strategies aim to take onboard overall market exposure and trends, good alpha strategies aim to take on specific exposures.

Guidelines for long-term beta harvesting

1: Reduce leakage from transaction costs and management fees.

2: Diversify intelligently by reducing to a minimum a portfolio's exposure to unrewarded risks.

3: Buy and sell the market well. Do not buy investments where the risk/reward trade-off is worse than the market as a whole.
Investors base decisions on a risk/reward expectation, and should be remunerated for taking on known risk. The corollary to this is that they should avoid securities that offer either unnecessary risk, insufficient reward or both.

Building a long-term portfolio

It is important to emphasise that investors have to construct portfolios, actual baskets of securities trading in real time that incur the friction of spreads and transaction costs. This is a very different skill from constructing an index. An index inhabits a theoretical world where transactions when needed can be done instantaneously, usually at zero cost. In contrast, the real investor has to take into account dealing costs, availability of stock, etc.

The skilful beta investor shouldn't therefore be asking: "Which index should I track?" The correct question investors should be asking is: "How can I maximize the amount of beta that I harvest from a given market?" To answer this practical question, one has to recognise that beta can be eroded in the three key ways:

- Transaction costs and investment management fees.
- Poor diversification which leaves portfolios over-exposed to either systemic or idiosyncratic risk.
- Portfolio maintenance carried out without regard for the environment against which this maintenance is taking place.

The long-term investor who has adopted the three (associated) guidelines set out in the box above has a very good chance of maximising the beta harvested from a particular market and minimising beta erosion.

In contrast, harvesting alpha should be possible irrespective of the market environment. While costs, fees, and diversification remain important considerations, alpha generation involves intelligent transacting and often requires taking concentrated, undiversified positions. Harvesting alpha is all about identifying and paying for that rare commodity; persistent investment skill.

The alpha space is highly competitive, with many investment shops constantly vying for the greatest relative outperformance versus a peer group. Competition drives innovation, meaning that investors have a multitude of choice of manager and style or approach.

Beta harvesting strategies, however, remain stubbornly inflexible and do not demonstrate the same facility in adapting to the market environment and investors' needs.

How market cap-weighted strategies fail investors

Until recently, those institutional investors seeking only beta have been content to track relevant market capitalisation-weighted indices. Given how commoditised these strategies have become, such an approach does much to satisfy the first guideline to reduce cost/fee leakage. However, blindly tracking a market capitalisation index does little to meet guidelines 2 and 3 on intelligent diversification and effective transacting.

The illusion of diversification

A market cap-weighted beta strategy offers the illusion of high diversification, but, in reality, follows wherever the market leads with no account taken of the level of concentration or lack of diversification that relative market movements may have introduced into that market. Had you, for example, invested in the global equity index in 1989 you would have invested 50% of your money in Japan – an investment which would subsequently drag down the return from the other markets in the index. In the good times, this risk is not apparent – if the number of individual stock failures is small and/or there are no events which are systemic, the index usually has enough diversification to keep losses at manageable levels. Technology stocks in 1999 and financials in 2007[1] are just two of many other examples of market capitalisation weightings leading to poor diversification.

Fumbling around the marketplace

Nobody would accuse the market cap method of savvy shopping. Research shows again and again that market cap-weighted indices are mechanically overweight over-valued securities and underweight under-valued ones.[2] An index tracker will buy with no consideration given to value at the point of purchase. This is why dealers love index trackers – they can often see them coming and price accordingly.

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The search for better beta

The industry's response has been to look for an index which doesn't suffer from the flaws inherent in market capitalisation-weighted indices. Much work has been done on this in the equity area and, more latterly, the sovereign debt area but, perhaps surprisingly, very little in the most obvious area – credit. As a result, several alternative index methodologies have emerged in the equity and sovereign bond areas. Yet, no perfect index methodology exists. Some, although not all, alternative indices diversify more intelligently than market capitalisation indices do. Some have lost sight of the cost of leakage either through excessive transacting or by charging excessive management fees which tracking the index would imply.

Both market capitalisation-weighted and alternative methodologies prove stubbornly unresponsive to changing market conditions and investors' goals.

The real life index tracking strategy only takes account of the index construction rules which are then blindly followed. Perhaps describing these strategies as dumb is a trifle harsh but to describe them as smart would be overly generous. This gets to the heart of why blindly tracking indices however they are constructed can never be optimal: index-tracking studiously ignores real-time information and the changing environment.

Let's be clear. An investor doesn't want an index. He or she wants a practical asset strategy. Indices are for measurement and for investment banks to devise clever hedging instruments. The investor wants a low risk way of harvesting the market beta net of all costs. This is the first mistake that technicians make: they concentrate on theoretical indices, not practical strategies. Let's take a look at what our practical approach of minimising beta erosion means in the case of credit investments.

Yield premium in the credit market

The "normal" state of affairs is that the yield on the credit market will stand at a premium to that of an equivalent sovereign sibling.[3] This is known as the yield premium, or yield spread. The size of this premium depends mainly on the perceived credit worthiness of the issuer and where the particular issue stands in the capital structure of the company in question. The investor expects to be paid a premium commensurate with the extra risk he or she is taking relative to the equivalent sovereign. A small part of the premium may be there to compensate the investor for the generally lower liquidity of some issuers relative to sovereigns. This yield premium may be thought of as the beta from investing in credit rather than the risk-free equivalent; again, sovereigns.

In theory, the aggregate of the losses from subsequent defaults and partial defaults might offset the yield premium, thus making passive credit investment a broadly neutral sum game with the liquidity premium being offset by fund management and other expenses. In practice, successive studies have shown that the market can be typically bought at a level of yield premium which over-compensates the long-term investor for taking on credit and liquidity risk. There is thus a beta to be harvested which is usually positive.

Harvesting the credit market beta

The logical beta harvesting strategy would be to buy and hold bonds until they redeem. As long as the bonds do not default either partially or completely, the full yield premium will be secured.

In the credit market, return outcomes are asymmetric. Specifically, the penalty from not holding a bond that does better than its peers is small whereas the penalty from holding a bond which defaults can be severe. This asymmetry means that excluding a number of "good" bonds as a consequence of excluding "bad" bonds can be a winning strategy whereas trying to include all good bonds at the expense of holding some bad ones is high risk.

The market cap-weighted strategy in the credit market invests the highest proportion of its assets with borrowers or sectors that have the most public debt outstanding. As our research on the topic suggests, this perversely 'rewards' issuers that take on greater amounts of debt and subjects the investor's portfolio to an unduly high amount of credit risk.[4] It is extremely difficult to argue that this is a sensible low risk way of lending money. Furthermore, investors that ignore real-time information do so at their own peril.

A more clever way

There is a more clever way to approach credit investing—what have been dubbed `smart' strategies. A smart strategy would take all the available information into account and therefore go a long way towards satisfying all three long-term beta harvesting guidelines, ex-ante. It is a practical investment strategy which at every stage focuses on investors' objectives rather than the obsessive adherence to the rules.

First off, a smart credit strategy would look to minimise losses by investing the largest proportion of its assets with the issuers most likely to be able to service their debt. Filters would be put in place in order to reduce the number of bad bonds. Investors can be secure in the knowledge that if these filters throw out a few good bonds as well, it doesn't matter.

Second, just as poor diversification is at the heart of what is most wrong with market capitalisation-based approaches, so intelligent diversification must be at the heart of a smart credit strategy. The asymmetric return profile of individual bonds and the lumpiness of the issuance (financials have historically issued more profusely than others) both point to reducing exposure to sectors and stocks to tolerable levels. However, it is important to remember that intelligent diversification does not necessarily mean complex diversification. In this context we worry about strategies which rely on previously observed correlations to drive their diversification processes. If there is one thing we have learnt from the Global Financial Crisis it is that, at times of stress, correlations can and do rise. This is why smart diversification should be fundamental and should avoid making any implicit assumptions about relative behaviour based on recent past experience. Diversification is most needed when there is a point of inflection in the market.

Third, another critical element of a smart strategy is the way in which the portfolio is bought and maintained. In any buy and hold strategy, the most important day is the day on which the securities are bought. The aggregate buying price has a significant impact on the overall return. In essence, smart beta would adapt to market conditions based on real-time information and avoids the obvious shortcomings of inflexible, rule-based strategies. Smart buying would focus on trade-offs between absolute adherence to the rules and trading costs. While the need for intelligent diversification trumps costs, in most cases, there are practical solutions where, for example, substitute issues can be found which don't in aggregate compromise diversification but do reduce costs.

Lastly, smart beta strategies differ from both traditional active and passive strategies in regards to turnover. Smart beta would employ diligent portfolio monitoring to guard against credit quality erosion. When an event occurs the fund manager would employ skill to respond in the most practical way. The purist might be inclined to call this active management—although this misses the point. Smart beta is a grounded, practical philosophy that offers a sensible way of reducing beta erosion, emphasising the pragmatism of fulfilling investors' objectives ahead of any other considerations.

To sum up

Guideline	Market cap-weighted strategy	Alternative index methods	Smart beta strategy
1. Reduce leakage?	Yes	Usually, but not always	Yes
2. Diversify intelligently?	No; an ex ante illusion	Yes; better than market cap-weighted	Yes; intelligent diversification on sector and stock levels
3. Buy and sell well?	No; ignores value at point of purchase	No; inflexible rules-based approach	Yes; focus on smart buying of quality securities

1 In 2007, for example, the MSCI World index had 22.6% invested in financials.
2 Gitzinger, Lionel. Shaking Up the Tool Box: Next-Generation Market Indices. AXA Investment Managers; first published in Investment Acumen XI (2012). Available on www.axa-im.com.
3 Let's assume that sovereign debt issued by developed countries is the "risk-free" bond class. While events in Europe could be said to challenge this assumption, it is a state of affairs that has been true more often than not.
4 Gitzinger, Lionel. Shaking Up the Tool Box: Next-Generation Market Indices. AXA Investment Managers; first published in Investment Acumen XI (2012).

Conclusion

In the decade of uncertainty which faces us, we at AXA IM think there are real dangers in blindly tracking indices. The winning strategies are either good long-term active management or smart strategies. What these two approaches share and is critical in today's markets is that they: 1) recognise the asymmetry of credit markets; 2) strive to avoid blow-ups; and 3) aim at delivering steady returns over the long term. Index tracking (irrespective of the index) assumes implicitly that change, if it occurs, will be gradual. This is not an assumption on which today's investors should choose to base an investment strategy.

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