

# VISION

## SSgA CAPITAL INSIGHTS

### THE EXCHANGE

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## Unleashing the Power of Fixed Income



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**For years, investors have been dissecting their equity allocations searching to create more efficient portfolios rather than just using a simple market capitalization weighting. Investors have routinely increased and decreased their equity exposure by market capitalization (large, mid and small), by style (growth and value) and by region (domestic, international and emerging) to take advantage of valuation opportunities and/or to position a portfolio in conjunction with their own risk preferences.**

Yet, for fixed-income allocations it's been a different story. The US Aggregate index — a US Dollar-denominated broad market universe of investment grade bonds — continues to be the preferred choice for fixed-income investors. Does this mean the US Aggregate index is the optimal investment strategy? It all depends on an investor's goals regarding risk and return.

Historically, the purpose of an investor's bond allocation has been to provide diversification, stable income and lower overall volatility for a total portfolio. While these continue to remain key attributes of fixed-income investing, recent events, including the liquidity and credit crisis, new pension accounting rules and the sharp downturn in equity markets, have spurred investors to re-think the objective and implementation strategy for their bond allocation.

As a result, investors such as defined-benefit plans, endowments and foundations and defined-contribution plans are no longer looking at their bond allocation as a pure "set it and forget it" part of their asset allocation. By distilling broad fixed-income indices into narrower segments — by sector, quality and maturity, for example — and moving beyond the domestic market, investors may have new opportunities to make more efficient use of their large, and in some cases, increasing fixed-income allocation.

In this changing environment, bond allocations are evolving to manage risk, enhance return and hedge unrewarded risks. Examples include addressing investor-specific goals such as reducing the duration gap against their liabilities under a Liability Driven Investing ("LDI") framework, increasing portfolio yield with sector allocations to investment grade credit and high yield, maintaining liquidity with high-quality government portfolios and gaining inflation protection with inflation-linked bond strategies.

In this article, we explore alternative fixed-income investment strategies which have the potential to improve investors' ability to meet their investment objectives by breaking the benchmark down into its parts and also expanding the investment universe from the traditional US benchmark.

### **A Closer Look at the US Aggregate Benchmark**

The US Aggregate index provides a broad representation of the US bond market, including sector exposure in government treasuries and agencies, in credit with corporates, supnationals and foreign governments and in securitized markets such as mortgage-backed securities (MBS), asset-backed securities (ABS) and commercial mortgage-backed securities (CMBS). These rules-based indices limit the securities to those that have an investment grade credit quality from one or more of the major ratings agencies (AAA down to BBB) and include any securities with a maturity of greater than 1 year.

Clearly, the US Aggregate benchmark provides high quality, diversified exposure, in terms of both security type and across the maturity spectrum. This fact is unquestioned. What, as we've said, should be questioned is whether the US Aggregate is an all-inclusive solution set and more specifically, is a one-size-fits-all approach appropriate for all investors? We approach these questions from two angles. First, what is the impact on portfolio allocations when investment objectives do not revolve solely on maximizing total return, but rather managing risk — volatility, downside, funding and liquidity — and second, can we improve the efficiency of the portfolio purely by expanding the opportunity set and lifting the market value-weighted constraint?

### Investor-Focused Fixed Income Allocations

Risk, in the broadest sense, has traditionally been defined as the volatility of a given asset class through varying market environments. However, volatility risk is just one dimension of risk that ultimately should be driving the fixed-income investment process. Protecting a portfolio from downside risk and capital erosion, providing adequate liquidity to an investor and making sure future obligations can be met take on varying levels of importance based on each investor's unique situation.

Dissecting the broad investment grade US fixed-income market and further expanding the opportunity set may provide opportunities similar to those found in equity diversification and help build more efficient portfolios. The many unique attributes of fixed-income securities — interest rate sensitivity, credit risk and prepayment risk to name a few — provide opportunities to all types of investors, from pension plans, endowments and foundations, to defined contribution participants and insurance companies. Given the recent volatility in all markets, investors are re-visiting their fixed-income allocation to see if it can be more appropriately managed, and in some instances, increased in size.

In the area of defined contribution, investors are clearly moving across the maturity and quality spectrum throughout the investment time horizon. Some target-retirement strategies allocate to longer duration instruments and higher yielding securities during the early years of savings and then re-allocate to higher quality, shorter maturity instruments, while simultaneously increasing the fixed-income allocation, as the participant approaches retirement.

While defined contribution participants may use fixed-income for growth in the early years and principal protection in later years, endowments and foundations, which live in perpetuity, have quite different objectives. Some have utilized treasury-only portfolios to protect principal, maintain liquidity and provide a constant duration to the overall asset allocation. Others have introduced inflation-linked bond strategies to ensure that their capital base is protected during high-inflation periods. Public pension plans have also shown a need for inflation-linked bond strategies as a way of hedging against the cost-of-living adjustment (COLA) inherent in their liabilities.

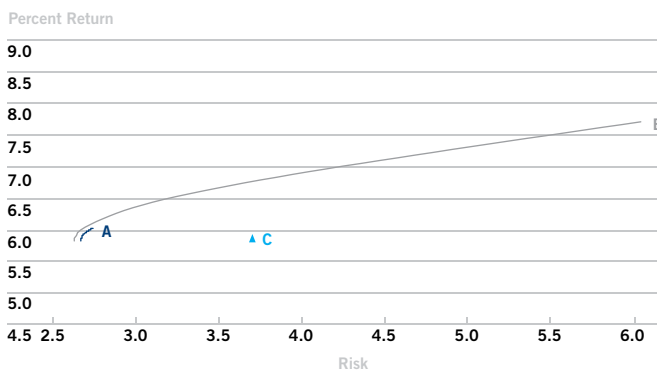
Insurance companies and pension plans alike can use fixed-income strategies to actively manage asset allocation across sectors to increase yield and enhance portfolio returns. This is an important part of the portfolio management process as insurance companies seek to maximize the total return of their general investment accounts. In the case of an under-funded pension plan, it can effectively use its entire portfolio, including fixed income, to grow out of its deficit by allocating to the corporate bond and high-yield sectors. In many cases, pension plans are more focused on utilizing their fixed-income allocation to reduce risk versus their pension liabilities. Under an LDI framework, a pension plan may choose to reduce funding ratio volatility through a combination of long duration strategies. This could entail a combination of long investment grade corporate bonds combined with long dated US Treasury STRIPS. The resulting portfolio would have a high correlation to the plan's actuary discount rate, which is generally AA corporate-bond based, as well as be able to reduce the duration mismatch between the plan and its liabilities.

## Expanding the Investment Universe

If we are to unleash the power of fixed income, we must lift the constraint of the US Aggregate index's inherent market value weighting. In the chart below, we graph the efficient frontier, utilizing historical index data for each sector from December, 1997 to June, 2009 – the longest common denominator for the expanded universe. Using the past 12 years of data on the major aggregate sector returns (governments, credits and securitized), the aggregate benchmark produced a return similar to the efficient frontier's, though with significantly higher level of risk. As one can see, the opportunity set was relatively small given the concentration of the US Aggregate in three main sectors. Over this time period, mortgage-backed securities dominated with the highest return and lowest risk.

In the expanded universe, however, we include US TIPS, non-US Inflation Linked Bonds, non-US Treasuries, US High Yield and Emerging Markets debt. We also break down the Credit and Government sectors into intermediate and long exposures. The additional sectors shift the efficient frontier slightly to the left of the US Aggregate sectors and, more importantly, expands across the risk spectrum. As a result, we can essentially maintain the same risk level as the Aggregate but increase return from ~5.90% to ~6.70%.

**CHART 1: Fixed Income Efficient Frontier**



**A US Aggregate Sectors**  
**B Expanded Universe**  
**C US Aggregate**

Source: SSGA, Barclays Capital, JP Morgan (December 1997 - June 2009)

The information outlined above is intended for illustrative purposes only. The information is not intended to be investment advice. Past performance is not a guarantee of future results.

## Active/Passive Debate

The motivation for expanding the investment universe is apparent and the need to clearly articulate investment objectives and invest in those fixed-income securities that meet those goals makes for a better investment policy. The next question is how this strategy can be implemented. The goal of this article is not to make a case for or against active or passive management but rather to suggest that a blend of the two methodologies may be the optimal solution.

Advocates of an index approach would argue that active management does not add value in the long run, is too costly and exposes the investor to concentration risk, out-of-benchmark positions and an overall increase in “surprise” risk, a situation where a manager may significantly under-perform. On the flip side, active managers would argue that index managers have to increase exposure to potentially weaker companies – those that are increasing their debt load. They would also say that active management can add value by analyzing each issuer on an individual basis and owning only those securities that have a higher probability of debt repayment. Furthermore, active managers would point out that most fixed-income indices cannot be fully replicated and sampling techniques create risk similar to those risks which index managers say they avoid.

One answer to this debate is “strategic or solutions based” fixed-income investing – tactically investing in sectors while achieving the beta of the sector through an index strategy. Such investors have the flexibility to actively manage their allocation to desired sectors, taking advantage of those opportunities that present themselves in the fixed-income markets, but achieve that exposure through index strategies in a diversified, transparent and cost-efficient manner.

### Looking Ahead: Diversified Exposure, Investor-Focused

When constructing a fixed-income portfolio, investors should focus on those segments of the fixed-income markets that address their specific needs — in particular, on the basis of liquidity, duration, yield, quality and volatility. Event risk continues to be a major concern for bond investors, and one that will likely continue as the economy works through the on-going crisis. A custom bond portfolio built around specific investor needs can offer several distinct benefits. Strategic sector, quality and maturity investing implemented through index strategies provides flexibility, predictability, transparency and cost-efficiencies. Since fixed income is looked upon as the anchor of most broad asset allocations, it clearly makes sense to make more efficient use of a large component of one's overall asset allocation. "Set it and forget it" can no longer be the *modus operandi* of bond allocation in portfolio construction.

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Although bonds generally present less short-term risk and volatility than stocks, bonds contain interest rate risks; the risk of issuer default; and inflation risk.