When top down models went out of date - fixed income as an alpha source

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Introduction

The need for global fixed income in a client's portfolio remains important – it provides significant diversification with other asset classes and has delivered one of the highest Reward to Risk ratio's[1]. Now a much evolved but often overlooked asset class, fixed income also presents significant alpha opportunities – providing the right approach is taken. In spite of the developments in the fixed income market, some investors still subscribe to the following beliefs:

Myth #1 Bond markets are more efficient than equity markets, and therefore offer less alpha potential.
Myth #2 Many bonds lack the volatility needed to generate high alpha.
Myth #3 Fixed income derivatives are too expensive and illiquid to allow for the isolation of alpha.

This research paper firstly debunks these myths. Secondly, demonstrates the evolution that has occurred in this asset class. And, finally shows how to identify an approach that combined with skills can realise global fixed income as a source of alpha for investors.

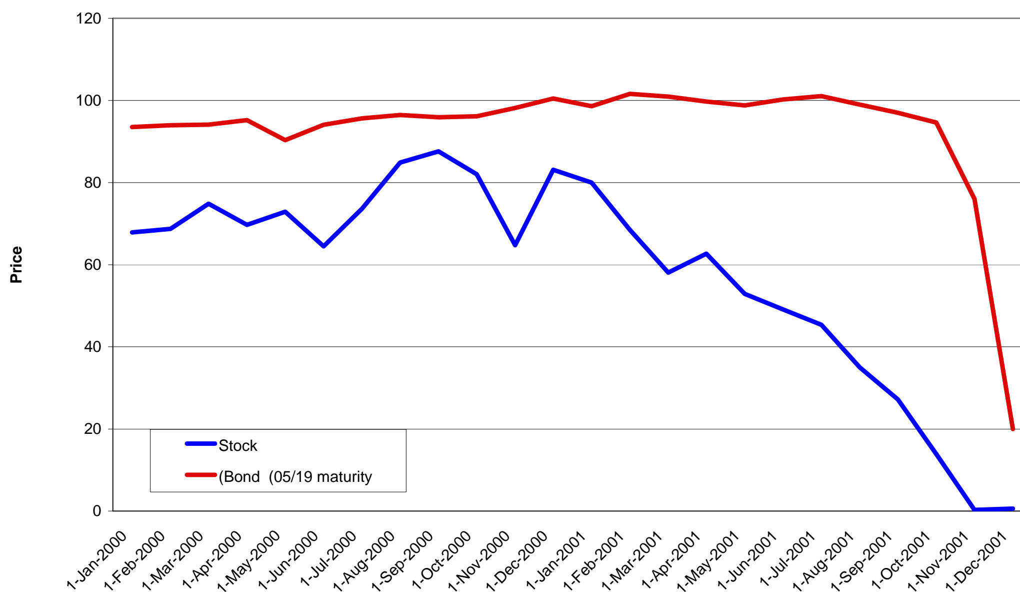
Debunking fixed income myths

Myth #1 Bond markets are more efficient than equity markets, and therefore offer less alpha potential.

This view is largely a factor of history - and as a result is out of date. The universe of fixed income specialists seasoned in the intricacies of government and corporate securities, mortgages, emerging-market bonds, and structured products is much smaller than the legions of portfolio managers and analysts focusing on the equity market. This explains, in part, the alternative view that there are more opportunities for an astute fixed income portfolio manager to profitably exploit than for an astute equity portfolio manager. Consider the speed at which new information about a company is reflected in the pricing of its stock and bonds. Generally, there is a systematic difference in the speed of the adjustment, with bond prices absorbing the new information more slowly. An example of this effect is shown in Chart 1, which compares the performance of Enron's stock to that of its bonds in the period prior to the company's demise.

CHART 1

Exhibit 1: Enron's stock repriced more quickly than its debt



Source: Bloomberg.

What are the reasons behind this discrepancy? Not only are there fewer players in this space, as discussed above, but also there are far more securities to choose from. Investors seeking exposure to Enron stock were limited to a single type of share traded on a single exchange, the NYSE. In contrast, investors could choose from among a broad range of Enron fixed instruments, including bonds, debentures, and a variety of secured instruments (Source: Putnam Investments). Furthermore, the market for many of these securities is not listed; most trade over the counter rather than on exchanges, which further delays the speed at which new information is reflected in each security's price.

Given the broad range of instruments available in the marketplace, it should come as little surprise that not all players in the fixed income market are alpha-maximizers. This represents another significant reason for the efficiency discrepancy between equity and fixed income, as precious few participants in equity markets are involved for any reason other than to make money. In contrast, banks and other non-investment-motivated players exert a significant impact on fixed income markets, just as they do in currency markets.

Consider the following example: French banks offer an array of inflation-linked securities that are available to the general public. These securities have enjoyed great popularity among French investors seeking to gain protection against inflation, just as linkers are highly sought after by U.K. investors. In order to provide the inflation-linked rate to their investors, French banks enter into swaps on the French inflation rate: The banks pay a fixed rate, and their counterparties pay the French inflation rate, a floating rate. The banks profit on these securities by charging their customers a fee, which more than covers any long-term cost due to discrepancies between the fixed and floating (inflation) rates. For this reason, the French banks are not seeking to profit from these swaps; they are merely entering into them in order to meet their customers' needs. These investor preferences give rise to pricing discrepancies between French inflation swaps and swaps on Eurozone inflation; intuitively, there should be no difference in rates on the two inflation swaps because France is a part of the Eurozone, but the demand for French inflation-linked securities creates a

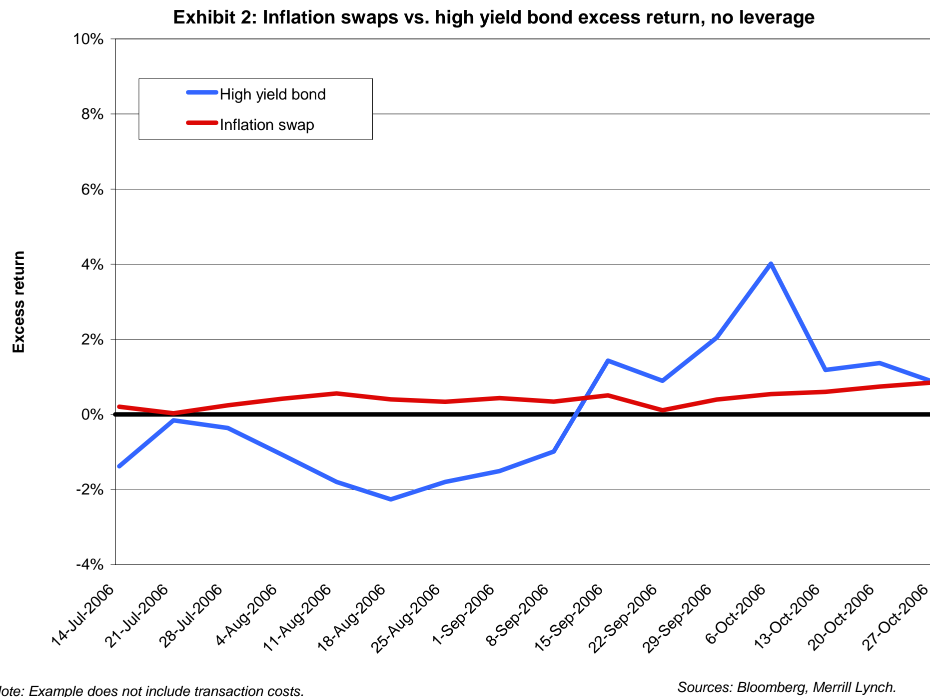
differential. Although opportunities like this certainly won't last forever, skilled managers with deep research resources can take advantage of the relative consistency of their return streams.

Myth #2 Many bonds lack the volatility needed to generate high alpha.

Several fixed income asset classes (e.g., high-yield bonds, certain mortgage securities, emerging market debt) generate sufficient alpha on their own and do not necessarily require the application of leverage to generate high alpha or, for that matter, market returns. However, where permitted, a fixed income portfolio manager can judiciously use leverage to achieve the desired level of expected return or alpha generation from other fixed income strategies. For example, a manager could use this investment tool to take advantage of perceived mispricings among less-volatile securities. Although use of leverage also raises risk exposures, using it prudently to exploit inefficiencies in a less-volatile market may in fact expose the portfolio to less volatility than an unlevered position in a more volatile asset class.

Our earlier example of the French vs. Eurozone inflation swaps offers an excellent demonstration of the way in which non-traditional tools can be applied to introduce stable, significant alpha streams to the portfolio. Chart 2 shows the differing 1-year excess return streams of the French vs. Eurozone swaps in contrast to a more conventional pairing of a Eurozone industrial high-yield bond vs. the Merrill Lynch Constrained High Yield Index.

CHART 2



Note: Example does not include transaction costs.

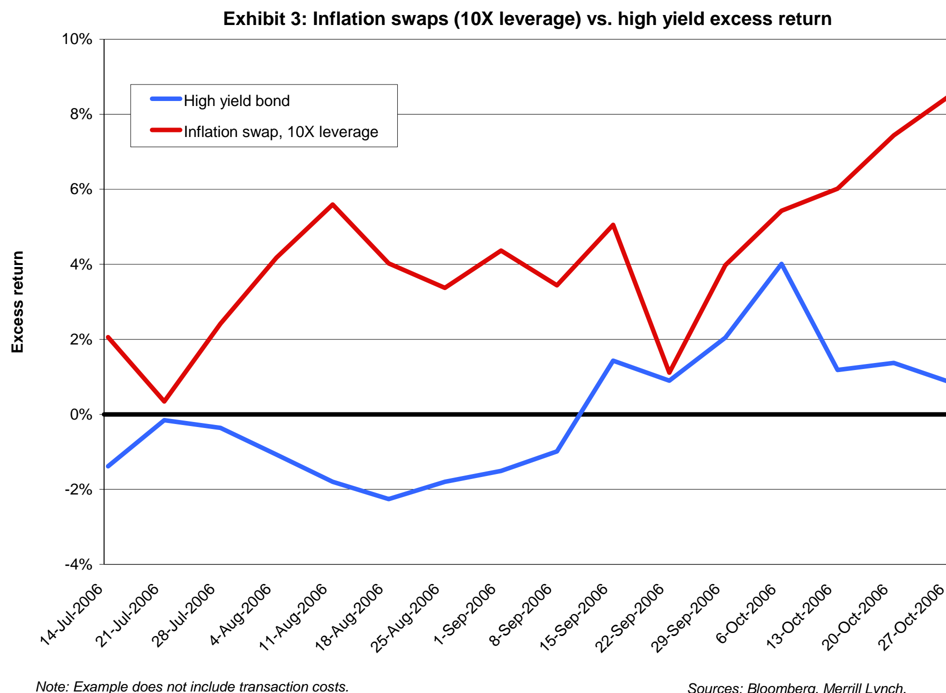
Sources: Bloomberg, Merrill Lynch.

The gray line in Chart 2 shows that although the excess return of the inflation swap trade is consistently positive, it is generally quite small, never exceeding a high of 85 basis points. While the inflation swap trade is positive and stable, returns at these levels are unlikely to have a significant impact on overall portfolio performance. Investors seeking greater returns may be tempted to explore asset classes offering higher return potential; however, higher returns

often mean higher risk, as demonstrated by the high-yield bond in this example. This bond does hit some impressive highs relative to the Merrill Lynch Index, at one point exceeding the index return by over 4% (see October 2006). However, these returns come at the cost of high volatility: The corporate bond underperformed the index more than half of this time period, at one point generating a 1-year return of -2.26% (see year ended August 18, 2006). Fortunately, the advent of new tools allows managers with specialized expertise in identifying possible sources of consistent security-level returns to convert these returns into potentially significant sources of alpha that retain much of their original stability. These tools include deeper, more liquid derivatives markets, which allow managers to magnify their exposure to certain positions without borrowing cash to apply leverage in the more traditional fashion. Increasing exposure in this way allows managers to keep assets on hand in the form of unpledged securities, which can be used to meet margin calls, thereby eliminating the risk of having to sell out of a leveraged position at the worst possible time in order to cover margin calls — the trap that Long Term Capital Management (LTCM) famously fell into back in 1998.

Chart 3 offers a simple illustration of the ways in which such a strategy could be used to amplify a small, stable return stream such as that generated by the two inflation swaps described earlier.

CHART 3



As this example demonstrates, the amplified excess return stream of the inflation swaps retains its positive profile, but now offers returns that could contribute significantly to the overall portfolio. For this reason, Putnam would encourage investors who are open to more volatile fixed income sectors, such as high yield, to consider introducing leveraged exposure to lower-risk securities that seek to provide stable, and importantly positive, returns into the framework of a well-diversified strategy.

Myth #3 Fixed income derivatives are too expensive and illiquid to allow for the isolation of alpha.

The advent of liquid credit derivatives markets, in conjunction with liquid bond repo markets in some sectors, has broadened dramatically the opportunity set for relative value trades. Shorting bonds or buying credit protection may be used to exploit security selection opportunities, to implement market-directional views, or to achieve market-neutrality as part of a broader strategy.

An example of the rapid expansion of the fixed income opportunity set can be found once again in our inflation swap example. Less than a decade ago, a trade such as this would have been out of the question. Leveraging the position using cash or securities would have introduced far too much risk, while the derivatives that make it possible today either did not exist or were too expensive to even consider, as they would have introduced transaction costs that could have cancelled out nearly all of the benefits of leveraging in the first place. Dramatic changes in the fixed income marketplace have created opportunities that managers could only dream of just ten years ago.

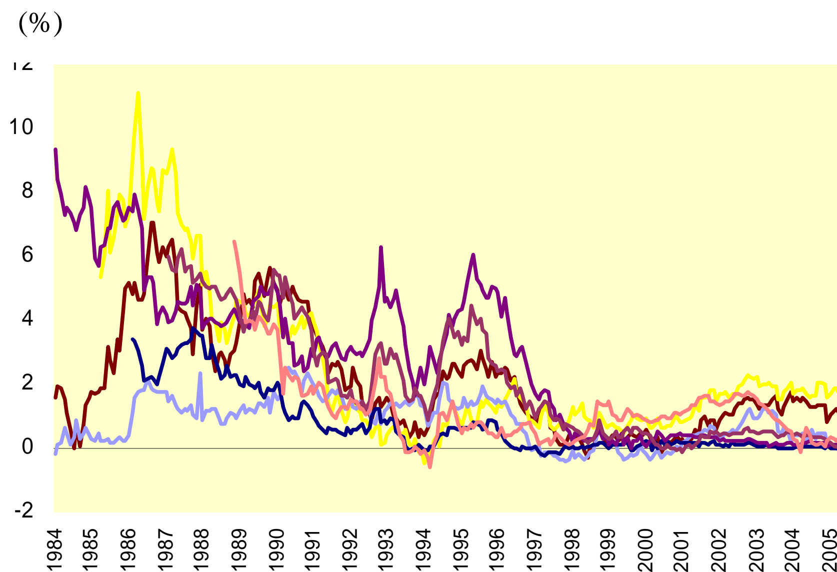
The Old Fixed Income Approach

Now that we have dispensed with some of the myths of fixed income investing, let's now turn to the evolution of the asset class and why a top-down approach is out of date.

From the mid-1980s to the mid-1990s, global fixed income markets experienced significant highs, which most active managers exceeded. Yield spreads among countries were wide; countries with poor monetary policies had significantly higher yields than those with sounder policies. Illiquidity and bureaucracy plagued some markets, driving bond yields higher in these countries. Spotty, inconsistent, and often unavailable information led to market inefficiency.

To capture the significant top-down opportunities created by yield and currency disparities (Chart 4, pre-1997) as well as general market inefficiency, managers were organised around macro (country) research and currency. There was an emphasis on frequent trading, trend following and capturing big ideas; transaction costs, carry, or potential mistakes were less important. Many managers simply tried to get a few big decisions right without considering curve shape, bond selection, or downside risk. As late as 1995, the yield differential between Italy and Germany was a major contributor to active manager returns (Source: Putnam Investments). It really didn't matter which bond you owned if you got the country/currency allocations right. Generally, they were rewarded, as big wins could offset losses.

CHART 4 : Ten year spread by country



Fixed Income Now

Fixed income investing has changed significantly. Policy is more consistent across the globe. Information is readily available; yields, spreads, and volatility are lower (Chart 4, post-1997). At the same time, the market has become much broader in terms of investable, liquid sectors, and deeper in terms of sub-sectors and individual securities today ballooning from 1000 securities 10 years ago to many more than 14,000 today.[2]

Issuance has migrated from government-backed securities to bonds issued by corporations or securitised by mortgage payments or other cash flows. Now, a sophisticated, complex asset class, global fixed income markets are deeper and more efficient, so it is harder and less profitable to call top-down decisions and, as a result, Beta opportunities in this asset class have been diminished, making alpha opportunities much more important.

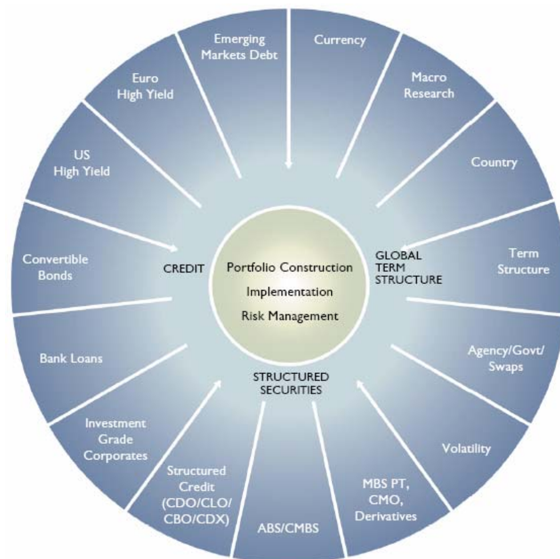
In this new world of fixed income, a manager with the right skills and tools can deliver alpha regardless of the direction of yields and regardless of the direction of spreads – by using more sophisticated strategies like relative value trades that can work independently of cycles.

Fixed income as an Alpha source

Fortunately, there are still alpha-generating opportunities available from fixed income, though the nature of them has changed. Unlike the days when outsized wins made it easy to overlook risks, managers must preserve gains.

Fixed income specialists, organised by sector are able to identify, research, and capture the myriad opportunities now available. Chart 5 divides the opportunity set into three areas of speciality: global term structure, structured securities, and credit. Global term structure or macro strategies still offer alpha-generating possibilities, including variances in currency values, economic growth rates, and monetary and fiscal policies across Europe, Japan, and the US. Strategies that exploit differences in the steepness or flatness of yield curves can also be productive.

CHART 5: The wheel of opportunity



14000+ Securities

Structured securities are an attractive source of incremental excess return, and offer the advantages of collateralisation and diversification. The global securitised debt sector is huge, exceeding $5 trillion USD by some estimates[3], and is composed of:

- mortgage-backed securities (MBS);
- asset-backed securities (ABS);
- commercial mortgage-backed securities (CMBS);
- structured credit products, such as collateralised debt obligations (CDOs), collateralised loan obligations (CLOs), and collateralised bond obligations (CBOs).

Credit sectors – especially global corporate high yield bonds and emerging markets debt – are another significant alpha source. Global high yield corporate bonds have weathered several market cycles and measure nearly $1trillion USD[4], while emerging markets debt has evolved from a tactical allocation to a strategic asset class in the eyes of many investors.

Strategies for a changed market

Successful investing in today's expanding global bond market requires broad and deep expertise. The strategies that managers can employ to more effectively capture opportunities are as follows.

1. Smaller bets, multiple strategies: Rather than relying on big, macro decisions, astute fund managers can make a series of smaller calls across multiple strategies. A diversified set of strategies reduces the dependence on one particular market or economic environment and increases the probability of achieving return targets over the long term with the optimal risk/return balance.

2. Sector specialist teams: To take advantage of the excess return available through security selection, teams of specialists aligned with the various bond sectors — government, securitised, investment-grade credit, high-yield credit, emerging-market debt, bank loans, etc. — can make a big difference. Each team can identify compelling strategies and securities within its area of expertise.

3. Centralised portfolio construction: A portfolio construction team can select from amongst the strategies recommended by the specialists to systematically build a portfolio of multiple strategies that carefully balances risk and return.

4. Sophisticated risk management: This is another critical factor to incremental outperformance in today's more efficient fixed income market. The portfolio construction team must not only be able to identify risks, but also to quantify its volatilities, correlations, and likely portfolio interactions. Strategies should be balanced so no single factor contributes too much risk to the portfolio.

5. High Information Ratios (IRs): Investors should seek managers with high IRs or high returns per unit of risk - not just high returns. High IRs are proof statements of well-run processes.

6. Flexible guidelines: Managers need flexibility to take advantage of the full range of opportunities across multiple sectors. Investors should ensure that their guidelines are aligned with the new market realities.

Portfolio Construction Considerations

Fixed income still remains a suggested allocation in most asset allocation models – the challenge is to determine the appropriate strategy to gain this exposure. As many global fixed income approaches still follow a top down methodology, so to do many model portfolio's in advocating a blend of domestic, international and high yield/income managers as the means to gain this exposure. With the appropriate skills and resources available, a manager can allocate across the whole fixed income opportunity set and determine the appropriate sizing of every idea – this alleviates the need to make an overt allocation to credit or high yield and also enables the manager to make the decision as to if and when these securities are attractive. Think of this in an equities context – it is like the old method of using a US equities team to run your US portfolio, another team to run your Japanese equity allocation, someone else to run your Emerging Markets and so on. Of course that approach in equities is all but extinct and it is inevitable that this will also change for fixed income allocations – ending with broader, unconstrained allocations to managers that have the skills and resources to access the full range of opportunities.

Conclusion

Historically, investors used global fixed income primarily for diversification, as its low correlation to equity was effective in reducing overall portfolio risk. Consistent with this expectation, fixed income managers were encouraged to accept standard, but limiting, benchmarks and to manage within tight tracking error ranges, thus limiting their opportunity set and dramatically curtailing their ability to generate alpha.

As investors begin to separate alpha from the betas in their portfolios, they are realizing that alpha may be sourced from any market that has inefficiencies - and the appropriate instruments to cost-effectively take advantage of those inefficiencies - regardless of the market's volatility. With this new perspective, global fixed income as an asset class should be garnering more attention from investors seeking to build well-diversified alpha generating portfolios.

However, in today's global fixed income environment, top-down strategies have become less successful and more risky. The best way to capture excess return is through multiple strategy portfolios that invest across global sectors; through specialised expertise that can uncover and capture the unique opportunities embedded within each sector; and through advanced portfolio construction/risk management techniques. With these factors in place, the best collective ideas of specialists can make their way into a portfolio that achieves the desired return target within the prescribed risk framework.

Whether generating alpha from a single sector or across sectors, a robust portfolio construction platform should not only identify risks, but also quantify its volatilities, correlations, and likely portfolio interactions.

Strategies tapping the full spectrum of opportunities may provide increased alpha and the advent of new tools allows managers specialised in producing consistent security-level returns to convert them into significant alpha sources for investors.

NOTES:

1. For the 3 and 5 years through June 2007 Hedged Global Fixed Income as measured by the Lehman Global Aggregate Index (Hedged $A) provided one of the highest Reward to Risk Ratios as well as low or negative correlations with the Australian and international share, Listed Property Trust and even Cash benchmarks. Source Mercer MPA.
2. Source Putnam Investments
3. Source Putnam Investments
4. Source Putnam Investments

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