

INVESTMENT UPDATE

Funny thing about the bond market is that it's constantly changing—every day, new bonds come into our market and old bonds mature and exit. Without new issuance of bonds, our market would eventually disappear, and any bond portfolio left to lie fallow will see the average maturity of its holdings shorten with each passing day; unlike a stock portfolio, a passive bond portfolio will eventually liquefy itself, becoming pure cash.

When we look at the indexes that our clients use to help define the areas of the bond market they want us to invest in, we

see a constantly changing landscape. The mix of bonds is adjusted every day, with newly-issued securities added and others (typically, those falling inside one year of their maturity date) taken out of the index. But there are other, more subtle changes—the market values of these bonds change based on interest rate movements and investor demand, and there are bonds that are added

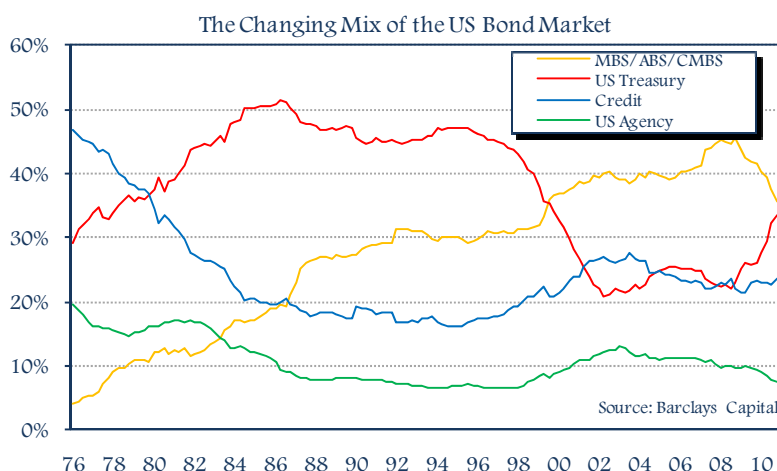
or removed from the index when the ratings agencies upgrade or downgrade an issuer to above or below the lowest allowable rating for that particular index (“triple-B” in the case for investment-grade portfolios). Over shorter periods of time, the indexes are fairly static, but over longer periods we observe significant changes in the size and composition of the major indexes.

The granddaddy of bond indexes is the Barclays Capital (formerly Lehman Brothers) Aggregate Index. This index goes back to 1976, when Lehman began tracking the new market for mortgage backed securities (MBS), and added them to their Government/Corporate (now called the Government/Credit) Index. At inception, this index included Treasuries (29% of total), agency debentures (20%), agency MBS (4%) and corporate bonds (47%); it included all investment-grade US dollar bonds above a minimum market value with maturities from one to thirty years. The total market value of the Aggregate Index in January of 1976 was \$330 billion.

Since the mid-70's the capital markets have experienced dramatic changes, both in the breadth and depth of the markets and in the many different investment vehicles available to bond investors. The Aggregate Index has reflected many (but not all) of these changes, adding asset-backed securities (ABS) in 1992, commercial mortgage securities (CMBS) in

1999, and agency-issued hybrid/ARM MBS in 2007. Significantly, and appropriately (in our opinion), Lehman/Barclays avoided the temptation to add “non-core” bond products (TIPs, non-dollar, junk, CMOs/non-agency MBS, and credit derivatives, just to name a few) to the Aggregate Index, so that this benchmark would constitute a fair and “investable” pool of traditional high-grade US bonds.

Over the decades, as shown in the chart below, the biggest change in the composition of the Aggregate index (and by extension, the investable core bond universe) has been the



remarkable, and up until recently, relentless growth of the MBS/ABS/CMBS market relative to the other major components. This reflects two separate, but important developments—the growth in the value of the US housing market, and the securitization of home mortgage loans. By mid-2008, nearly half (45%, to be exact) of the Aggregate Index

was comprised of mortgage- and asset-backed securities, 90% of which were represented by home mortgage bonds issued by GNMA, FNMA and FHLMC. The other big “swing” component has been the relative change in the share of US Treasuries, which have gone from more than 50% of this market in the mid-80s to nearly 20% in the early 2000s, before rising again in recent years. By comparison, especially since the early 1980s, corporate credit and agency debentures have had relatively stable market shares.

But more than market share, we're interested in the size of the market—and here the changes are much more obvious. The market value of the high grade US bond market (as measured by the Aggregate Index) which totaled \$330 billion in 1976, now totals more than \$15 trillion! Recent growth has been explosive, as the Aggregate has grown by an average of more than 13% per year over the last decade. In the early part of the 2000s, the MBS category was the big driver of growth, but more recently it's been Treasuries, whose market value doubled between September 2008 and September 2010 alone, to more than \$5 trillion (see chart on next page).

We all know the reasons for this explosive growth: In MBS, it was the over-expansion and over-inflation of the US housing market. In Treasuries, it has been the massive issuance



of new debt that's been used to fund the deficit spending of the US Federal Government.

Changes in market benchmarks have important consequences for investors, whether it's the rebalancing of the S&P 500 for equity managers or the structural and market-based shifts that occur in the bond market. For passive index managers, portfolio adjustments must be made each month (at least) in order to keep tracking error to a minimum when the benchmark changes. But even active managers who make relative "bets" on how much to be overweight or underweight various sectors will have to fine-tune the portfolio or else see their portfolio's relative weights shift over time.

Even beyond the mechanical/technical aspect of an index's changing mix of securities there is the fact that the bigger an index subsector grows, it becomes, simultaneously, more important, less desirable, and riskier. "More important" because it cannot be ignored. For instance, the ABS component of the Aggregate is currently less than one-half of one percent of the whole index. Even a few years ago when the ABS market was healthy and growing, it was never more than 2% of the index. Having a 2% underweight in ABS by holding none in your portfolio can make a small difference in relative performance; having a zero allocation when the asset represents less than 1% is no more than a rounding error. If a subsector is small enough, it can be effectively ignored; if it's big enough, it's probably going to have to be part of your portfolio, too.

We say that an index subsector becomes less desirable as it grows simply because of the supply-demand equation. Assuming that an object is useful, the greater the supply of that product, the less it should cost, simply because a greater quantity is more likely to satisfy whatever demand might exist for that "thing." In the case of corporate bonds, we see that the more a company floods the market with its bonds, the greater the chance that investors will eventually become "full on the name." Today, issuers like Verizon and Citigroup will regularly have to sweeten the terms of their new bond issues in order to induce investors to add to existing positions, or to make it economical for portfolio managers to sell some of their older bonds and replace them with new bonds with fatter yields. The caveat to this is a variation on "Say's Law"—named for economist Jean-Baptiste Say—the modern interpretation of which is commonly quoted as "supply creates its own demand." The idea here is that a firm that comes to market at least occasionally to issue debt will be able to do so at more favorable rates than one that comes very rarely; there needs to be some familiarity among investors of how a firm's bonds will trade, and a company who's never come to market may find a less than optimally-receptive crowd for its bonds.

The third thing that happens to an index component when it grows to be very large is that it becomes more risky. For any borrower, the more debt that's piled on their balance sheet, the greater the chance, all else equal, that they'll have trouble paying it all back. The credit crisis of 2001-2002 was the culmination of a decade-long glut of corporate bond issuance that grew at a rate of 15% per year, pushing credits' market share from 17% to 27% of the Aggregate index. Similarly, the MBS meltdown in 2008 was caused by overleveraging of personal balance sheets—a whole new class of homeowner was created when "affordability products" were offered by mortgage originators who simply flipped the loans to Wall Street for securitization. While the rapid growth of non-Agency MBS doesn't show up in the Barclays Aggregate Index data (in either prime or subprime form), new US agency MBS issuance does—and these guys made plenty of crummy loans themselves. Once again, the explosive growth of the US MBS market predicted the pain that was to come.

Nowhere is the link between size and risk more obvious (and more in the popular press) than in the US Treasury bond sector, where the current political debate concerns the expansion of the Treasury's debt ceiling. The US fiscal deficit has grown so large (and the resulting issuance of Treasury bills,

notes, and bonds so massive) that credit rating agency S&P recently placed the US Government on negative outlook for a downgrade, warning that the US could lose its AAA bond rating. While the downgrade threat could be attributed to just another game of political chicken being played between Congressional Democrats and Republicans as they try to win political points for "saving" the

US economy, the episode underscores deeper and more serious issues: How much debt can the US economy carry over the long term? As we've written more than once in past *Investment Updates*, there are vital but unpleasant fiscal decisions that need to be made in Washington, and the sooner they are tackled, the better.

As with corporates and MBS before them, the decade-long surge in Treasury supply has led to poor relative performance in recent quarters for Treasuries, compared to other high-grade bonds. While we won't pretend to attribute all of this poor performance to supply, there can be no question that the current glut of Treasury bonds is weighing heavily on investor sentiment, especially as we look towards the end of the Fed's "QE2" program this summer, at which time all new Treasury issuance will have to be absorbed by the investing public. Serious progress in bringing down the US fiscal deficit is critical if we hope to improve the return prospects for the US Treasury market.

