Capitalizing on Broad Bond Market Accessibility

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Concept Introduction

Given the evolution of the corporate bond market, regulatory changes affecting broker-dealers, and the concentration of assets under management (AUM) among a relatively small number of asset managers, the consulting community and other market practitioners have asked us to identify implications for corporate bond investing against this backdrop. As an investment construct, we have often contemplated whether meaningful access to the entire investment grade corporate bond market provides potential spread, performance, and/or diversification benefits. We present our research and findings over the next few pages.

Research and Analysis

Piedmont's fixed income team looked at the BAML Investment Grade Corporate Bond Index monthly back to January 2004. We sorted the issuers from largest to smallest by total market value of debt outstanding and divided the issuers into five quintiles (tranches). Although each tranche has nearly equivalent market values, they differ in the number of issuers, the number of bonds, sector diversification and credit rating. Given our methodology, as you move down the tranches it is not surprising to see the average issuer and bond size declining, and the number of issuers and number of bonds issued increasing.

Tranche	Quality	OAS	Wtd. Avg Bond ($mm)	# of Bonds	Wtd. Avg Issuer ($mm)	# of Issuers
Top 20%	A3	106	2,491	619	43,647	17
20% - 40%	A2	88	1,239	1,041	17,377	51
40% - 60%	A3	97	1,107	1,182	10,305	88
60% - 80%	BBB1	117	835	1,484	5,018	181
Bttm 20%	BBB1	141	610	1,973	1,185	758

Source: BAML, Piedmont Investment Advisors. As of July 31, 2014.

It is important to note that companies in the Bottom 20% aren't necessarily smaller and riskier, they just have less debt outstanding than those in the higher tranches. Household names such as The Gap, Inc. (GPS) and Yale University (YALUNI) are in the Bottom 20%, as well as more obscure names like Worthington Industries (WOR). At the same time, a lesser-known company like Enterprise Products Operating LLC (EPD) is in the 20%-40% tranche. We should also note that the quality rating is not significantly different in the Bottom 20% at BBB1 versus the Top 20% weighted average quality rating at A3.

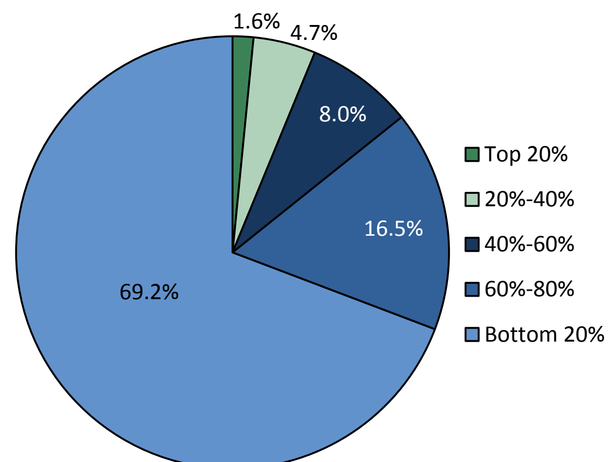
Structural Analysis

Investment grade debt issuance has grown significantly over the last 10 years. The total amount of corporate investment grade debt outstanding has increased from $1.9 trillion at December 31, 2003 to $5.0 trillion at July 31, 2014 (as measured by the market value of the BAML Investment Grade Corporate Index). From December 2004 through July 2014, the market value of the index increased by 157%, the number of unique issuers increased by 59% and the number of bonds issued increased by 107%.

While growth in the bond market means more companies across the board are raising public debt, the top-end of the index remains extremely concentrated. Just 17 issuers make up the Top 20%, and the largest 68 issuers make up the top two tranches of the index (Top 20% + 20%-40%), leaving approximately 1,000 issuers to make up the remaining 60% of the index.

The weighted average issuer face value has also increased over this time—most significantly at the bottom of the index. The average issuer face value for the Bottom 20% was $685 million in July 2004 versus $1.2 billion today. The 73% growth in the Bottom 20% is 4.2 times greater than the 17% increase in the Top 20% (from $37.2 billion to $43.6 billion).

Bottom 3 Quintiles Represent 94% of Issuers



Source: BAML, Piedmont Investment Advisors. As of July 31, 2014.

Structural Opportunity Exists

Natural Restriction of Access – Pensions & Investments (December 2013) data shows that the Top 50 Domestic Fixed Income Managers control 89% of AUM for that asset class (nearly $2.8 trillion). This results in an average firm size of over $50 billion AUM. For the purposes of this analysis, we consider a 1% position to be a meaningful position for investment grade corporates, therefore for a $50 billion fund, a meaningful position would be $500 million, roughly equivalent to the size of the weighted average bond issued in the Bottom 20%. Even for a $10 billion fund, a single meaningful position would be buying almost 1/6 of the average sized bond in the Bottom 20%.

Less Institutional Coverage – With smaller bond issues in the lower tranches, there tends to be less of an institutional following and ownership resulting in less competition. As an example, we examine two recently issued bonds for Verizon Communications Inc. (VZ) and International Game Technologies (IGT). In this case, bondholders data reveals that concentration of ownership is more pronounced for the smaller IGT issuer, and the available float is decreased.

Bond	VZ 5.15% 9/15/23	IGT 5.35% 10/15/23
Issue Size	$11 billion	$500 million
Ownership	442 holders own 38.5%	64 holders own 65.7%

Source: Bloomberg as of June 30, 2014.

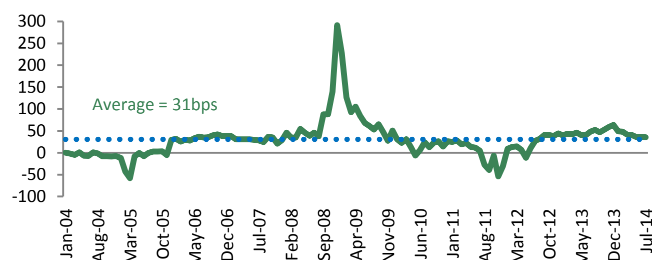
We reveal our research and findings in the following paragraphs as we tested the hypothesis that acquiring and building a meaningful position in similar, less-followed holdings could add spread advantage, diversification benefit and alpha to a corporate bond portfolio.

Capturing the Opportunity

Nimble is Necessary - Although the amount of corporate debt outstanding has increased, the size of dealer inventories has decreased—making it more difficult to locate bonds as the nature of trading has changed. Both the Volcker Rule (which prevents broker dealers from taking part in proprietary trading) and Basel III requirements (increases risk-weighting associated with debt, discouraging dealers from holding certain bonds) have contributed to this problem. As of July 31, 2014, Federal Reserve data shows that primary dealer inventories accounted for just 0.38% of corporate debt outstanding versus a 13-year average of 3.15%, with the peak being just over 8% in 2007 (using the BAML Corporate Index as a proxy for the corporate market). Lower inventory levels significantly reduce liquidity in the market while potentially increasing volatility. A critical aspect of fixed income trading involves accessing the market anonymously *(without* moving spreads significantly while building a position) in order to take advantage of the illiquidity premium that exists at the lower end of the issuer-size spectrum.

Spread Premium - Because of the structural issues identified above, an illiquidity premium exists in the lower tranches of the market resulting in a spread advantage. On average, since January 2004, the Bottom 20% has delivered a 31 bps Option-adjusted Spread (OAS) advantage over the Top 20%.

Spread between Top 20% and Bottom 20%



**See footnote. Source: BAML, Piedmont Investment Advisors.

Sector Diversification - The Top 20% is dominated by financial companies and Technology, Media & Telecomm (TMT), making up 59% and 20% of the tranche, respectively. Alternatively, the Bottom 20% offers a more diversified exposure. Financials are still the largest sector at 30% and TMT represents 10% of the tranche, but the consumer (14%), energy (13%), and industrials (12%) sectors are also well represented.

Performance - The sweet spot for performance encompasses both the Bottom 20% and the Top 20% over rolling one through five years periods. By accessing the full corporate marketplace, a manager is able to take advantage of strong performance from both the larger, more liquid names (Top 20%) as well as the wider spreads and more idiosyncratic-bond-picking prevalent with smaller names (Bottom 20%).

This relationship broke down for the Bottom 20% over the rolling seven and rolling 10 year periods, primarily due to 2008. As liquidity became challenged in 2008, investors moved to better-known, more liquid names in the Top 20% (aiding its performance), leaving the Bottom 20% to underperform. This alone stresses the need for strong fundamental managers that can remain nimble while investing across the entire index.

Time Period	ML IG Corp. Index	ML Investment Grade Corporate Index Tranche				
		Top 20%	20%-40%	40%-60%	60%-80%	Bttm 20%
Rolling 1 yr	7.2%	7.2%	7.0%	6.6%	7.3%	7.7%
Rolling 2 yrs	7.7%	9.3%	6.3%	6.2%	7.7%	8.9%
Rolling 3 yrs	18.9%	20.4%	18.1%	18.1%	18.6%	19.0%
Rolling 5 yrs	43.3%	43.8%	42.4%	40.2%	43.2%	46.9%
Rolling 7 yrs	63.5%	79.1%	72.5%	55.5%	57.9%	51.9%
Rolling 10 yrs	70.1%	82.9%	82.5%	62.5%	62.8%	58.7%
Rolling 7 (ex. 2008)	69.9%	58.1%	65.6%	66.3%	74.9%	84.0%
Rolling 10 (ex. 2008)	76.7%	61.5%	75.1%	73.8%	80.3%	92.4%
2008	-2.3%	14.8%	6.0%	-5.6%	-8.4%	-15.9%
2009	20.6%	11.4%	17.5%	19.8%	24.2%	30.1%
2010	8.1%	8.2%	8.8%	7.4%	8.1%	7.9%
2011	8.1%	5.3%	8.2%	9.4%	8.6%	8.7%
2012	11.2%	14.1%	11.0%	9.9%	10.7%	10.6%
2013	-1.2%	0.2%	-2.1%	-1.8%	-1.5%	-0.9%
2014 YTD*	5.9%	5.1%	6.0%	5.7%	6.2%	6.5%

**See footnote. Source: BAML, Piedmont Investment Advisors.

Summary - Our research illustrates that structural issues are present in the credit market, creating an opportunity stemming from the diversification, different bondholder composition, and spread premium that exists in the bottom quintile. Smaller managers, that are able to nimbly access the entire investment grade corporate bond market, can potentially outperform by capitalizing on these opportunities.

**All returns for the research, including index returns, calculated by PIA using month-end (as of July 31, 2014) data and may differ from BAML calculated data.

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