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THE LEHMAN BROTHERS U.S. UNIVERSAL INDEX: DIFFERENCES AND IMPLICATIONS RELATIVE TO THE AGGREGATE INDEX

Brian Zeiler, Associate
(310) 260-7394
bzeiler@wilshire.com

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Summary

Lehman's new Universal Bond Index adds 16% of new market capitalization to the popular Aggregate Bond Index by including high yield bonds, emerging market debt, Eurodollar debt, 144A Corporates, and certain CMBS securities. Wilshire recommends that investors consider the Universal Bond Index as a benchmark for "core plus" bond portfolios and, in some circumstances, for asset allocation purposes.

Background

On January 1, 1999, Lehman introduced the US Dollar-Denominated Universal Index ("Universal Index"). This bond index seeks to expand upon the widely used Lehman Aggregate Bond Index ("Aggregate Index"), which has been the standard for domestic fixed income performance since its introduction in 1986. Lehman developed this index in response to the changing composition of the fixed income market, such as the introduction of dollar denominated emerging market debt (Brady bonds) and corporate 144As, and the growing trend among active bond managers toward investing in the widening opportunity set of out-of-index securities in order to outperform the Lehman Aggregate Index. This is commonly referred to as the "core-plus" strategy. The solution was to create a U.S. dollar-denominated debt index that contained all the securities in the traditional Aggregate Index but added to it the newer sub-asset bond classes. The new bond categories are: dollar-denominated Eurobonds, 144A bonds, Non-ERISA CMBS, High Yield CMBS, US High Yield Corporates, and dollar-denominated Emerging Markets bonds.

Exhibit 1 summarizes some key characteristics of the Aggregate Index, the newly added sectors, and the combined Universal Index:

EXHIBIT 1: US UNIVERSAL INDEX SUMMARY, JANUARY 1, 2000

	Aggregate +	Added Sectors =	Universal
Number of Issues	5,566	4,184	9,750
Market Value ($ trillion)	$5.5	$1.0	$6.5
Modified Duration	4.9	4.3	4.8
Average Maturity	8.6	8.0	8.5
Yield to Maturity (worst)	7.3%	10.3%	7.8%
Minimum Credit Rating	BBB-	None	None
Average Credit Rating	AA+/AAA	BB+/BBB	AA/AA+
% of Index Rated AAA or Better	80%	15%	70%

Source: Lehman Brothers

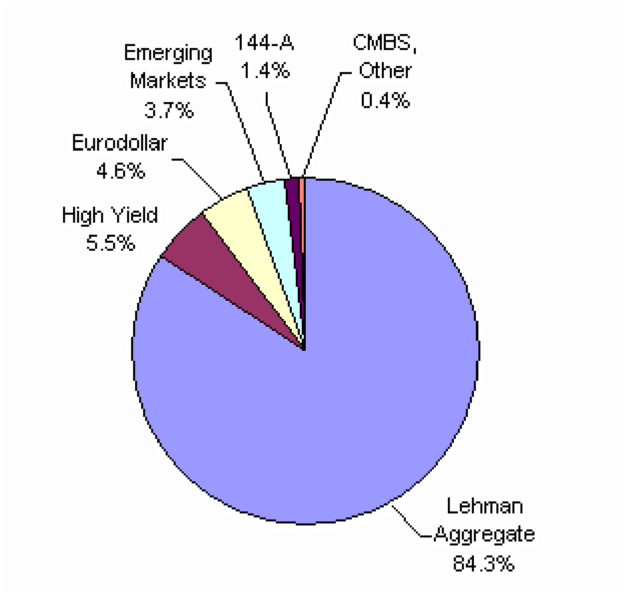
Exhibit 2 shows a breakdown of the sectors that have been added to construct the Universal Index, and Exhibit 3 shows that despite these additions, the Aggregate Index still comprises 84% of the Universal Index's market value.

EXHIBIT 2: CHARACTERISTICS OF ADDED SECTORS

	High Yield	Eurodollar	Emg Mkt	144A	CMBS
Number of Issues	1,845	671	342	284	1,042
Market Value ($ billion)	357	300	243	91	27
Modified Duration	4.6	3.5	3.8	6.1	6.3
Average Maturity	7.1	5.1	11.1	12.8	10.2
Yield to Maturity (worst)	11.9%	7.3%	12.6%	8.2%	9.9%
Min. Credit Rating	None	BBB-	None	BBB-	None
Avg. Credit Rating	B/B+	AA+	B/B+	A-	BBB+
% Rated BBB- or Better	None	100%	6.2%	100%	74%

Source: Lehman Brothers

EXHIBIT 3: LEHMAN UNIVERSAL INDEX COMPOSITION



All of the securities in the market-value weighted Universal Index must be US dollar-denominated and have at least one year remaining to maturity, in addition to meeting minimum issue size criteria. All instruments are fixed-rate with the exception of certain floating-rate emerging market notes, which comprise just 1.25% of the Universal Index's market value. Several classes of securities are still excluded from the Index, such as tax-exempt municipal bonds, perpetual notes, warrants, linked bonds, structured products, and TIPS (Treasury Inflation-Protected Securities). TIPS are excluded because, according to Lehman, their cash flows behave more like floating rate notes, which produce price behavior at odds with the general fixed income market behavior that their Index is attempting to capture. TIPS were included in the Aggregate Index at one point but were removed for this reason.

The New Asset Classes.

EXHIBIT 4: HISTORICAL RISK AND RETURN COMPARISON

1990-1999	US Universal	US Aggregate
Average Return	7.92	7.88
Average Risk	6.11	6.31

The addition of these new asset classes, introduced below, has caused the Universal Index to provide a slightly higher return with a slightly lower volatility. This is because the higher risk of high yield and emerging market debt provides investors with better compensation in terms of yield, while the introduction of these asset classes with lower correlations to US Treasuries reduces the overall volatility of the Universal Index.

EXHIBIT 5: ANNUAL RETURNS, UNIVERSAL AND AGGREGATE

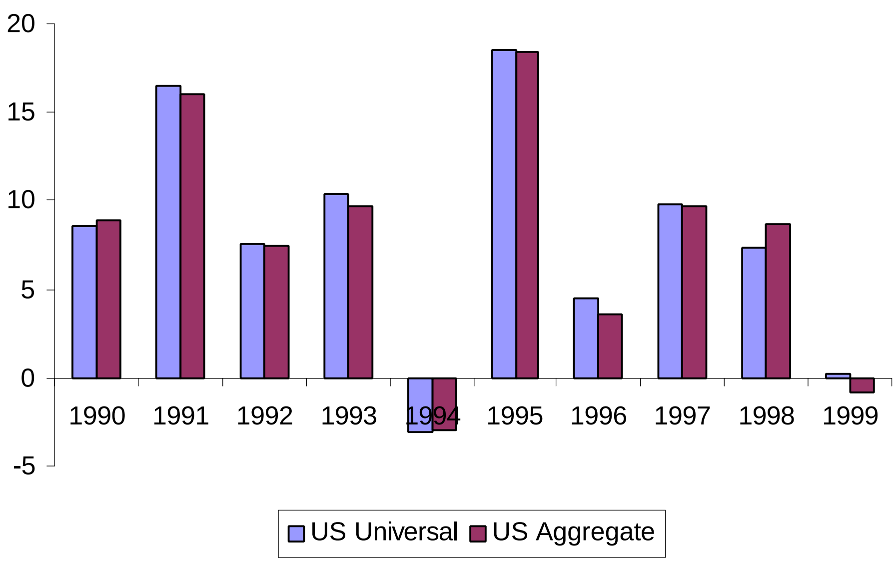
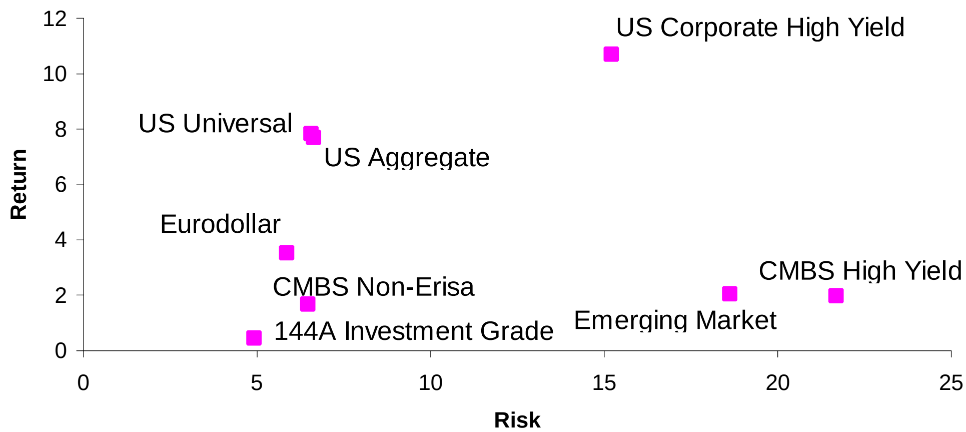
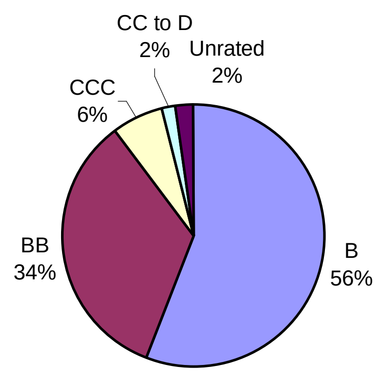


EXHIBIT 6: RISK-RETURN PROFILE OF AGGREGATE AND NEW UNIVERSAL SECTORS 1990-1999



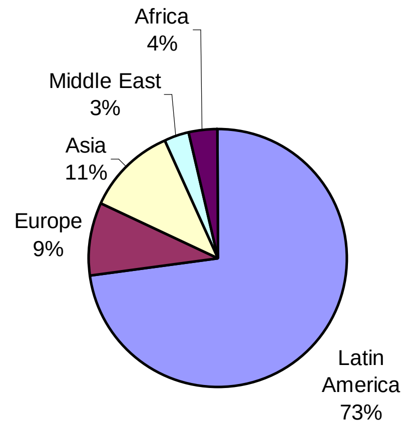
US High Yield covers the universe of dollar-denominated securities with more than one year to maturity and with credit ratings Ba1 or lower by Moody's (or if no Moody's rating is available, a rating of BB+ or lower by S&P). The sector is dominated by BB and B quality issues.

EXHIBIT 7: US HIGH YIELD QUALITY DISTRIBUTION



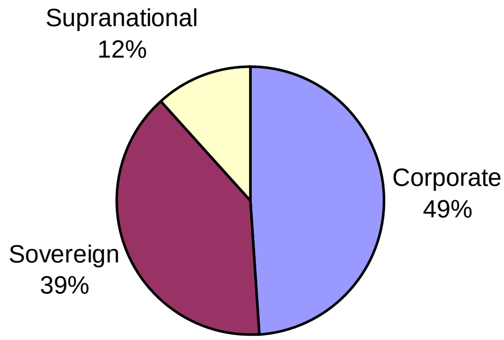
Emerging Market bonds must be dollar-denominated with a *maximum* quality ceiling of Baa3/BBB- and at least a year to maturity. Standard liquidity minimums apply, as with all the new classes. The coupons may be floating or fixed; however, this is the only area in which floating rates will be included in the Universal Index (somewhat contrary to the rationale for excluding TIPS). The bulk of this sector is dominated by Latin American debt.

EXHIBIT 8: EMERGING MARKETS REGIONAL DISTRIBUTION



Eurodollar bonds are investment-grade, fixed-rate, dollar-denominated but foreign-issued corporate and sovereign bonds. Some supranational issues are also included, however.

EXHIBIT 9: EURODOLLAR BOND ORIGINATION



Investment Grade 144A bonds are the SEC-registered investment-grade bonds that meet Rule 144A requirements and meet the Aggregate Index's requirements for inclusion of investment grade corporates (e.g. fixed-rate, non-convertible, $150 million par outstanding). Rule 144A relates to criteria establishing an institution as a qualified institutional buyer (QIB) who may trade privately placed debt with other QIBs without a minimum holding period. Once the securities become publicly traded, these bonds become part of the Aggregate Index.

Commercial Mortgage-Backed Securities have two new classes in the Universal Index to expand upon the investment-grade, ERISA-eligible CMBS Index that was already included in the Aggregate. Both new classes are private (non-agency) issues with new origination collateral, fixed-rate coupons, and at least a year to maturity.

- The **CMBS Non-ERISA** class includes those CMBS securities which are investment grade and which do not qualify as ERISA eligible under the underwriter's exemption. However, these non-ERISA qualified older securities will likely become qualified under SEC rules later this year.

- The **CMBS High Yield** class includes those CMBS securities that are unrated or that are rated below investment grade by Moody's.

Who Should Use the Universal Index?

The Universal Index presents a more favorable risk/return profile after which to model one's portfolio than the Aggregate Index. It also more completely reflects the universe of choices for dollar-denominated debt. But, is the Universal an appropriate index for all institutions to index or at least benchmark, and can managers manage to it?

One concern would be the legality of investing in non-ERISA CMBS securities by pension funds bound to ERISA investment guidelines. Both corporate and Taft-Hartley plans are, under ERISA guidelines, prohibited from purchasing non-ERISA CMBS and high yield CMBS securities. Their market values are an insignificant component of the Universal, but nevertheless, the Universal is conceptually less relevant to them in the face of such constraints. Furthermore, many conservative plans may not find the emerging market exposures appealing.

Managers may also find it difficult to manage to this index, especially with respect to passively indexing to it. Some classes, particularly the investment grade 144A sector which comprises about 1.35% of the Universal Index, or only $87 billion in market value, may not have sufficient liquidity for a large pool of managers to index. Managers may find themselves substituting in place of these 144A securities, which naturally increases tracking error to some extent.

Overall, the index is a better representation of the global dollar-denominated fixed-income market, but these practical constraints may prevent a rapid adoption by many fund sponsors and particularly by managers who prefer to leave less-liquid, lower-quality bond products in the realm of opportunistic out-of-benchmark exposure rather than in a core approach. This index is appropriate for plans who make strategic allocations to non-Aggregate sectors such as high yield, Eurodollar, and 144A, but it likely faces hurdles for plans that are domestic-focused, plans that have little discretion in investing in non-Aggregate sectors, and plans that prefer a conservative fixed income portfolio.