

Emerging Markets Corporate Bond Indices

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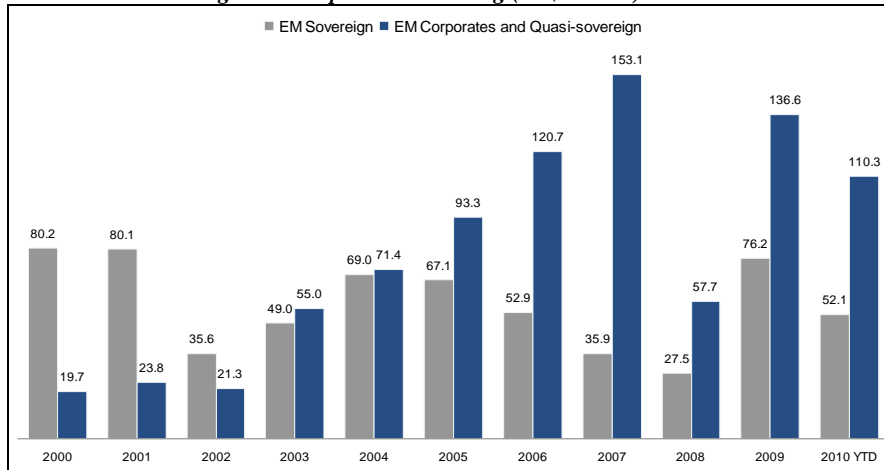
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Broadly speaking, investing in emerging markets requires a very different approach than that in the developed markets. EM corporate debt has historically been perceived as a riskier investment than U.S. or Western European corporate debt, since the bondholder must be aware of political dynamics, economic changes, and structural factors, in addition to the concerns of inflationary and default risk. Additionally, the bankruptcy codes in EM jurisdictions often do not provide the same creditor protections as those in more developed markets. For these reasons, investors in EM corporate debt have traditionally been rewarded with higher spreads to compensate for their increased risk.

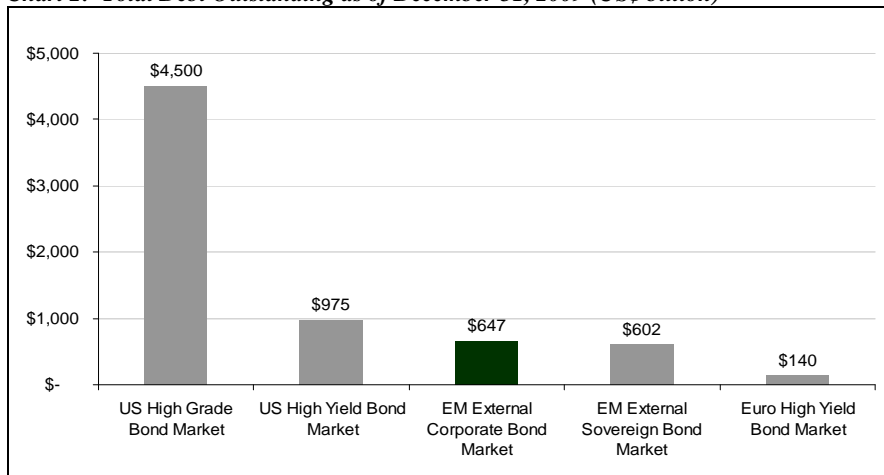
Encouraged by significantly increased investor demand and a more favorable lending environment, EM corporations are now taking advantage of the opportunity to raise money through bond issuance. Additionally, many of the issuers in emerging markets typically have far better individual credit metrics than developed country debtors. At the same time, many EM sovereigns have repurchased their foreign currency debt. Consequently, the EM corporate debt market has grown at a much faster rate than the EM sovereign debt market has. In 2000, EM sovereign and corporate issuances stood at \$80 billion and \$20 billion, respectively. As of August 2010, EM sovereign and corporate issuances were \$52 billion and \$110 billion, respectively, as shown below.

Chart 1: EM Sovereign and Corporate Borrowing (US\$ billion)



EM corporate bond issuance surpassed sovereign external currency issuance for the first time in 2003, and has continued ever since. The EM corporate bond market reached \$647 billion by the end of 2009, as compared to the size of the U.S. high yield market at \$975 billion, and the outstanding amount of EM corporate bonds was larger than the \$602 billion in sovereign bonds, as shown below.

Chart 2: Total Debt Outstanding as of December 31, 2009 (US\$ billion)



In December 2007, JP Morgan announced the introduction of its Corporate Emerging Markets Bond Index (**CEMBI**), a global, liquid corporate emerging markets benchmark that tracks US dollar-denominated corporate bonds issued by emerging markets entities. It is a market capitalization-weighted index representing Asia, Latin America, Europe and the Middle East/Africa, and was created in response to investor demand for a liquid global emerging market corporate benchmark and the rapid increase in corporate issuance. Data for this family of indices date back to December 31, 2001.

The CEMBI defines emerging market countries with a combination of World Bank-defined per capita income brackets and relevant OECD status. These two criteria allow the CEMBI to include a broader list of countries that international investors may consider as part of the emerging markets universe. Additionally, the **CEMBI Diversified** was introduced concurrently as a uniquely-weighted version of the CEMBI index. It limits weights of those index countries with larger corporate debt stocks by only including a specified portion of these countries' eligible current face amounts of debt outstanding. Inclusion into both these indices requires an initial minimum of five years maturity and a minimum of \$500 million face amount outstanding. Once added, an instrument may remain in the index until 36 months before maturity. If an issue's characteristics do not meet these requirements, the issue will be removed from the index at the next month-end.

While the CEMBI uses the total current face amount outstanding of each issue, the CEMBI Diversified uses only a certain portion of the current face amount outstanding for instruments from countries with larger debt stocks. In effect, the CEMBI Diversified limits the current face amount allocations of the bonds in the CEMBI. This results in well-distributed, more balanced weightings for countries included in the index.

In January 2008, the **CEMBI Broad** was launched as a more comprehensive index, including smaller issues to cover a wider array of corporate bonds. In contrast to the CEMBI, the minimum amount outstanding required is \$300 million for the CEMBI Broad. Once added, an instrument may remain in the index until 12 months before maturity. Similarly, the **CEMBI Broad Diversified** was concurrently established to provide a more balanced weighting for countries included in the index.

Table 1: Characteristics of CEMBI Indices (As of September 30, 2010)

EM Corporate Bond Indices							
	Market Cap	Duration	Yield	Spread	# of Issuers	# of Issues	% Inv. Grade
	(US \$ mm)	(Years)	(%)	(bps)			
CEMBI	\$154,686	6.17	5.64	316	122	171	74%
CEMBI Diversified	88,791	5.87	5.60	335	122	171	71%
CEMBI Broad	314,298	5.56	5.52	331	236	444	75%
CEMBI Broad Diversified	127,824	5.37	5.65	361	236	444	68%
CEMBI Diversified HY	25,043	5.11	7.66	595	40	46	0%

Though JP Morgan's CEMBI is the leading index for EM corporates, Credit Suisse also launched its own basket of US dollar-denominated EM corporate bond issues in October 2007, the Emerging Market Corporate Bond Index (**EMCI**). Inclusion into the index requires a minimum of \$100 million remaining face amount outstanding, and maturity of at least two years at the date of issuance. As of September 30, 2010, the EMCI included 761 issues and 378 issuers, of which 72% were investment grade. The index had a market value of \$439 million with an average duration of 5.04 and yield of 5.17. Data for this index is available historically from November 1, 2001.

While dedicated investment vehicles for EM equities and sovereign debt have been available to investors for a long time, EM corporate bond funds are only now being launched due to investor demand. Inflows into EM fixed income have reached record levels, and the amount of assets benchmarked against EM indices continues to grow, as shown in the table below. This sustained momentum and strategic allocation by various investment managers represents a long-term positive for EM credit.

Table 2: Assets under Management Benchmarked against EM Indices (US\$ million)

EM Indices	June 2009	June 2010	EM Indices	June 2009	June 2010
Sovereign External Debt			Sovereign Local Curr. Money Market Debt		
EMBI Global Diversified	\$115,911	\$169,262	ELMI+	\$10,150	\$13,593
EMBI Global	57,908	83,220			
EMBI+	15,850	15,700	Corporate External Debt		
Total	189,669	268,182	CEMBI Broad Diversified	5,187	6,520
Sovereign Local Market Debt			CEMBI Diversified	1,000	1,580
GBI-EM Global Diversified	35,767	42,310	CEMBI Broad	500	-
GBI-EM Diversified	8,193	9,418	CEMBI	-	-
GBI-EM Broad Diversified	5,070	6,063	Total	6,687	8,100
GBI-EM	5,771	4,118			
GBI-EM Broad	105	260	Total AUM Benchmarked	\$261,562	\$352,194
GBI-EM Global	150	150			
Total	55,056	62,319			

Appendix: Attributes of JP Morgan's Various EM Corporate Indices (As of September 30, 2010)

CEMBI (122 Issuers, 171 Issues)					
	Market Cap		Duration	Yield	Spread
	(US \$ mm)	(%)	(Years)	(%)	(bps)
CEMBI	154,686	100%	6.17	5.64	316
By Region					
Africa	3,396	2%	5.20	5.77	411
Asia	47,875	31%	5.61	5.01	303
Europe	26,159	17%	4.76	5.77	423
Latin America	60,247	39%	7.57	6.00	327
Middle East	17,008	11%	5.16	5.31	330
By Credit					
Investment Grade	114,989	74%	6.47	5.10	257
High Yield	39,697	26%	5.31	7.43	531
By Sector					
Banks	45,911	30%	5.97	5.61	310
Consumer	7,156	5%	5.55	6.80	489
Industrials	33,601	22%	5.86	5.91	368
Metals & Mining	17,407	11%	8.38	6.11	319
Oil	25,005	16%	5.52	4.54	276
Telecom	16,966	11%	6.69	5.27	274
Utilities	8,639	6%	5.37	5.97	420
CEMBI Diversified (122 Issuers, 171 Issues)					
	Market Cap		Duration	Yield	Spread
	(US \$ mm)	(%)	(Years)	(%)	(bps)
CEMBI Diversified	88,791	100%	5.87	5.60	335
By Region					
Africa	3,396	4%	5.20	5.77	411
Asia	34,061	38%	5.51	5.11	315
Europe	11,741	13%	4.62	5.99	450
Latin America	25,280	28%	7.42	6.08	339
Middle East	14,313	16%	5.17	5.28	331
By Credit					
Investment Grade	62,918	71%	6.22	4.90	251
High Yield	25,873	29%	5.02	7.60	567
By Sector					
Banks	26,924	30%	5.65	5.25	306
Consumer	4,119	5%	5.10	6.98	525
Industrials	20,216	23%	5.65	5.95	382
Metals & Mining	8,117	9%	8.08	6.15	329
Oil	11,648	13%	5.29	4.46	278
Telecom	11,008	12%	6.50	5.37	288
Utilities	6,759	8%	5.20	6.47	475
CEMBI Diversified High Yield (40 Issuers, 46 Issues)					
	Market Cap		Duration	Yield	Spread
	(US \$ mm)	(%)	(Years)	(%)	(bps)
CEMBI Diversified HY	25,043	100%	5.11	7.66	595
By Region					
Africa	0	0%			
Asia	10,491	42%	5.26	7.37	563
Europe	7,296	29%	4.50	7.80	626
Latin America	4,241	17%	4.99	8.43	666
Middle East	3,015	12%	6.24	7.24	532
By Sector					
Banks	6,488	26%	5.51	8.04	623
Consumer	4,129	16%	6.55	7.06	491
Industrials	4,351	17%	5.09	7.69	590
Metals & Mining	4,029	16%	4.77	6.92	530
Oil	891	4%	3.11	5.25	442
Telecom	3,603	14%	4.31	7.94	651
Utilities	1,553	6%	3.60	10.19	894

CEMBI Broad (236 Issuers, 444 Issues)

	Market Cap		Duration	Yield	Spread
	(US \$ mm)	(%)	(Years)	(%)	(bps)
CEMBI Broad	314,298	100%	5.56	5.52	331
By Region					
Africa	4,778	2%	5.08	5.85	400
Asia	110,116	35%	5.07	4.87	300
Europe	61,254	19%	4.41	5.96	439
Latin America	103,131	33%	6.87	5.93	329
Middle East	35,018	11%	5.31	5.14	318
By Credit					
Investment Grade	235,585	75%	5.82	4.89	263
High Yield	78,713	25%	4.78	7.62	555
By Sector					
Banks	95,828	30%	5.20	5.48	340
Consumer	10,586	3%	5.30	6.73	471
Industrials	64,291	20%	5.28	6.00	389
Metals & Mining	27,995	9%	7.24	5.77	305
Oil	56,726	18%	5.83	4.89	273
Telecom	35,071	11%	5.78	5.17	292
Utilities	23,801	8%	4.89	5.62	374

CEMBI Broad Diversified (236 Issuers, 444 Issues)

	Market Cap		Duration	Yield	Spread
	(US \$ mm)	(%)	(Years)	(%)	(bps)
CEMBI Broad Diversified	127,824	100%	5.37	5.65	361
By Region					
Africa	4,778	4%	5.08	5.85	396
Asia	51,479	40%	5.09	5.18	322
Europe	17,882	14%	4.09	6.72	520
Latin America	33,799	26%	6.48	6.06	374
Middle East	19,886	16%	5.41	5.12	305
By Credit					
Investment Grade	87,302	68%	5.81	4.82	259
High Yield	40,522	32%	4.40	7.84	621
By Sector					
Banks	41,614	33%	5.03	5.53	357
Consumer	4,264	3%	5.19	6.96	511
Industrials	26,536	21%	4.92	6.15	431
Metals & Mining	8,541	7%	7.92	5.92	317
Oil	17,086	13%	5.93	4.75	256
Telecom	16,422	13%	5.42	5.41	336
Utilities	13,360	10%	4.94	5.93	409