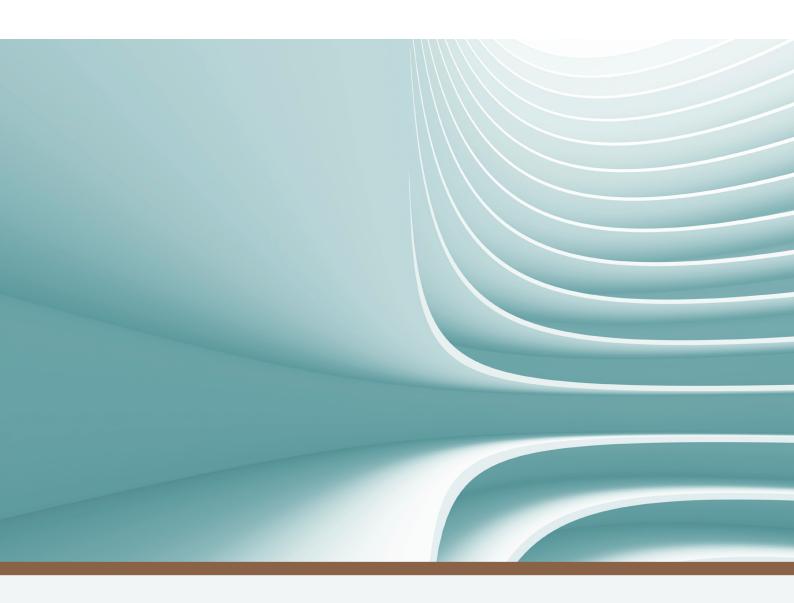
J.P.Morgan



Introducing the J.P. Morgan EM Credit Core Index

A blend of liquid EM Sovereign and Corporate USD debt

What is the J.P. Morgan EM Sovereign and Corporate Credit Core Index?

The J.P. Morgan EM Sovereign and Corporate Credit Core Index (JPM EM Credit Core) tracks liquid, US-dollar Emerging Market fixed and floating-rate debt instruments issued by Corporate, Sovereign, and Quasi-Sovereign entities.

The rules and methodology of the EM Credit Core Index are derived from the established and well-telegraphed standards for the EMBIG Core (Sovereign index) and CEMBI Core (Corporate Index) benchmarks.

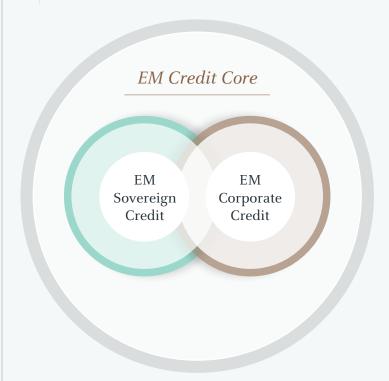
The minimum notional outstanding for index inclusion for Sovereign and Quasi-Sovereign instruments is \$1 billion and \$500 million for Corporate instruments.

The JPM EM Credit Core captures over \$2 trillion in Emerging Market debt (almost double that of Sovereigns alone) and offers a diverse investment opportunity set of 600 issuers and 69 countries.

The EMBI Global (EMBIG) and the CEMBI Broad (CEMBIB) are J.P. Morgan's flagship benchmarks for Emerging Market (EM) Sovereign and Corporate Credit, respectively. A dedicated investor base of over \$500 billion is benchmarked to the EMBI & CEMBI index suites.

There are many benefits to adding EM Corporates to an EM Sovereign portfolio, and there is increasing investor appetite for blended EM Credit indices. In 2022, custom EM Credit blended indices comprising of Sovereign and Corporate debt accounted for 15% of all new custom indices provisioned by J.P. Morgan Global Index Research.

Combining Sovereigns and Corporates can lead to improved diversification, better performance and higher credit quality.





Historical Performance

EM Corporates have performed better on a risk-adjusted basis with lower drawdowns compared to Sovereign debt over the past decade. Therefore, the EM Credit Core Index has median risk-return characteristics compared to EM Sovereigns or Corporates alone.

Year	EM Credit Core	EMBIG Div.	CEMBI Broad Div.
2013	-3.71%	-5.25%	-0.60%
2014	6.09%	7.43%	4.96%
2015	1.19%	1.18%	1.30%
2016	9.94%	10.15%	9.65%
2017	9.08%	10.26%	7.96%
2018	-3.84%	-4.26%	-1.65%
2019	14.83%	15.04%	13.09%
2020	6.23%	5.26%	7.13%
2021	-1.12%	-1.80%	0.91%
2022	-15.72%	-17.78%	-12.26%
2023*	5.08%	6.08%	4.66%
Cumulative Total Return	27.36%	24.19%	38.13%
Annualized Return	2.31%	2.07%	3.10%
Cumulative Excess Return	13.99%	11.16%	23.63%
Annualized Excess Return	1.24%	1.00%	2.02%
Annualized Volatility	7.98%	8.84%	6.28%
Sharpe Ratio	0.16	0.11	0.32

Source: J.P. Morgan *Data as of July 31, 2023



Why combine EM Corporate & Sovereign Credit?

Larger Opportunity Set & Enhanced Diversification

Adding Corporates increases diversification providing exposure to eleven additional countries that are not included in the EMBI series. These eleven new markets constitute approximately 16% of the EM Credit Core index.

Additional countries included in the EM Credit Core Index compared to the EMBIG:

Country	Weight (%)
Hong Kong, SAR	3.67
Korea	2.91
Singapore	2.58
Israel	2.37
Macau, SAR	1.92
Taiwan	1.53
Thailand	1.12
Tanzania	0.09
Czech Republic	0.07
Burkina Faso	0.05
Moldova	0.03

Source: J.P. Morgan as of July 31, 2023

Top 10 country exposures in the EM Credit core, EMBIG Div., and CEMBI Broad Div.:

EM Credit	EM Credit Core		EMBIG Div.		CEMBI Broad Div.	
Country	Weight (%)	Country	Weight (%)	Country	Weight (%)	
China	5.12	Mexico	5.12	China	6.58	
Mexico	4.55	Indonesia	4.83	Hong Kong, SAR	4.86	
Saudi Arabia	4.29	Saudi Arabia	4.71	Brazil	4.63	
Brazil	3.98	Turkey	4.51	Mexico	4.31	
UAE	3.94	China	4.42	Korea	4.24	
Indonesia	3.73	UAE	4.35	UAE	4.19	
Turkey	3.7	Qatar	3.65	India	4.14	
Hong Kong, SAR	3.67	Brazil	3.32	Saudi Arabia	4	
Qatar	3.31	Philippines	3.3	Turkey	3.76	
India	2.95	Chile	3.22	Singapore	3.76	

Source: J.P. Morgan as of July 31, 2023



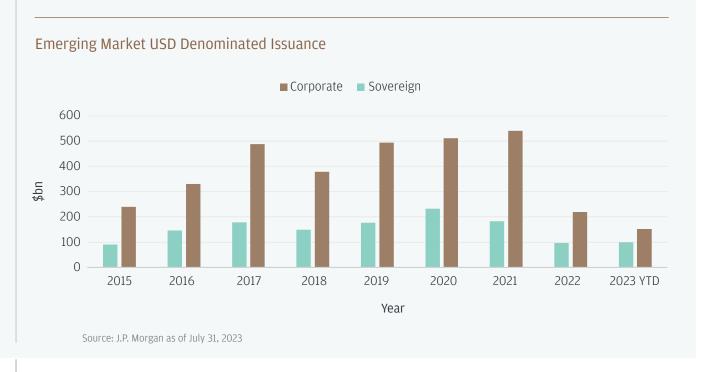
Top 10 issuer exposures in the EM Credit core, EMBIG Div., and CEMBI Broad Div.:

EM Credit Core		EMBIG Div.		CEMBI Broad Div.	
Issuer	Weight (%)	Issuer	Weight (%)	Issuer	Weight (%)
Turkey Sovereign	2.74	Saudi Arabia Sovereign	4.28	TSMC Global Ltd	2.70
Saudi Arabia Sovereign	2.65	Turkey Sovereign	3.86	Saudi Arabian Oil Co.	1.59
Philippines Sovereign	2.32	Brazil Sovereign	3.26	Ecopetrol SA	1.54
Dominican Republic Sovereign	2.29	Philippines Sovereign	3.18	Teva Pharmaceuticals Ne	1.52
Panama Sovereign	2.07	Qatar Sovereign	2.93	Standard Chartered Plc	1.31
Qatar Sovereign	2.01	Dominican Republic Sovereign	2.92	Sands China Ltd	1.20
Oman Sovereign	1.99	Colombia Sovereign	2.82	Prosus NV	1.03
Indonesia Sovereign	1.89	Mexico Sovereign	2.68	Kazmunaygas National Co	1.03
Bahrain Sovereign Sukuk	1.68	Panama Sovereign	2.61	Bangkok Bank Pcl/Hk	1.00
Mexico Sovereign	1.64	Bahrain Sovereign Sukuk	2.60	First Quantum Minerals L	0.98

Source: J.P. Morgan as of July 31, 2023

Further, adding EM Corporate exposure allows the EM Credit Core to capture USD denominated EM Corporate issuance which, on average, is almost 2.5x larger than EM Sovereign issuance per annum.

EM Corporate dollar denominated issuance tends to be significantly higher than Sovereigns:





An EM Corporate index (e.g. CEMBIB) tends to have lower duration and higher average credit rating than an EM Sovereign index (e.g. EMBIG). However, EM Sovereign bonds tend to have higher headline yields (partly due to longer duration) than EM Corporates, and are more liquid in secondary markets (i.e. tighter bid-offer spreads).

The combined EM Credit Core index retains the balanced risk-return characteristics of both EM Sovereign and Corporate indices.

Additionally, the inclusion of only USD denominated debt eliminates potential country-specific FX risk.

EM Credit Core relative risk profile snapshot:

Instrument	Duration to Worst	YTW	STW (bps)	Weighted Rating	#of Issuers	#of Countries	Index Bid/Ask Spread
EM Credit Core	6.06	7.62	345	Baa3/BBB-/BBB-	600	69	0.77
EMBIG Div.	6.8	8.12	397	Ba1/BBB-/BB+	160	69	0.79
CEMBI Broad Div.	4.17	7.14	290	Baa2/BBB-/BBB-	758	63	0.83

Source: J.P. Morgan as of July 31, 2023

Sub-credit bucket exposures in the EM Credit core, EMBIG Div., and CEMBI Broad Div.:

	Weight (%)			
Sub-Credit Bucket	EM Credit Core	EMBIG Div.	CEMBI Broad Div.	
AAA	0.12	-	0.18	
AA	7.59	6.77	6.22	
А	18.30	16.83	19.62	
BBB	31.45	27.05	32.07	
ВВ	20.47	21.07	21.22	
В	16.36	21.36	12.19	
C and Below	5.72	6.92	8.49	

Source: J.P. Morgan as of July 31, 2023



Index rules at a glance

EM Credit Core is the aggregate EM USD denominated credit index with added liquidity thresholds compared to the baseline indices.

	EM Credit Core	EMBI Global / Div	CEMBI Broad / Div
Inception Date	Dec-2011	Dec-1993	Dec-2001
Launch Date	Jun-2022	Jul-1999	Jan-2008
Country/Region			
	Sovereigns/Quasi-Sovereigns: GNI per capita must be below the Index Income Ceiling (IIC) for 3 consecutive years OR IPR below threshold for 3 consecutive years Corporates: Based on region: Asia ex Japan, Latam, Eastern Europe, Middle East/Africa	GNI per capita must be below the Index Income Ceiling (IIC) for 3 consecutive years OR IPR below threshold for 3 consecutive years	Based on region: Asia ex Japan, Latam, Eastern Europe, Middle East/Africa
Issuer			
	Sovereign/Quasi-Sovereign eligibility based on EMBI Global/Div; Corporate eligibility based on CEMBI Broad/Div	Sovereigns, Corporate entities that are 100% owned or guaranteed by the national government	Issuers where any of the below are considered an EM by our Corporate country EM classification: - Country of risk of the guarantor (must be 100%), or - Country where majority of issuer's assets are located, or - Country where issuer's operating headquarters is located, and centralized decision-making occurs.



Instrument					
Instrument Type	All fixed, floaters, amortizers and capitalizers	All fixed, floaters, amortizers and capitalizers	All fixed, floaters, amortizers and capitalizers		
Defaulted Issues	Sovereigns/Quasi-Sovereigns: Eligible for Inclusion Corporates: Excluded	Eligible for Inclusion	Excluded		
Min Face Amount Outstanding	Sovereigns/Quasi-Sovereigns: US\$1bn Corporates: US\$500mm	US\$500mm	US\$300mm		
Diversification Approach	Country Level				
Concentration Risk Limit	Country Weight cap at 10%	Country weight cap at 10%	Country Weight cap at 10% Issuer Weight cap at 3%		
BR-Assides for	Minimum 2.5 years to maturity				
Maturity for Initial Inclusion Maturity for maintaining eligibility	Exit when there is less than 1 year to maturity	Exit when there is less than 6 months to maturity	Exit when there is less than 6 months to maturity		
Law/ Settlement	Local law instruments are not eligible for the index; Euroclearable or settled through another institution outside issuing country				
Liquidity	Daily available pricing from third party valuation vendor				

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