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J.P. Morgan Asia Credit Index (JACI)

Index Methodology and Factsheet

Highlights

The J.P. Morgan Asia Credit Index (JACI) is an all inclusive benchmark that tracks liquid, US-dollar denominated debt instruments issued out of the Asia ex-Japan region. The index includes debt issued by Corporate, Sovereign, and Quasi-Sovereign entities from the region spanning both Investment Grade and High Yield debt segments. The JACI suite of indices is one of the most widely followed benchmark index in the region with over US\$125 billion in assets under management (AUM) as of December 2023.

There are two variants of the index:

- JACI
- JACI Diversified

The JACI Diversified shares the inclusion criteria and composition of the JACI, which is the traditional market cap weighted index. The Diversified version constraints the weights of the large countries in the index by capping the amount of eligible debt outstanding. The JACI index was launched in July 2006 followed by the JACI Diversified in May 2016.

Daily historical returns and statistics for the JACI suite of indices is available from September 30, 2005.

Index Criteria **Country/Region** Asia ex-Japan region Corporates, Sovereign and Quasi-sovereign Issuer Type Instrument Type Include: Fixed, floaters, amortizers, and capitalizers Exclude: Convertibles, Inflation Linkers, and defaulted bonds **Remaining Maturity** For entry: at least 2.5 years until maturity For exclusion: Bonds excluded with maturity being <=6 months to maturity Amount Outstanding Issues must have minimum size of US\$300 million or more to be eligible US-Dollar denominated Currency Default Treatment Defaulted bonds are excluded Liquidity Criteria Daily available pricing from PricingDirect

Table 1: Index Criteria

Source: J.P. Morgan

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Table 2: Index Characteristics and Methodology

Index Characteristics and Methodology			
Pricing	Bid and Ask prices are taken from a third-party pricing source (PricingDirect)		
Aggregate Return	Index/Country level total return is calculated as a market-weighted average of bond returns using bid side prices		
FX Rates	All FX rates are as of 4pm London time provided by WM Reuters		
Coupon treatment	All coupons received are immediately reinvested into the index		
Repeiend	Rebalances on the last US business day of the month. If FX rates from WM Reuters are unavailable on the last weekday of the month (i.e. Good Friday), indices are rebalanced on the previous business day		
Holiday	Follows U.S. bond market calendar set by Emerging Markets Trader Association (EMTA)		

Table 3: Index Profile

Market	JACI Weight %	JACI Diversified Weight %
China	36.28	19.82
Hong Kong, SAR	13.30	12.44
India	6.22	10.12
Indonesia	12.37	12.78
Macau. SAR	2.21	3.60
Malaysia	2.86	4.66
Maldives	0.04	0.07
Mangolia	0.27	0.44
Pakistan	0.53	0.85
Philippines	5.46	8.89
Singapore	4.08	6.65
South Korea	11.94	12.47
Sri Lanka	0.63	1.02
Taiwan (China)	1.78	2.90
Thailand	1.85	3.01
Vietnam	0.17	0.27

Source: J.P. Morgan, as of Dec 29th, 2023.

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Table 4: Inclusion Criteria comparison

Index Criteria	JACI	JACI Diversified	
Inception Date	Sep, 2005		
Launch Date	Jul, 2006	May, 2016	
Holiday	Follows US bond market calendar set by Emerging Markets Trader Association (EMTA)		
Pricing Source	Bid and Ask prices are taken from a third party pricing source		
FX Spot / Forward	WM/Reuters 4pm London rate		
Coupon	All coupons received are immediately reinvested into the index		
Instrument Type	All fixed, floaters, amortizers, and capitalizers; excluding defaulted bonds		
Issuers	Corporate, Sovereign and Quasi-Sovereign		
Min. FaceOS	US\$300) million	
Credit Quality Classification	 Both IG and HY rated securities are included. For index purpose, instrument rating will be determined based on the ratings available from S&P, Moody's, and Fitch, using following rules: The middle rating when all 3 ratings are available; The lower rating when only two ratings are available; The sole rating when only one rating is available; Non-Rated bonds are classified under HY bucket. 		
Fallen Angels/Rising Stars	Bonds will transition between investment grade and high yield at the month-end rebalance based on rating changes up to and including T-1 weekday of the month.		
Maturity	For Inclusion: At least 2.5 years till maturity For Exclusion: At least 6 months till maturity		
Face Amt Diversification	-	\checkmark	
Bloomberg Ticker	JACICOTR	JADICOTR	

Source: J.P. Morgan.

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Appendix

Defining the universe of JACI instruments

The J.P. Morgan Asia Credit Index provides investors with a benchmark that tracks US Dollar-denominated debt instruments in the Asia ex-Japan region. Eligibility for issues is determined using the following criteria:

Instrument Type

The index includes both fixed and floating rate instruments, as well as capitalizing/amortizing bonds or loans. Bonds or loans with embedded options and warrants are eligible for inclusion, if: **a**) the options/warrants are attached to instruments that would otherwise be included in the index, and **b**) the quotation convention - as recommended by the Emerging Markets Traders Association (EMTA), is for instrument prices to be quoted cumulative of options or warrants. Convertible bonds are not eligible for inclusion in the index.

A default will force the removal of the affected instrument from the JACI index. According to the enhanced framework for the treatment of credit defaults, a security will be removed if:

- Issuer fails to pay a scheduled interest or principal payment on an instrument within the grace period, or
- Instruments that fall under the cross-default provision, or
- Issuer has completed a distressed exchange, or
- Issuer has filed for bankruptcy and the issuance is in scope for legal actions, or
- One or more of credit rating agencies (S&P, Moody's or Fitch) has downgraded the instrument level rating to credit default (or equivalent).
- **Furthermore**, securities that are excluded based on the above rules will be eligible for re-inclusion, provided the securities meet all index eligibility criteria, and are no longer rated to be in credit default (or equivalent) by S&P, Moody's and Fitch.
- For Sovereign & Quasi-sovereign defaults' treatment, please refer to our publication 'JACI: Treatment of defaulted instruments' ¹.

Issuer Type

The index contains those bonds or loans issued by Corporate, Sovereign, and Quasi-sovereign entities from indexeligible countries. As per the J.P. Morgan Index definition, an entity that is 100% owned or 100% guaranteed by the national/regional government and resides in the index eligible country qualifies as 'Quasi-Sovereign'. Instruments issued by municipalities or provinces are eligible for index inclusion as well.

Bonds are eligible for inclusion in the JACI series if:

- The issuance is 100% guaranteed by an entity within an Emerging Markets economy, or
- Majority of issuer's assets are located in Emerging Markets economy, or
- Issuer's operating headquarter is located, and centralized decision making occurs, in an Emerging Markets economy.

^{1.} For more details on publication 'JACI: Treatment of defaulted instruments', refer via link.

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Current face amount outstanding and remaining time until maturity

Issues with a current face amount outstanding of US\$300 million or more will be considered for inclusion. If an issue's current face outstanding falls below this requirement (due to either a debt retirement by the entity or the amortization of principal), the issue will be removed from the index at the next month-end rebalancing date.

Existing issues that, through re-openings, increase in size to satisfy our minimum current face outstanding requirement will be eligible for inclusion and follow the criteria applied to a new issue. For an existing issue in the index, any re-opening will be rebalanced in the month that it is settled.

Only those instruments with at least 2.5 years until maturity are considered for inclusion. Once added, an instrument may remain in the JACI suite of indices up to 6 months before it matures. On the month-end preceding the 6 months to its maturity date, the instrument is removed from the index.

Prior to January 2021, the minimum FaceOS criteria for inclusion was US\$150 million and remaining maturity criteria of 12months for maturity removals, please refer to our publication '2020 EM Index Governance Results'².

Legal Jurisdiction

Inclusion in the JACI suite of indices is limited to issues with legal jurisdiction that is domestic to a G-7 country or Hong Kong. Local law instruments that do not fall under G-7 or Hong Kong jurisdiction are not eligible for index inclusion.

Settlement Convention

Instruments in the JACI suite of indices must be able to settle internationally (either through Euroclear or another institution domiciled outside the issuing country).

Quantifiable source of cash flow return

J.P. Morgan reserves the right to exclude from the composition of the JACI any debt instrument that it considers to have a cash flow structure from which verifiable daily returns or other statistics (i.e., yield, spreads) cannot be calculated.

Quoted price availability

Bonds must have bid and offer prices available on a daily and timely basis from our third party evaluation vendor – PricingDirect³ to be considered for inclusion. The lack of availability of such prices prevents the addition of a new issue to the index. In the case of the current JACI issues, if reliable prices for an issue become unavailable during a month, it is removed from the index at its next month-end rebalancing date.

Once an issue is removed due to a lack of pricing, it will not be reconsidered for inclusion in the index for the next 12 months.

^{2.} For more details on changes in amount outstanding and maturity removals, refer to our publication '2020 EM Index Governance Results' via link.

^{3.} PricingDirect Inc., a market-based professional valuation service and a wholly owned subsidiary of JPMorgan Chase & Co, is utilized as the primary source for instrument level pricing ensuring transparency around pricing sourcing and consistency/accuracy of index constituent valuations.

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Timing of the addition/removal of instruments

Index rebalancing occurs monthly on the last US business day of the month. A new issue that meets the index inclusion criteria will be assessed for inclusion at the month-end rebalance provided its settlement date falls on or before the month-end rebalance date of the same month. Prior to January 2021, the cut-off date for bonds to settle to be eligible for inclusion on the same month-end was the 15th of the month with one exception of a new issue that is released as part of a debt exchange program. At the month-end rebalancing date immediately following this event, the amount of debt retired in this exchange would be removed from the index, and the new issue would be added to the index (provided official exchange results are made available in a timely manner and the issue settles by the month-end).

Full or partial calls, taps or buybacks, and any rating changes are also reflected at this time. If an announcement is made for a bond to be called, it is removed at the month-end prior to its call date. If an announcement is not made in time for the bond to be removed at the prior month-end, it will be removed at the first month-end following the announcement.

Weighting Methodology

J.P. Morgan's indices vary in weighting schemes, with alternative variants being provided on a client specific basis. The most common weighting schemes are provided below:

- Market Cap Weighting Scheme: The JACI follows the traditional market-capitalization weight approach to determine each instrument's allocation in the index (i.e. dirty price times notional amount outstanding). Bond level weights can be summed to the aggregate country/issuer level in the index.
- **Diversification scheme:** The JACI Diversified follows the diversified methodology which anchors on the average size (debt stock) of countries in the index and the debt stock of the largest country in the index. To calculate the diversified (adjusted) face amount for each country, the following is used:

$$ICA = \frac{\sum FA_t}{N}$$

Where:

- ICA = Index Country Average
- $FA_t = Country Face Amount$
- N = Number of countries in the index

Based on the ICA, the diversified face amount for any country in the index is derived according to the following rules:

- 1. The largest country based on face amount will be capped at double the average country debt stock in the index (ICA * 2). This is the maximum threshold and sets the scale to determine the diversified face amounts of other countries in the index.
- 2. If a county's debt stock is below the index country average, the entire amount will be eligible for inclusion.
- 3. Countries whose debt stock falls between the index country average and double the average will be linearly interpolated.

The below formula summarizes the calculation of diversified country face amount:

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$$f(x) = \begin{cases} ICA + \frac{ICA}{FA_{max} - ICA} & ICA & x = FA_{max} \\ ICA + \frac{ICA}{FA_{max} - ICA} & (FA - ICA) & x > ICA \\ FA & x \le ICA \end{cases}$$

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