

# S&P Global

# iBoxx Asian Local Currency Indices

iBoxx ALBI, iBoxx ABF and iBoxx SGD

#### Contributor

Kangwei Yang
Director
Fixed Income Indices
Asia Pacific
kangwei.yang@spglobal.com

# October 2023 Commentary

As the Israel-Hamas conflict broke out in early October, investors swooped to the safe haven of U.S. Treasuries, as marked by a 22-bps decline in the yield of iBoxx \$ Treasuries between Oct. 6, 2023, and Oct.10, 2023. That was short lived, as the sell-off of long-dated U.S. Treasuries in recent weeks pushed the yield of the index back above 5%, ending the month at 5.15% and a month-to-date loss of 1.35%. This also brought the 10-2 Year Treasury Yield Spread to its highest level in the past year, widening to -0.19% by month-end.<sup>1</sup> The lowest point recorded in the past year was -1.08% in July.

This month, the European Central Bank also put a pause to 10 consecutive rate hikes and decided to hold interest rates following signs of easing inflation and slowing economic activities. This was decided after the ECB Governing Council's monetary policy meeting in late October. In Asia, Indonesia's and the Philippines' central banks raised rates by 25 bps in October in a bid to manage inflationary pressures.

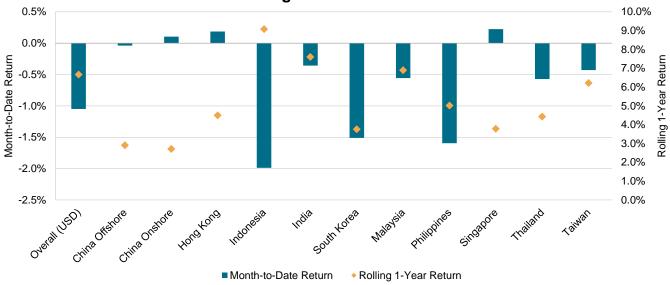
On the equities front, the <u>S&P 500®</u> posted -2.20%, its third consecutive month of negative returns. Likewise, the S&P Pan Asia Ex-Japan LargeMidCap (USD) was down 3.34%, and China—as represented by S&P China 500 (USD)—also lost ground in October (-3.53%).

<sup>&</sup>lt;sup>1</sup> Source: Federal Reserve Bank of St. Louis

# iBoxx ALBI

### October 2023 Commentary

**Exhibit 1: iBoxx ALBI Overall and Single Market Returns** 



Source: IHS Markit, part of S&P Global. Data as of Oct. 31, 2023. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Asian local currency bonds—as represented by the iBoxx Asian Local Bond Index (ALBI) (USD)—posted a loss for the third consecutive month, declining 1.05% in October. Capital losses were observed in all underlying markets; in addition, most local currencies (except Hong Kong dollar and Thai baht) lost ground against the U.S. dollar.

Three markets, in local currency terms, posted positive performance after adding returns from the bond coupon payments and accrued interest, namely Singapore (up 0.22%), Hong Kong (up 0.19%) and China Onshore (up 0.10%). The worst-performing markets were Indonesia (down 1.99%), the Philippines (down 1.60%) and South Korea (down 1.51%).

Similar to U.S. Treasuries, the longer-dated bonds experienced a sell-off this month with the largest losses in the 10+ years segment. The heaviest losses were seen in the Philippines 10+ (down 4.27%) and South Korea 10+ (down 3.05%). China Onshore was the only market with gains across the yield curve, in local currency terms.

As of the end of October, the overall index yield increased by 11 bps to 4.34%. India remained the highest-yielding bond market in the index, posting 7.48%, while China Onshore (2.80%) represented the lowest-yielding market.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> Taiwan has 0% weight in the index.

**Exhibit 2: iBoxx ALBI Overall and Single Market Returns** 

| Market         | Viold (9/) | Duration (Voors) |               | Returns (%) |            |
|----------------|------------|------------------|---------------|-------------|------------|
| war ket        | Yield (%)  | Duration (Years) | Month-to-Date | YTD         | Three-Year |
| Overall (USD)  | 4.34       | 6.54             | -1.05         | -1.72       | -8.39      |
| China Offshore | 3.36       | 2.57             | -0.04         | 2.97        | 8.41       |
| China Onshore  | 2.80       | 5.83             | 0.10          | 3.22        | 14.20      |
| Hong Kong      | 5.18       | 3.73             | 0.19          | 1.99        | -6.71      |
| India          | 7.48       | 6.65             | -0.36         | 5.53        | 12.62      |
| Indonesia      | 7.19       | 5.99             | -1.99         | 4.17        | 18.93      |
| South Korea    | 4.13       | 8.36             | -1.51         | -0.46       | -12.93     |
| Malaysia       | 4.27       | 7.09             | -0.56         | 3.57        | 3.60       |
| Philippines    | 5.62       | 4.87             | -1.60         | 3.11        | -3.20      |
| Singapore      | 3.48       | 7.47             | 0.22          | 0.51        | -9.73      |
| Taiwan         | 1.35       | 8.42             | -0.43         | 1.13        | -5.88      |
| Thailand       | 3.51       | 8.12             | -0.57         | -0.80       | -6.97      |

Source: IHS Markit, part of S&P Global. Data as of Oct. 31, 2023. Overall index performance based on total return in USD. All others based on total return in local currency. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Exhibit 3: iBoxx ALBI Returns Attribution - October 2023

| Market         | FX Return (%) | Accrual Return (%) | Capital Return (%) |
|----------------|---------------|--------------------|--------------------|
| Overall (USD)  | -0.43         | 0.33               | -0.94              |
| China Offshore | -0.60         | 0.27               | -0.31              |
| China Onshore  | -0.19         | 0.26               | -0.15              |
| Hong Kong      | 0.07          | 0.28               | -0.09              |
| India          | -0.24         | 0.60               | -0.95              |
| Indonesia      | -2.55         | 0.58               | -2.57              |
| Malaysia       | -1.62         | 0.34               | -0.90              |
| Philippines    | -0.26         | 0.37               | -1.97              |
| Singapore      | -0.30         | 0.23               | -0.01              |
| South Korea    | -0.09         | 0.25               | -1.76              |
| Taiwan         | -0.48         | 0.11               | -0.54              |
| Thailand       | 1.57          | 0.25               | -0.82              |

Source: IHS Markit, part of S&P Global. Data as of Oct. 31, 2023. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

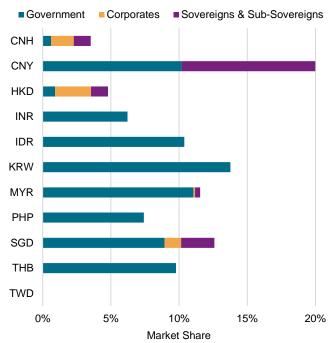
Exhibit 4: iBoxx ALBI Returns by Maturity - October 2023

| Market                   | Return (%) |          |          |           |          |  |  |
|--------------------------|------------|----------|----------|-----------|----------|--|--|
| warket                   | 1-3 Year   | 3-5 Year | 5-7 Year | 7-10 Year | 10+ Year |  |  |
| Overall (USD)            | -0.20      | -0.60    | -0.80    | -1.28     | -2.11    |  |  |
| Overall (Local Currency) | 0.12       | -0.21    | -0.39    | -0.75     | -1.62    |  |  |
| China Offshore           | 0.00       | -0.13    | -0.02    | -0.06     | -0.85    |  |  |
| China Onshore            | 0.10       | 0.11     | 0.15     | 0.07      | 0.10     |  |  |
| Hong Kong                | 0.41       | 0.24     | 0.06     | -0.19     | -0.86    |  |  |
| India                    | 0.42       | 0.26     | -0.25    | -0.41     | -0.76    |  |  |
| Indonesia                | -0.81      | -1.95    | -2.35    | -2.00     | -2.30    |  |  |
| Malaysia                 | 0.19       | -0.12    | -0.29    | -0.57     | -1.15    |  |  |
| Philippines              | -0.03      | -0.74    | -1.47    | -2.55     | -4.27    |  |  |
| Singapore                | 0.42       | 0.40     | 0.52     | 0.64      | -0.46    |  |  |
| South Korea              | 0.10       | -0.59    | -1.13    | -1.77     | -3.05    |  |  |
| Taiwan                   | 0.05       | -0.14    | -0.30    | -0.45     | -0.84    |  |  |
| Thailand                 | 0.21       | 0.06     | -0.10    | -0.24     | -1.52    |  |  |

Source: IHS Markit, part of S&P Global. Data as of Oct. 31, 2023. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

#### October Month-End Rebalance

**Exhibit 5: Market Breakdown and iBoxx ALBI Duration Changes** 



| Market         | Duration (Years)* |              |  |  |
|----------------|-------------------|--------------|--|--|
| warket         | Oct. 31, 2023     | Nov. 1, 2023 |  |  |
| Overall (USD)  | 6.54              | 6.60         |  |  |
| China Offshore | 2.57              | 2.59         |  |  |
| China Onshore  | 5.83              | 5.86         |  |  |
| Hong Kong      | 3.73              | 3.82         |  |  |
| India          | 6.65              | 6.67         |  |  |
| Indonesia      | 5.99              | 6.00         |  |  |
| South Korea    | 8.36              | 8.50         |  |  |
| Malaysia       | 7.09              | 7.28         |  |  |
| Philippines    | 4.87              | 4.94         |  |  |
| Singapore      | 7.47              | 7.53         |  |  |
| Thailand       | 8.12              | 8.08         |  |  |
| Taiwan         | 8.42              | 8.41         |  |  |

Source: IHS Markit, part of S&P Global. Data as of Oct. 31, 2023 (and Nov. 1, 2023, for duration). Past performance is no guarantee of future results. Chart and table are provided for illustrative purposes.

<sup>\*</sup>Semiannual modified duration.

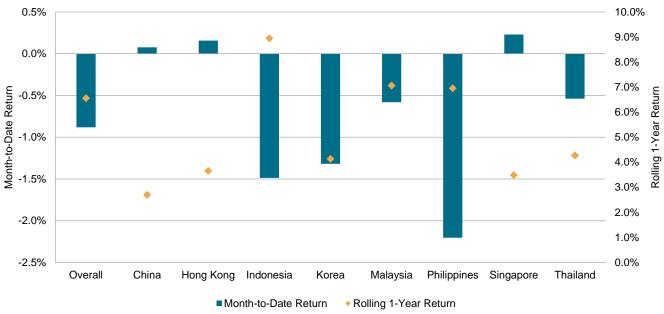
The latest rebalance saw 20 bonds entering and 19 bonds leaving the overall index. The existing underlying market weights are reflected in Exhibit 5. Note that the underlying market weights will be updated at the November month-end index rebalance. For more details, please refer to the iBoxx Asia-Pacific Annual Index Review 2023 Results.

Following the recent rebalance, the index duration increased by 0.06 years to 6.60 years. Most markets saw a small duration increase this month, with the largest increase coming from Malaysia (up 0.19 years). Among the eligible markets, South Korea continued to have the longest duration (8.50 years), while China Offshore (2.59 years) remained the least sensitive to interest rates.

## iBoxx ABF

## October 2023 Commentary

#### **Exhibit 6: iBoxx ABF Overall and Single Market Returns**



Source: IHS Markit, part of S&P Global. Data as of Oct. 31, 2023. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Asian markets represented in iBoxx ABF Pan-Asia (USD) performed largely similar to the iBoxx ALBI, retreating 0.88% in October, their third straight month of loss. Performance across local markets was a mixed bag, but losses in most markets outweighed small gains in Singapore (up 0.23%), Hong Kong (up 0.16%) and China (up 0.08%).

Across the yield curve, most markets fared better in the shorter end, while more selling took place in the long end, especially in the 10+ segment. The Philippines 10+ and South Korea 10+ were hit the heaviest, losing 4.79% and 3.03%, respectively.

**Exhibit 7: iBoxx ABF Overall and Single Market Returns** 

| Market        | Viold (9/) | Duration (Vacra) |               | Returns (%) |            |
|---------------|------------|------------------|---------------|-------------|------------|
| Mai Ket       | Yield (%)  | Duration (Years) | Month-to-Date | YTD         | Three-Year |
| Overall (USD) | 4.11       | 6.67             | -0.88         | -2.09       | -8.96      |
| China         | 2.83       | 6.27             | 0.08          | 3.27        | 14.56      |
| Hong Kong     | 4.55       | 3.81             | 0.16          | 1.58        | -7.65      |
| Indonesia     | 7.16       | 5.97             | -1.49         | 4.36        | 19.19      |
| South Korea   | 4.17       | 7.44             | -1.32         | 0.21        | -11.66     |
| Malaysia      | 4.29       | 7.18             | -0.58         | 3.65        | 3.71       |
| Philippines   | 7.05       | 5.10             | -2.20         | 4.16        | -5.17      |
| Singapore     | 3.40       | 7.87             | 0.23          | -0.16       | -11.44     |
| Thailand      | 3.51       | 7.92             | -0.54         | -0.86       | -6.85      |

Source: IHS Markit, part of S&P Global. Data as of Oct. 31, 2023. Overall index performance based on total return in USD. All others based on total return in local currency. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Exhibit 8: iBoxx ABF Returns Attribution - October 2023

| Exhibit of Iboxx Abi Netario Attribution October 2020 |               |                    |                    |  |  |  |
|---|---------------|--------------------|--------------------|--|--|--|
| Market  | FX Return (%) | Accrual Return (%) | Capital Return (%) |  |  |  |
| Overall (USD)   | -0.37         | 0.30               | -0.81              |  |  |  |
| China   | -0.19         | 0.25               | -0.18              |  |  |  |
| Hong Kong   | 0.07          | 0.23               | -0.08              |  |  |  |
| Indonesia   | -2.55         | 0.58               | -2.06              |  |  |  |
| South Korea   | -0.09         | 0.25               | -1.57              |  |  |  |
| Malaysia  | -1.62         | 0.34               | -0.92              |  |  |  |
| Philippines   | -0.26         | 0.48               | -2.69              |  |  |  |
| Singapore   | -0.30         | 0.22               | 0.01               |  |  |  |
| Thailand  | 1.57          | 0.24               | -0.78              |  |  |  |

Source: IHS Markit, part of S&P Global. Data as of Oct. 31, 2023. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

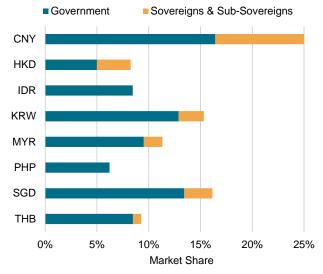
Exhibit 9: iBoxx ABF Returns by Maturity - October 2023

| Market                   | Return (%) |          |          |           |          |  |  |
|--------------------------|------------|----------|----------|-----------|----------|--|--|
| iviai ket                | 1-3 Year   | 3-5 Year | 5-7 Year | 7-10 Year | 10+ Year |  |  |
| Overall (USD)            | -0.10      | -0.45    | -0.63    | -1.17     | -1.89    |  |  |
| Overall (Local Currency) | 0.15       | -0.13    | -0.28    | -0.72     | -1.42    |  |  |
| China                    | 0.08       | 0.07     | 0.13     | -0.01     | 0.12     |  |  |
| Hong Kong                | 0.34       | 0.18     | 0.10     | 0.04      | -0.63    |  |  |
| Indonesia                | -0.42      | -1.75    | -2.23    | -1.87     | -1.41    |  |  |
| South Korea              | 0.08       | -0.61    | -1.17    | -1.79     | -3.03    |  |  |
| Malaysia                 | 0.18       | -0.12    | -0.31    | -0.58     | -1.17    |  |  |
| Philippines              | -0.03      | -0.99    | -1.74    | -2.98     | -4.79    |  |  |
| Singapore                | 0.42       | 0.46     | 0.66     | 0.66      | -0.46    |  |  |
| Thailand                 | 0.21       | 0.06     | -0.09    | -0.23     | -1.50    |  |  |

Source: IHS Markit, part of S&P Global. Data as of Oct. 31, 2023. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

#### October Month-End Rebalance

**Exhibit 10: Market Breakdown and iBoxx ABF Duration Changes** 



| Duration (Years)* |   |  |  |  |
|-------------------|---|--|--|--|
| Oct. 31, 2023     | Nov. 1, 2023  |  |  |  |
| 6.67              | 6.73  |  |  |  |
| 6.27              | 6.31  |  |  |  |
| 3.81              | 3.86  |  |  |  |
| 5.97              | 6.03  |  |  |  |
| 7.44              | 7.57  |  |  |  |
| 7.18              | 7.36  |  |  |  |
| 5.10              | 5.19  |  |  |  |
| 7.87              | 7.94  |  |  |  |
| 7.92              | 7.89  |  |  |  |
|                   | Oct. 31, 2023 6.67 6.27 3.81 5.97 7.44 7.18 5.10 7.87 |  |  |  |

Source: IHS Markit, part of S&P Global. Data as of Oct. 31, 2023 (and Nov. 1, 2023, for duration). Past performance is no guarantee of future results. Chart and table are provided for illustrative purposes.

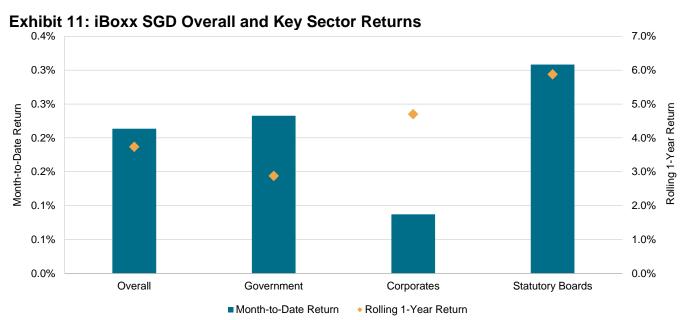
The latest rebalance saw 46 bonds entering and 43 bonds leaving the overall index. The annual weight change for the underlying markets was implemented at the October month-end rebalance as per the <u>iBoxx Asia-Pacific Annual Index Review 2023 Results</u>. The latest weights are reflected in Exhibit 10.

<sup>\*</sup>Semiannual modified duration.

The iBoxx ABF index duration increased by 0.06 years to 6.73 years following the recent rebalance. Most markets (except Thailand) saw a small increase to their duration this month, with the largest increase coming from Malaysia (up 0.18 years). After the index rebalance, Thailand remained the market with the longest duration (7.89 years), while Hong Kong was the least sensitive to interest rates, with a duration of 3.86 years.

# iBoxx SGD

# October 2023 Commentary



Source: IHS Markit, part of S&P Global. Data as of Oct. 31, 2023. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Singapore was one of the bright spots in both the iBoxx ALBI and iBoxx ABF in October. Similarly, the iBoxx SGD—designed to capture the broad SGD market—posted an uptick of 0.21%, contributed to by returns across government, statutory boards and corporates.

Within the corporates segment, financials (up 0.15%) outperformed non-financials (down 0.20%) by 35 bps. Performance across the rating scale was also largely positive, except for a small decline of 0.03% in A rated (or implied-rated) bonds.

This month, the credit spreads of both investment grade (up 14 bps) and high yield (up 24 bps) SGD bonds widened, reaching 131 bps and 423 bps, respectively, signaling a small increase in credit risk in the SGD market.

**Exhibit 12: iBoxx SGD Overall and Key Sector Returns** 

| Market           | Yield (%) | Duration (Years) |               | Returns (%) |            |
|------------------|-----------|------------------|---------------|-------------|------------|
| wai ket          | Heid (76) | Duration (Tears) | Month-to-Date | YTD         | Three-Year |
| Overall          | 3.57      | 6.92             | 0.21          | 0.58        | -8.25      |
| Government       | 3.29      | 7.90             | 0.23          | -1.20       | -10.92     |
| Statutory Boards | 3.92      | 6.07             | 0.31          | 4.06        | -9.61      |
| Corporates       | 4.95      | 3.81             | 0.09          | 3.73        | 2.25       |
| Financials       | 5.02      | 3.52             | 0.15          | 3.50        | 2.50       |
| Non-Financials   | 4.73      | 5.09             | -0.20         | 4.54        | 1.57       |

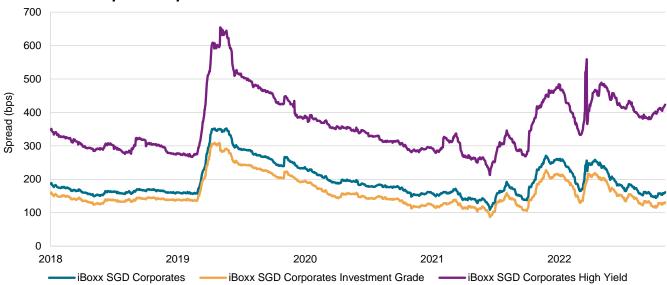
Source: IHS Markit, part of S&P Global. Data as of Oct. 31, 2023. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

**Exhibit 13: iBoxx SGD Rating and Maturity Month-to-Date Performance** 

| Index/Rating               | Overall (%) | 1-3 Years<br>(%) | 3-5 Years<br>(%) | 5-7 Years<br>(%) | 7-10 Years<br>(%) | 10+ Years<br>(%) |
|----------------------------|-------------|------------------|------------------|------------------|-------------------|------------------|
| iBoxx SGD Investment Grade | 0.22        | 0.38             | 0.37             | 0.51             | 0.52              | -0.44            |
| iBoxx SGD AAA              | 0.26        | 0.43             | 0.47             | 0.64             | 0.64              | -0.46            |
| iBoxx SGD AA               | 0.04        | 0.22             | 0.30             | 0.19             | -1.18             | 0.00             |
| iBoxx SGD A                | -0.03       | 0.24             | 0.21             | -0.22            | 0.12              | -0.38            |
| iBoxx SGD BBB              | 0.13        | 0.27             | 0.08             | 0.03             | -0.25             | 1.34             |
| iBoxx SGD High Yield       | 0.09        | -                | -                | -                | -                 | -                |

Source: IHS Markit, part of S&P Global. Data as of Oct. 31, 2023. Index performance based on total return in SGD. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

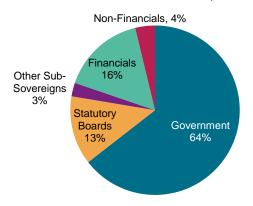
**Exhibit 14: Corporate Spreads** 



Source: IHS Markit, part of S&P Global. Data from Dec. 31, 2018, to Oct. 31, 2023. Spread refers to semiannual spread to benchmark curve in basis points. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

#### October Month-End Rebalance

**Exhibit 15: Sector Breakdown, Duration and Rating Changes** 



| Sector           | Duration (Years)* |              |  |  |
|------------------|-------------------|--------------|--|--|
| Sector           | Oct. 31, 2023     | Nov. 1, 2023 |  |  |
| Overall          | 6.92              | 7.00         |  |  |
| Government       | 7.90              | 7.99         |  |  |
| Corporates       | 6.07              | 6.07         |  |  |
| Statutory Boards | 3.81              | 3.90         |  |  |
| Financials       | 3.52              | 3.61         |  |  |
| Non-Financials   | 5.09              | 5.09         |  |  |
|                  |                   |              |  |  |

Source: IHS Markit, part of S&P Global. Data as of Oct. 31, 2023 (and Nov. 1, 2023, for duration). Past performance is no guarantee of future results. Chart and table are provided for illustrative purposes.

This rebalance, three non-sovereign bonds entered the index, totaling more than SGD 750 million. Meanwhile, five bonds left the index as their expected remaining life dropped below one year, removing close to SGD 1.5 billion of notional.

Exhibit 16: iBoxx SGD Overall - Rating Changes

| Issue                  | Sept. 30, 2023 | Oct. 31, 2023 |
|------------------------|----------------|---------------|
| SMMSP 3.85% 2029-09-10 | BBB*           | BB*           |

<sup>\*</sup>Implied rated bonds.

Source: IHS Markit, part of S&P Global. Data as of Oct. 31, 2023. Table is provided for illustrative purposes.

Additionally, there was one implied bond rating change in the index at the October month-end rebalance.

<sup>\*</sup>Semiannual modified duration.

#### General Disclaimer

© 2023 S&P Dow Jones Indices. All rights reserved. S&P, S&P 500, SPX, SPY, The 500, US500, US 30, S&P 100, S&P COMPOSITE 1500, S&P 400, S&P MIDCAP 400, S&P 600, S&P SMALLCAP 600, S&P GIVI, GLOBAL TITANS, DIVIDEND ARISTOCRATS, Select Sector, S&P MAESTRO, S&P PRISM, S&P STRIDE, GICS, SPIVA, SPDR, INDEXOLOGY, iTraxx, iBoxx, ABX, ADBI, CDX, CMBX, LCDX, MBX, MCDX, PRIMEX, TABX, HHPI, IRXX, I-SYND, SOVX, CRITS, CRITR are registered trademarks of S&P Global, Inc. ("S&P Global") or its affiliates. DOW JONES, DJIA, THE DOW and DOW JONES INDUSTRIAL AVERAGE are trademarks of Dow Jones Trademark Holdings LLC ("Dow Jones"). These trademarks together with others have been licensed to S&P Dow Jones Indices LLC. Redistribution or reproduction in whole or in part are prohibited without written permission of S&P Dow Jones Indices LLC. This document does not constitute an offer of services in jurisdictions where S&P Dow Jones Indices LLC, S&P Global, Dow Jones or their respective affiliates (collectively "S&P Dow Jones Indices") do not have the necessary licenses. Except for certain custom index calculation services, all information provided by S&P Dow Jones Indices is impersonal and not tailored to the needs of any person, entity or group of persons. S&P Dow Jones Indices receives compensation in connection with licensing its indices to third parties and providing custom calculation services. Past performance of an index is not an indication or quarantee of future results.

It is not possible to invest directly in an index. Exposure to an asset class represented by an index may be available through investable instruments based on that index. S&P Dow Jones Indices does not sponsor, endorse, sell, promote or manage any investment fund or other investment vehicle that is offered by third parties and that seeks to provide an investment return based on the performance of any index. S&P Dow Jones Indices makes no assurance that investment products based on the index will accurately track index performance or provide positive investment returns. S&P Dow Jones Indices LLC is not an investment advisor, and S&P Dow Jones Indices makes no representation regarding the advisability of investing in any such investment fund or other investment vehicle. A decision to invest in any such investment fund or other investment vehicle should not be made in reliance on any of the statements set forth in this document. S&P Dow Jones Indices is not an investment adviser, commodity trading advisor, commodity pool operator, broker dealer, fiduciary, promoter" (as defined in the Investment Company Act of 1940, as amended), "expert" as enumerated within 15 U.S.C. § 77k(a) or tax advisor. Inclusion of a security, commodity, crypto currency or other asset within an index is not a recommendation by S&P Dow Jones Indices to buy, sell, or hold such security, commodity, crypto currency or other asset, nor is it considered to be investment advice or commodity trading advice.

These materials have been prepared solely for informational purposes based upon information generally available to the public and from sources believed to be reliable. No content contained in these materials (including index data, ratings, credit-related analyses and data, research, valuations, model, software or other application or output therefrom) or any part thereof ("Content") may be modified, reverse-engineered, reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of S&P Dow Jones Indices. The Content shall not be used for any unlawful or unauthorized purposes. S&P Dow Jones Indices and its third-party data providers and licensors (collectively "S&P Dow Jones Indices Parties") do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Dow Jones Indices Parties are not responsible for any errors or omissions, regardless of the cause, for the results obtained from the use of the Content. THE CONTENT IS PROVIDED ON AN "AS IS" BASIS. S&P DOW JONES INDICES PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Dow Jones Indices Parties be liable to any party for any direct, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs) in connection with any use of the Content even if advised of the possibility of such damages.

S&P Global keeps certain activities of its various divisions and business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain divisions and business units of S&P Global may have information that is not available to other business units. S&P Global has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

In addition, S&P Dow Jones Indices provides a wide range of services to, or relating to, many organizations, including issuers of securities, investment advisers, broker-dealers, investment banks, other financial institutions and financial intermediaries, and accordingly may receive fees or other economic benefits from those organizations, including organizations whose securities or services they may recommend, rate, include in model portfolios, evaluate or otherwise address.