

Index Methodology Guide for the FactSet US-China Electric & Autonomous Vehicles Index™

Version 1.2 – June 06, 2022

Table of Contents

Index Methodology Guide for the FactSet US-China Electric & Autonomous Vehicles Index™	1
Table of Contents	2
Index Introduction and Objective	3
Index Construction	4
Index Maintenance	8
Index Calculation and Data Correction	9
Additional Information.....	9

Index Introduction and Objective

1.1 Index Overview

The FactSet US-China Electric & Autonomous Vehicles Index is an equity benchmark designed to track the performance of U.S. and China companies that develop primarily electric power vehicles, as well as their enabling technologies and automotive components.

The FactSet US-China Electric & Autonomous Vehicles Index is a market capitalization weighted index reconstituted and rebalanced semi-annually in March and September.

The FactSet US-China Electric & Autonomous Vehicles Index is calculated and maintained by Solactive AG – the Calculation Agent – based on a methodology developed by FactSet. It is calculated on a price return and gross total return basis in U.S. Dollar (USD). The Price and Gross Total Return values of the index are calculated on a real-time and an end-of-day basis, Monday to Friday 1:00 a.m. to 10:50p.m. CET (Central European Time). Index values are distributed via various data channels and market data vendors, including the price marketing services of Boerse Stuttgart AG. Index values of may also be obtained from FactSet upon request.

1.2 Inception Date and Base Value

The Index Inception Date was September 21, 2018 with a base value of 100.00. The inception date refers to when the first back-tested index value was calculated. The back test is based on a similar methodology used to calculate the index when it was officially launched on December 15, 2021.

1.3 Index Valuation Days

Index Valuation Days are business days, Monday to Friday.

1.4 Commencement Date

The index commencement date was December 15, 2021. Commencement date refers to when the index was officially launched with continuous and end-of-day calculations.

1.5 Reconstitution and Rebalance Schedule

The index is reconstituted and rebalanced semi-annually after the close of the 3rd Friday of March and September each year (“Reconstitution Day” and “Rebalance Day”).

If any of the existing or new index components is not trading on Reconstitution Day/Rebalance Day due to an exchange holiday, the reconstitution/rebalance is moved to the next business day.

The data used to reconstitute and rebalance the index is as of the close of 1st Friday of March and September (“Selection Day”). Subsequent adjustment to the index composition may be made to account for corporate actions that occur between the Selection Day and the Reconstitution Day or Rebalance Day.

Index Construction

2.1 Constituent Selection and Weighting Schema

1. The securities are primarily listed in one of the following 5 exchanges and domiciled in China or United States:
 - Hong Kong Exchange
 - NASDAQ
 - New York Stock Exchange (includes NYSE American)
 - Shanghai Stock Exchange*
 - Shenzhen Stock Exchange*
2. The securities are common stocks** and ADR.
3. The securities have aggregated revenue of 50% or greater from one or more of the 5 following Electric Vehicles Manufacturing related RBICS Level 6 industries, and they are categorized as Electric Vehicles companies:

RBIC L6 Name
<ul style="list-style-type: none"> • Alternative Energy Car Manufacturers • Autonomous Commercial/Transit Vehicle Production • Autonomous Control Ship Builders • Autonomous Control Truck Production • Autonomous Drone Manufacturers

Moreover, securities with aggregated revenue of 50% or greater from the RBICS Level 6 industries “Conventional Engine Car Manufactures” or “Multi-Type Car Manufactures” are included if they also involved in developing “autonomous” or “battery” vehicles products as captured by Revere Hierarchy, and they are also categorized as Electric Vehicles companies.

* Must also be eligible in the Hong Kong-China Stock Connect Program for buying and selling, for multi-listed securities, the selection order is China Connect > Hong Kong > US

** Preferred securities that exhibit similar characteristics as common stocks with primary difference being voting power are also eligible

4. The securities have aggregated revenue of 40% or greater from one or more of the following 9 RBICS Level 6 industries and are suppliers to the securities identified as Electric Vehicles in Step 3, they are categorized Autonomous Driving Enablers.

RBIC L6 Name
<ul style="list-style-type: none"> • Power Module and Subassembly Electronic Components • General Analog and Mixed Signal Semiconductors • Specialty Analog and Mixed Signal Semiconductors • Diversified Semiconductors • Microprocessor (MPU) Semiconductors • Other Communications Semiconductors • Smart Phone Manufacturing • Web Search Sites and Software • Vehicle Autonomous Control Software

Moreover, securities with aggregated revenue of 50% or greater from the RBICS Level 6 “Video Multimedia Semiconductors” or “Vehicle Autonomous Control Electronics Makers” are also categorized as “Autonomous Driving Enablers.”

5. The securities have aggregated revenue of 5% or greater from the following 6 RBICS Level 6 industries and are also suppliers or partners to companies from the RBICS Focus Level 5 industry “Car Manufacturers,” they are categorized as Electric Vehicles Battery Manufacturers.

RBIC L6 Name
<ul style="list-style-type: none"> • Backup, Emergency and Standby Power Products • Mixed Heavy-Duty and High-End Batteries Makers • Heavy-Duty Industrial Batteries Manufacturing • Traditional Vehicle Batteries Manufacturing • Military Batteries Manufacturing' • Electric Vehicle Batteries Manufacturing

6. The securities have aggregated revenue of 5% or greater from the following 6 RBICS Level 6 industries and also include the keywords of “EV” or “Electric Vehicle” in their Supply Chain Relationships data are categorized as EV Battery Raw Materials

RBIC L6 Name
<ul style="list-style-type: none"> • Other Inorganic Chemical Makers • Other Additive Manufacturing • Lithium Compounds Manufacturing *** • Lithium Ore Mining • Copper Ore Mining • Cobalt Ore Mining

***Exempt from Keyword requirement.

7. The securities have aggregated revenue of 40% or greater from the RBICS Level industry “Fuel Cell Equipment and Technology Providers” and also suppliers to Electric Vehicles securities identified in Step 3, they are categorized as Fuel Cell Providers.

The securities have aggregated revenue of 50% or greater from the following 8 RBICS Level 6 industries, and are suppliers to Electric Vehicles securities identified in Step 3, they are categorized as Electric Vehicle Components Suppliers.

RBIC L6 Name
<ul style="list-style-type: none"> • Powertrain and Chassis Thermal Management Products • Powertrain Manufacturing • Auto Exterior Comfort/Safety/Electronics Products • Auto Interior Comfort/Safety/Electronics Products • Pan-Powertrain and Chassis Manufacturing • Multi-Type Motor Vehicle Parts Manufacturers • Electronic Materials Manufacturing • Multi-Industry-Specific Factory Machinery Makers

8. The securities are classified to the Revere Hierarchy Focus industries “Rideshare and Taxi Services” are categorized as “Ride Hailing”.
9. The securities have aggregated revenue of 5% or greater from the RBICS Level 6 industries “Power Transmission and Distribution Products”, “Electric Vehicle Charging Stations” and “Battery Charging Equipment Manufacturing,” and have “EV”, “electric vehicle” or “smart charge” keywords in their Supply Chain Relationships data are categorized as Electric Vehicles Charging.
10. The securities have a minimum total market capitalization of US\$1 billion or greater, and 3-month ADTV (Average Daily Trading Value) of US\$2 million or greater.
11. Rank securities by their total market capitalization within each of Categories from Step 3 to 9, in descending order, keep all securities in the Electric Vehicles category and the Autonomous Driving Enablers Category, and cull the rest to make the total number of securities greater than 50 but less or equal to 60, ensure each subgroup has at least one security included.
12. Weight constituents by dividing their individual market capitalization to the sum total market capitalization of all constituents.

Securities in any one country shall not exceed 60% of the index weight.

Securities from any one RBICS Focus Level 1 industries shall not exceed 30% of the index weight.

Individual securities are capped at no more than 4% and no less than 0.5% of the index weight. For securities with either (i) LTM Annual Revenues <= \$0 or (ii) Current Ratio < 0.50 (i.e. current assets divided current liabilities), they shall be capped at no more than 0.5% of the index weight.

If the total number of stocks with 4% weight is greater than 12, sequentially reduce each by 0.02%.

Top 10 weighted securities’ weight shall not in aggregate exceed 40% of the index weight.

In addition to the above selection schema, FactSet may at its discretion modify one or more selection criterion to ensure relevant and timely capture of the theme. Whenever possible, any modifications shall be announced 30 days prior to semi-annual Reconstitution Day.

2.2 Index Return Formulas

The Price and Gross Total Return levels of the index are calculated using the following formulas.

$$I_{(t)} = \frac{\sum_{i=1}^n S_{i(t)} \times P_{i(t)} \times FX_{i(t)}}{D_{(t)}}$$

where:

$I_{(t)}$ = Index value on Index Valuation Day (t)

$D_{(t)}$ = Divisor on Index Valuation Day (t)

n = Number of stocks in the index

$P_{i(t)}$ = Closing price of stock (i) on Index Valuation Day (t)

$S_{i(t)}$ = Number of allocated shares of stock (i) on Index Valuation Day (t)

$FX_{i(t)}$ = WM Reuters FX rate published at 4:00pm London time on Index Valuation Day (t) required to convert closing price of stock (i) in index currency, USD

and on Inception Date, where (t) = 0, the initial divisor is calculated as follows:

$$D_{(0)} = \frac{\sum_{i=1}^n S_{i(0)} \times P_{i(0)} \times FX_{i(0)}}{I_{(0)}}$$

where:

$I_{(0)}$ = Price Returns Index value on Index Inception Date

$D_{(0)}$ = Divisor on Index Inception Date

n = Number of stocks in the index on Index Inception Date

$P_{i(0)}$ = Price of stock (i) on Index Inception Date

$S_{i(0)}$ = Number of allocated shares of stock (i) on Index Inception Date

$FX_{i(t)}$ = WM Reuters FX rate published at 4:00pm London time on Index Valuation Day (t) required to convert closing price of stock (i) in index currency, USD.

Allocated shares (“S”) are the number of shares required for each constituent such that all constituents are weighted equally. Allocated shares (“S”) would be adjusted accordingly to account for Corporate Actions.

2.3 Index Divisor Adjustments

From time to time, the index divisor is adjusted to account for corporate actions that could distort index value and continuity using the following formula:

$$D_{(t+1)} = D_{(t)} \times \frac{\sum_{i=1}^n AS_{i(t+1)} \times AP_{i(t+1)} \times FX_{i(t)}}{\sum_{i=1}^n S_{i(t)} \times P_{i(t)} \times FX_{i(t)}}$$

where:

$D_{(t+1)}$ = Divisor for Index Valuation Day (t+1) after CA and rebal adjustment

$D_{(t)}$ = Divisor for Index Valuation Day (t)

$AP_{i(t+1)}$ = Adjusted price of stock (i) calculated for open on Index Valuation Day (t+1) after CA adjustment

$P_{i(t)}$ = Closing price of stock (i) on Index Valuation Day (t)

$S_{i(t)}$ = Number of allocated shares of stock (i) on Index Valuation Day (t)

$AS_{i(t+1)}$ = Adjusted number of allocated shares of stock (i) for open on Index Valuation Day (t+1) after CA adjustment.

Divisor adjustments are generally implemented on the date the corporate action becomes effective, such that for example, the ex-dividend date rather than the payment date is used to time the divisor adjustment.

Find below a detailed calculation for AP, AS, and S in case of corporate actions and rebalancing.

$AP_{i(t)}$ = Adjusted price of stock (i) is determined for the open on Index Valuation Day (t) shall mean:

- If index constituent opens ex-date in respect of the corporate action, then $AP_{i(t)}$ is determined as per Corporate Action Adjustment Section.
- Otherwise

$$AP_{i(t)} = P_{i(t-1)}$$

$S_{i(t)}$ = Number of allocated shares of stock (i) on Index Valuation date (t) is determined as

$$S_{i(t)} = AS_{i(t)}$$

$AS_{i(t)}$ = Adjusted number of allocated shares of stock (i) for open on Index Valuation Day (t) after CA adjustment is determined as:

- If such day opens immediately following the Rebalancing Day (t-1) and if:
 - index constituent opens ex-date in respect to corporate action, then $AS_{i(t)}$ is determined as per Corporate Action Adjustment Section with $S_{i(t-1)}$ replace with:

$$S_{i(t-1)} = \frac{I_{(t-1)} \times Weight_{i(t-1)}}{P_{i(t-1)} \times FX_{i(t-1)}}$$

- index constituent does not opens ex-date in respect to corporate action, then $AS_{i(t)}$ is determined as:

$$AS_{i(t)} = \frac{I_{(t-1)} \times Weight_{i(t-1)}}{P_{i(t-1)} \times FX_{i(t-1)}}$$

- On any other day:

- index constituent opens ex-date in respect to corporate action, then $AS_{i(t)}$ is determined as per Corporate Action Adjustment Section
- Otherwise:

$$AS_{i(t)} = S_{i(t-1)}$$

where $Weight_{i(t-1)}$ is determined as per Section 2.1.

2.4 Corporate Action Adjustments

Special Cash Dividend:

$$AP_{i,t} = P_{i,t-1} - D_{i,t} \times FX_{d,t-1}$$

Where

- t** = Index Valuation Date (t) is ex-date for corporate action.
D_{i,t} = Dividend amount corresponding to stock (i) with ex-date (t).
FX_{d,t-1} = WM Reuters FX rate published at 4:00pm London time fixing on Index Valuation Day (t) required to convert dividend amount in underlying stock currency, USD.

Spin-off Adjustment

If an index constituent (i.e. the parent company) distributes part of its business into a spun-off company, the spun-off company will be added to the Index according to the transaction terms on the ex-date.

The parent company will remain in the Index with unchanged calculation parameters. The spun-off company will remain in the Index until the next ordinary rebalancing.

The spun-off company will be added to the Index with an open price of zero on ex-date.

If the spun-off company does not start to trade on the effective date (i.e. ex-date), a theoretical price for the spun-off company will be implemented (**see the equation below**) as a fixed price until it commences trading, from which time official prices will be used.

$$P_{f(t)} = [P_{i(t-1)} - AP_{i(t)}] \times \text{Share Ratio}_{i(t)} \times \text{FX}_{j,t-1}$$

Where

- P_{i(t-1)}** = Closing price of Parent Company on Index Valuation Date (t-1).
AP_{i(t)} = Open price of Parent Company on Index Valuation Date (t).
P_{f(t)} = Price of Spun-off Company on Index Valuation Date (t).
FX_{j,t-1} = WM Reuters FX rate published at 4:00pm London time fixing on Index Valuation Day (t) required to convert dividend amount in underlying stock currency, USD.

Rights Issue Adjustment

$$AP_{j,t} = \frac{P_{j,t-1} + C_{j,t} \times \text{Share Ratio}_{j,t}}{1 + \text{Share Ratio}_{j,t}}$$

$$AS_{j,t} = S_{j,t-1} \times (1 + \text{Share Ratio}_{j,t})$$

Where

- C_{j,t}** = Official tender price.

Stock Splits Adjustment

$$AP_{j,t} = \frac{P_{j,t-1}}{\text{Share Ratio}_{j,t}}$$

$$AS_{j,t} = S_{j,t-1} \times \text{Share Ratio}_{j,t}$$

Stock distribution

$$AP_{j,t} = P_{j,t-1} \times \frac{1}{1 + \text{Share Ratio}_{j,t}}$$

$$AS_{j,t} = S_{j,t-1} \times (1 + \text{Share Ratio}_{j,t})$$

Index Maintenance

Constituent changes may occur between review periods due to corporate events that disqualify their eligibility for index inclusion. Adjustments to corporate events are described below:

3.1 Corporate Actions – Delisting and Fast Entry

A constituent is removed immediately after being delisted from its primary markets.

3.2 Corporate Actions – Merger/Acquisition and Fast Entry

If a merger or acquisition results in one constituent acquiring another, the acquiring company remains a constituent, and the acquired company is removed. If a non-constituent acquires a constituent, the acquired constituent is removed. If a constituent acquires a non-constituent, the acquiring constituent remains a constituent.

3.3 Corporate Actions – Spin-off

If a constituent spins or splits off a portion of its business, both the spun-off companies and the parent companies (with the highest market value relative to the spun-off companies) will be kept in the index, and be considered for removal from the index at the next Reconstitution or Rebalance Day should they fail to meet the eligibility criteria in Section 2.1.

3.4 Corporate Actions – Bankruptcy

If a constituent is delisted after bankruptcy, it will be removed immediately with a price of 0 from the index.

Index Calculation and Data Correction

4.1 Index Calculation

Price and Gross Total Return values for the FactSet US-China Electric & Autonomous Vehicles Index are calculated by Solactive AG. The Price and Gross Total Return values are calculated on a continuous and end-of-day basis by using the trading price for each component in the index from relevant exchanges and markets. Index values are rounded to 2 decimal places and divisors are rounded to 6 decimal places.

If trading in a stock is suspended prior to the market opening, the stock's adjusted closing price from the previous day will be used in the index calculation until trading commences. If trading in a stock is suspended while the relevant market is open, the official closing price published by relevant exchange for that stock will be used for all subsequent index calculations until trading resumes.

In case of exceptional market conditions disrupting normal closing auction, or causing official closing prices not being available, Solactive and FactSet reserve the right to utilize other prices in the calculation of the official closing level.

4.2 Data Correction

Incorrect index constituent data, corporate action data, or index divisors will be corrected upon detection. If such errors are discovered within five days of occurrence, they will be corrected retroactively on the day of discovery. If discovered after five days, corrective actions will be decided based on the errors' significance and feasibility of a correction.

4.3 Decision Making in Undocumented Events

A FactSet Index Committee consisting of select employees of FactSet Research Systems Inc. is responsible for amending rules as documented in the Index Methodology Guide due to undocumented or extraordinary events.

Additional Information

5.1 Contact Information

FactSet Research Systems Inc.
 One Sansome St. Floor 19
 San Francisco, CA 94104
 Tel.: 1.415.645.0967 Fax: 1.415.645.0901
 Contact: GoIndexing@factset.com

Version	Release Date	Notes
Version 1.0	December 15, 2021	
Version 1.1	January 17, 2022	
Version 1.2	June 06, 2022	