

# **Horizon Kinetics Global Spin-Off Index**

## **Methodology**

**May 2015**

---

## Table of Contents

---

Horizon Kinetics Global Spin-Off Index .....	3
Index Eligibility Criteria .....	3
Unscheduled Constituent Changes .....	5
Base Date and Values.....	6
Index Equation .....	6
Corporate Actions.....	8
Dividends .....	8
Stock Split .....	9
Bonus Issue of Shares .....	10
Rights Issue.....	11
Spin Off .....	12
Delisting .....	13
Acquisition.....	14
Merger.....	15
Bankruptcy .....	16
Index Data.....	167
Index Policy.....	168
Disclaimer .....	169

# Horizon Kinetics Global Spin-Off Index

---

## *Index Summary*

The Horizon Kinetics Global Spin-Off Index (the “Index”) provides a benchmark for investors interested in tracking the performance of listed, publicly-held spin-offs that are domiciled and trade in the US or developed markets of Western Europe and Asia. These securities generally result from large companies divesting small subsidiaries in a way that bypasses traditional Wall Street coverage, often resulting in a short-term valuation disconnect.

In many cases, spin-off transactions may have the potential to unlock shareholder value that has been obscured by a dysfunctional corporate structure. While operating as a unit of a parent or holding company, for instance, a business unit may be subject to revenue targets and other corporate planning that incentivize short-term initiatives at the cost of long-term competitive advantage. These entities may also be saddled with excessive overhead costs from the parent organization, or cede control of their cash flow to the parent. Consequently, the true economics of the underlying business may be shrouded and even suppressed by the operations of larger business segments. A spin-off has the potential to enable management to make more rational long-term operational and financial decisions, and allows investors the freedom to invest in the portion of the business that they believe offers greater investment potential. The use of a spin-off strategy as a predictive index variable, appears to provide relative returns well in excess of the MSCI World Index (“WORLD”), while also providing diversification benefits, as measured by the correlation of their returns with those of the MSCI World Index.

## **Index Eligibility Criteria**

---

***All of the following requirements must be met in order for a company to be eligible for inclusion:***

- The initial distribution of shares of the component security must have been distributed to shareholders of the distributing company (“the Parent Company”) and must not have required that any action be taken by the Parent Company shareholders (i.e., share exchanges and carve-outs/IPO are excluded).
- The Parent Company must have originally distributed at least 80% of the component security’s outstanding shares to shareholders of the parent company.
- Shares of the component security must not have been publicly-traded prior to the distribution.
- Companies that are separated to affect a merger or acquisition of the spun-off entity immediately following the distribution are excluded from the Index.
- Constituents are eligible for inclusion for a period of five years starting from the first reconstitution period (as defined below) following the distribution of shares.

- In limited instances, the primary business of the company (what would typically be considered the Parent Company) was listed as the spun-off company due to tax or other legal considerations. Horizon Kinetics may use its discretion in classifying which is the spun-off entity in these situations.

In addition, the following market capitalization and liquidity requirements must also be satisfied:

***Market Capitalization***

Minimum market capitalization of US\$ 500 million.

***Liquidity***

Minimum average daily value traded for trailing 20 days of US\$ 0.5 million. Shorter periods for average daily value traded will be considered for spin offs that occur within 20 days of the Reconstitution Date at the discretion of Horizon Kinetics.

***Domicile***

The component security must be domiciled and listed in the US or the developed countries in Western Europe and Asia. Country of Domicile is defined as the country where the company is headquartered.

***Type of Security***

The component security must be an operating company and not a closed-end fund or an exchange traded fund (ETF). The component security cannot be a limited partnership.

Horizon Kinetics will, in most cases, use the screening system described herein. However, subjective screening based on fundamental analysis or other factors may be used, if in the opinion of Horizon Kinetics certain components should be included or excluded from the Index.

## ***Reconstitution***

The Index has a quarterly review in March, June, September and December of each year. The Index is reconstituted and rebalanced to equal-weight quarterly. Component changes are made after the close of the last trading day of March, June, September and December, and become effective at the open of the following trading day (“Reconstitution Date”). Constituents are first eligible for inclusion after the close of the securities’ first day of regular-way trading.

## **Unscheduled Constituent Changes**

---

Components of the Index may change before the regularly scheduled review period if a component is deemed ineligible due to a specific corporate action. These corporate actions include, but may not be limited to, bankruptcy, spin off, merger, acquisition or delisting. The guidelines for reviewing a component’s eligibility in these situations are outlined in the “Corporate Actions” section.

## Base Date and Values

---

The **Horizon Kinetics Global Spin-Off Index** has the following base date and values:

Index	Base date	Base value
Horizon Kinetics Global Spin-Off Index	December 31, 2003	1000

## Index Equations

---

The Index value is calculated using the following equation:

$$\text{Index Value} = \frac{\text{Aggregate Market Value of Assigned Shares of All Components}}{\text{Divisor}}$$

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

where:

$I_{(t)}$  = Index value at time (t)

$D_{(t)}$  = Divisor at time (t)

n = Number of components in the index

t = The time the index is calculated

$P_{i(t)}$  = Price of stock (i) at time (t)

$S_{i(t)}$  = Number of assigned shares of stock (i) at time (t)

The initial index divisor is determined using the following equation:

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

where:

$I_{(0)}$  = Base index value as of the base date

$D_{(0)}$  = Initial divisor as of the base date

n = Number of components in the index

$P_{i(0)}$  = Closing price of stock (i) as of the base date

$S_{i(0)}$  = Number of assigned shares of stock (i) as of the base date

Changes to the components of the index and/or specific corporate events, as outlined in the Corporate Actions section, may require adjustments to the Divisor in order to ensure index value remain comparable with prior periods. Divisor changes are made as follows:

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

where:

$D_{(t+1)}$  = Divisor after changes are made to the index

$P_{i(t+1)}$  = Price of each stock after index changes

$S_{i(t+1)}$  = Number of assigned shares of each stock after index changes

# Corporate Actions

---

Corporate actions (such as stock splits, dividends, spin-offs and rights offerings) are applied on the ex-date. The impact and adjustment of various corporate actions are discussed below.

## Dividends

---

### Meaning

---

Dividends are payments made by a corporation to its shareholder members. It is the portion of corporate profits paid out to stockholders. When a corporation earns a profit or surplus, that money can be put to two uses: it can either be re-invested in the business (called retained earnings), or it can be paid to the shareholders as a dividend. Many corporations retain a portion of their earnings and pay the remainder as a dividend.

Dividends must be "declared" (approved) by a company's Board of Directors each time they are paid. For public companies, there are four important dates to remember regarding dividends.

1. **Declaration Date:** Is the day the Board of Directors announces its intention to pay a dividend. On the declaration date, the Board will also announce Date of Record and Payment Date.
2. **In-dividend Date:** Is the last day, which is one trading day before the ex-dividend date, where the stock is said to be cum dividend ('with dividend').
3. **Ex-dividend Date:** Is the day on which all shares bought and sold no longer come attached with the right to be paid the most recently declared dividend. Typically, its 2 trading days before the record date for U.S. securities.
4. **Payment Date:** Is the day when the dividend checks will actually be mailed to the shareholders of a company or credited to brokerage accounts.

### Impact on Index

---

Dividends payments impact the total return index calculation. The price return index calculations as well as the number of shares remain unaffected.

### Adjustment in the Index

---

Normal Dividend payments will be reinvested in the total return index on the ex-dividend date. Special Dividend payments will be reinvested in the respective stock, on the ex-dividend date.



# Stock Split

---

## Meaning

---

All publicly-traded companies have a set number of shares that are outstanding on the stock market. A stock split is a decision by the company's board of directors to increase the number of shares that are outstanding by issuing more shares to current shareholders. For example, in a 2-for-1 stock split, every shareholder with one stock is given an additional share. So, if a company had 10 million shares outstanding before the split, it will have 20 million shares outstanding after a 2-for-1 split.

A stock's price is also affected by a stock split. After a split, the stock price will be reduced since the number of shares outstanding has increased. In the example of a 2-for-1 split, the share price will be halved. Thus, although the number of outstanding shares and the stock price change, the market capitalization remains constant. A stock split is usually done by companies that have seen their share price increase to levels that are either too high or are beyond the price levels of similar companies in their sector. The primary motive is to make shares seem more affordable to small investors even though the underlying value of the company has not changed.

## Impact on Index

---

Stock splits impact the number of shares in both the total and price return indices. There is no impact on the Index divisor<sup>1</sup>.

## Adjustment in the Index

---

Stock splits will be adjusted for in the total and price return indices on the ex- date. The number of shares will increase times the adjustment factor for the split. For example if a company has announced a 2-for-1 stock split, the adjustment factor for the same will be  $2/1=2$ . The number of shares in this case will be multiplied by 2.

<sup>1</sup>-Defined in Index Equation (Page 6)

## Bonus Issue of Shares

---

### Meaning

---

A bonus share is a free share of stock given to current/existing shareholders in a company, based upon the number of shares that the shareholder already owns at the time of announcement of the bonus. While the issue of bonus shares increases the total number of shares issued and owned, it does not increase the value of the company. Although the total number of issued shares increases, the ratio of number of shares held by each shareholder remains constant. New shares are issued to shareholders in proportion to their holdings. For example, the company may give one bonus share for every five shares held.

### Impact on Index

---

Bonus issue of shares impacts the number of shares in both the total and price return indices. There is no impact on the Index divisor

### Adjustment in the Index

---

Bonus issue of shares will be adjusted for in the total and price return indices on the ex- date. The number of shares will increase times the adjustment factor for the bonus issue. For example if a company has announced a 100% bonus, the adjustment factor for the same will be 2 (i.e., one bonus share for every one share held). The number of shares in this case will be multiplied by 2.

## Rights Issue

---

### Meaning

---

Rights issue is an invitation to existing shareholders to purchase additional new shares in the company. More specifically, this type of issue gives existing shareholders securities called "rights", which give the shareholders the right to purchase new shares at a discount to the market price on a stated future date. The company is giving shareholders a chance to increase their exposure to the stock at a discount price. But until the date at which the new shares can be purchased, shareholders may trade the rights on the market the same way they would trade ordinary shares. The rights issued to a shareholder have a value, thus compensating current shareholders for the future dilution of their existing shares' value.

### Impact on Index

---

Rights issue impacts the number of shares in both the total and price return indices. There will be an impact on the divisors in both the total and price return indices.

### Adjustment in the Index

---

Rights issue will be adjusted for in the total and price return indices on the ex- date. However the adjustment for rights issue will take place only when the subscription price is less than the stock price on ex-date. The subscription price is the price at which the company gives its existing shareholders the right to purchase new shares.

## Spin Off

---

### Meaning

---

A spin off occurs when a parent company separates an existing business/division from its remaining operations in order form a new, independent, publicly-traded entity. The separation is typically accomplished via a dividend of shares in the new entity to existing shareholders of the parent company. Shareholders are not required to take any action in order to receive these shares. Once the separation has been completed, shareholders of the parent company will continue to own shares of the (now smaller) parent company, as well as shares of the spin off.

### Impact on Index

---

Spin off impacts both the total and price return indices.

### Adjustment in the Index

---

The adjustment for spin offs is done on a case by case basis. The spin off will typically be treated as a special dividend. Horizon Kinetics will exercise its discretion, based on the guidelines set forth herein, on one of the following options:

- Only the parent company, also a spin off for purposes of this Index, remains in the Index
- The parent company remains in the Index and the spun off entity is deemed ineligible for inclusion
- The parent company is deemed ineligible to remain in the Index, however, the spun off entity is deemed eligible for inclusion
- Neither the parent company nor the spun off entity are eligible to be in the Index

## Delisting

---

### Meaning

---

Delisting refers to the practice of removing the stock listing of a company from a stock exchange, thereby not allowing investors to trade shares of the stock on that exchange. This can occur for many reasons, including instances in which a company no longer satisfies the listing rules of stock exchange, has become a private company after a merger or acquisition, or wants to reduce regulatory reporting complexities and overhead, or if the stock volumes on the exchange from which it wishes to delist are not significant.

### Impact on Index

---

Delisting of a security impacts the divisors in both the total and price return indices.

### Adjustment in the Index

---

A company will be removed from the Index immediately upon being delisted from the exchange or upon announcing that it will be delisted from the exchange.

## Acquisition

---

### Meaning

---

A corporate action in which a company buys most, if not all, of the target company's ownership stakes in order to assume control of the target firm. Acquisitions are often made as part of a company's growth strategy whereby it is more beneficial to take over an existing firm's operations and niche compared to expanding on its own. Acquisitions are often paid in cash, the acquiring company's stock or a combination of both. Acquisitions can be either friendly or hostile.

### Impact on Index

---

Acquisition of a security impacts the divisors in both the total and price return indices.

### Adjustment in the Index

---

In the event a component company is acquired, it will be removed from the Index at the first reconstitution period following the announcement of the transaction. If the acquisition is both announced and completed during the quarter, Horizon Kinetics will exercise its discretion regarding the liquidation of any securities related to the transaction and the Index will be rebalanced according to the Index methodology.

## Merger

---

### Meaning

---

Merger is when two companies combine together to form a new company altogether. In other words, it is the combination of two or more companies, generally by offering the stockholders of one company securities in the acquiring company in exchange for the surrender of their stock.

### Impact on Index

---

Merger impacts the divisors in both the total and price return indices.

### Adjustment in the Index

---

In the event a component company is subject to a merger, it will be removed from the Index at the first reconstitution period following the announcement of the transaction. If the merger is both announced and completed during the quarter, Horizon Kinetics will exercise its discretion regarding the liquidation of any securities related to the transaction and the Index will be rebalanced according to the Index methodology.

# Bankruptcy

---

## Meaning

---

Bankruptcy is a legal proceeding involving a person or business that is unable to repay outstanding debts. The bankruptcy process begins with a petition filed by the debtor (most common) or on behalf of creditors (less common). All of the debtor's assets are measured and evaluated, whereupon the assets are used to repay a portion of outstanding debt. Upon the successful completion of bankruptcy proceedings, the debtor is relieved of the debt obligations incurred prior to filing for bankruptcy.

## Impact on Index

---

Bankruptcy of a security impacts the divisors in both the total and price return indices.

## Adjustment in the Index

---

In the event a company announces Bankruptcy, it will be removed from the Index before the effective date of the corporate action.



## Index Data

---

### Total Return Index

---

Ordinary cash dividends are applied on the ex-date for calculating the total return index. “Special dividends” are those dividends that are outside of the normal payment pattern established historically by the issuing corporation. Whether a dividend is funded from operating earnings or from other sources of cash does not affect the determination of whether it is ordinary or special. Total return index reflects both ordinary and special dividends.

# Index Policy

---

## Index Committee Policy

---

Horizon Kinetics is responsible for setting policy, determining index composition, and administering the indices. Horizon Kinetics reserves the right to use qualitative judgment to include, exclude, adjust, or postpone the inclusion of a stock. Continued index membership of a constituent is not necessarily subject to the guidelines provided herein. A stock may be considered for exclusion by Horizon Kinetics on the basis of corporate governance, accounting policies, lack of transparency and lack of representation, despite meeting all the criteria provided herein.

## Announcements

---

Announcements of additions and deletions of constituents due to various corporate actions mentioned above, during the index trading period will be determined by Horizon Kinetics. Any discretionary decisions will be communicated to the client as far in advance as possible.

## Holiday Schedule

---

The Index is calculated when the U.S. equity markets are open. In situations where an exchange is forced to close early due to unforeseen events, the Index will be calculated based on the closing prices published by the exchange, or if no closing price is available, the last regular trade reported for each stock before the exchange closed.

## Calculation Frequency and Dissemination

---

The Horizon Kinetics Global Spin-Off Index is calculated by Indxx beginning the open of equity markets on April 1, 2014. The value of the Total Return Index will be calculated and disseminated every 15 seconds during the U.S. Market hours to distributors of market data.

## Data Correction

---

Incorrect index data, including, but not limited to, corporate action data, index component data, or index divisors will be corrected upon detection. The necessary corrections and adjustments will be handled on a case-by-case basis depending on the significance of the error and the feasibility of a correction. Announcements regarding these adjustments will be made available to the public on Indxx's website prior to the change becoming effective.

Incorrect intraday index tick data will not be corrected. However, incorrect opening and closing values will be corrected as soon as possible after detection.

# Disclaimer

---

This methodology document and all information contained herein including, without limitation, all text, data, graphs, charts, visuals and theory (collectively, the “information”), were created by and is the sole property of Horizon Kinetics LLC . Redistribution, reproduction and/or photocopying of this document in whole or part is prohibited without written permission. All information in this document is impersonal and not tailored to the needs of any person, entity or group. None of the information constitutes an attempt at an offer to sell (or an attempt of an offer to buy), or a promotion or recommendation of, any security, product, investment vehicle or any trading strategy,. None of the information, indices, models, other products or services contained herein is intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and should not be relied on as such. A decision to invest in any investment fund or other vehicle should not be made based solely on information or statements contained in this document. Prospective investors are advised to make an investment in any such fund or other vehicle only after carefully considering the risks, fees and expenses associated with investing, as detailed in an offering memorandum or similar document that is prepared by or on behalf of the issuer of the investment fund or other vehicle. Historical data, analysis and performance of indices should not be taken as an indication or guarantee of any future performance. Horizon Kinetics does not guarantee the accuracy and/or completeness of any index, any data included herein, or any data from which it is based, and Horizon Kinetics shall have no liability for any errors, omissions, or interruptions therein. All information in these materials is provided “as is” and the content may change without notice.

**PERFORMANCE DISCLOSURE** Certain information herein may include performance of an index for a period of time prior to when the index was officially launched. Such information may reflect hypothetical historical performance and as such may be back-tested. Horizon Kinetics generally employs the same methodology in back-test calculations as it does when the actual index was officially launched. Anyone interested in better understanding the information herein should contact Horizon Kinetics. Past performance is not an indication or guarantee of future results. In situations where back-tested performance of data has been employed, prospective application of the methodology used to construct the information of such index may not result in performance commensurate with the back-test returns shown.

A limitation associated with the hypothetical information of an index is that generally the index calculations are being prepared with the benefit of hindsight. Back-tested data reflects the application of the index methodology and selection of index constituents in hindsight. No hypothetical record can completely account for the impact of financial risk in actual trading. For example, there are numerous factors related to the equities (or fixed income, or commodities) markets in general which cannot be, and have not been accounted for in the preparation of the index information, all of which can affect actual performance.

Furthermore, the Indexes’ returns shown do not represent the results of actual trading of investor assets. The Index calculates the index levels and performance shown or discussed, but does not manage actual assets. Index returns do not reflect payment of any expenses, sales charges or fees an investor would pay to purchase the securities they represent. The imposition of these fees and charges would cause actual and back-tested performance to be lower than the performance shown.

For more information on the index, please email [info@horizonkinetics.com](mailto:info@horizonkinetics.com) .

Learn more at [www.indxx.com](http://www.indxx.com).