Fidelity International Multifactor Index
Fidelity Emerging Markets Multifactor Index

Index Methodology Document

January 2021

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Section 1: Introduction

Fidelity Factor Indexes are designed to provide investors exposure to strategic factors.

Index Definitions and Rationale

1. **Fidelity International Multifactor Index** is designed to reflect the performance of stocks of large and mid-capitalization developed international companies with attractive valuations, high quality profiles, positive momentum signals, lower volatility than the broader market, and low correlation to the U.S. equity market
   - **Rationale:** Provides efficient exposure to the international equity market by combining alpha and risk factors while emphasizing stocks with lower correlation to the U.S.

2. **Fidelity Emerging Markets Multifactor Index** is designed to reflect the performance of stocks of large and mid-capitalization emerging markets companies with attractive valuations, high quality profiles, positive momentum signals, lower volatility than the broader market, and low correlation to the U.S. equity market
   - **Rationale:** Provides efficient exposure to the emerging markets equity market by combining alpha and risk factors while emphasizing stocks with lower correlation to the U.S.

There is no guarantee that a factor-based investing strategy will enhance performance or reduce risk. Before investing, investors should understand how the fund's factor investment strategy may differ from more traditional index funds. Depending on market conditions, funds may underperform compared to funds that seek to track a market-capitalization weighted index.

Index Methodology Summary

Parameter	Fidelity International & Emerging Markets Indexes	
Investment Universe	Largest 1000 developed international stocks based on float-adjusted market cap*	• Fidelity International Multifactor Index
	Largest 1000 emerging markets stocks based on float-adjusted market cap*	• Fidelity Emerging Markets Multifactor Index
Sector Weights	25% reallocation to least correlated sectors	
Portfolio Construction	1. Calculate composite score based on targeted factors 2. Select highest-ranked stocks within each sector and country/super region by score 3. Assign overweight to sectors least correlated with the U.S. market 4. Assign equal active weights (i.e., all stocks overweighted by the same amount)	
Rebalancing	Semi-annual; turnover constraints are applied at each rebalance	

* Based on full list of international developed stocks that meet liquidity and investability constraints; process detailed in Section 2.

Section 2: Investment Universe

Developed International Investment Universe

Constructing the international index begins with selecting the largest 1,000 developed international stocks based on market cap and certain liquidity and investability requirements. These largest 1,000 securities are the eligible investment universe for the Fidelity International Multifactor Index. These securities are utilized to determine the weights of the broader Developed International Equity market (Developed International Equity market).

Securities Excluded:

1. Remove any stocks whose Country is not defined by S&P as Developed International; also remove stocks domiciled in South Korea and the United States

2. Remove any stocks whose security type is not set to common stock. Also remove any stocks that are not the parent entity where there is a parent entity listed in the country/region of domicile. Should there be no parent entity, but multiple child entities listed in the country/region of domicile, the child entity with the highest ADV will be included.

3. Remove any remaining securities that are:
    a. Limited Partnerships
    b. BDCs
    c. ADRs
    d. Closed End Funds
    e. UITs
    f. Mutual Funds

Data Availability Screens:
1. Include only stocks with prices, market caps, and trading volumes greater than zero

Liquidity / Investability Screens:
1. Exclude all stocks in the bottom quintile of securities based on days to trade $10 million
2. Exclude all stocks with less than 15% free float market cap

Sanctions
1. Fidelity Product Services LLC will exclude, as necessary, any security currently under sanction/with broad based government-imposed trading restrictions. These securities will be evaluated on a case-by-case basis by the Index Committee.

Top 1000 Selection: Sort the remaining stocks by free-float market cap. The market cap of all share classes is combined into a single value for the stock. The largest 1000 stocks comprise the eligible starting universe. Weights for constituents and sectors in the Developed International Equity market are also determined using combined free-float market cap.

Emerging Markets Universe

Constructing the emerging market index begins with selecting the largest 1,000 emerging markets stocks based on market cap and certain liquidity and investability requirements. These largest 1,000 securities are the eligible investment universe for the Fidelity Emerging Market Index. These securities are utilized to determine the weights of the broader Emerging Markets Equity market (Emerging Markets Equity market).

Securities Excluded

1. Remove any stocks whose Country is not defined by S&P as Emerging Markets; also add stocks domiciled in South Korea

2. Remove any stocks whose security type is not set to common stock. Also remove any stocks that are not the parent entity where there is a parent entity listed in the country/region of domicile. Should there be no parent entity, but multiple child entities listed in the country/region of domicile, the child entity with the highest ADV will be included.

3. Remove any remaining stocks that are:
    a. Limited Partnerships
    b. BDCs
    c. Closed End Funds
    d. UITs
    e. Mutual Funds

Data Availability Screens

1. Include only stocks with prices, market caps, and trading volumes greater than zero

Liquidity / Investability Screens

1. Exclude all stocks in the bottom quintile of securities based on days to trade $10 million
2. Exclude all stocks with less than 15% free float market cap

Sanctions
1. Fidelity Product Services LLC will exclude, as necessary, any security currently under sanction/with broad based government-imposed trading restrictions. These securities will be evaluated on a case-by-case basis by the Index Committee.

Top 1000 Selection: Sort the remaining stocks by free float-adjusted market cap. The market cap of all share classes is combined into a single value for the stock. The largest 1000 stocks by full market capitalization comprise the investment universe, and their free float-adjusted constituent and sector weights are utilized to define the broad emerging markets equity market.

Section 3: Index Construction

Fidelity International Multifactor Index

Calculating Composite Factor Score

To determine the level of exposure each stock has to the targeted factors, a composite score is calculated. The composite score is a weighted-average score based on multiple measures of four factors. Composite scores are calculated separately within each industry group and then combined for each sector and country intersection group. Stocks are identified for inclusion in the index based on their composite factor score.

Characteristics of Fidelity International Multifactor Index

International Index provides investors with efficient exposure to the developed international market based on the following factors:

Factor	Weight	Definition
VALUE		
Free Cash Flow Yield*	**25%**	Free cash flow per share divided by the share price
EBITDA to Enterprise Value*	**25%**	Earnings before interest, tax, depreciation, and amortization divided by enterprise value
Tangible Book Value to Price*	**25%**	Company's total book value less the value of any intangible assets per share over share price
Earnings Over Next Twelve Months to Price*	**25%**	Based on consensus estimates of earnings per share over share price
QUALITY		
Free Cash Flow Margin*	**33%**	Profitability measure that indicates how efficient a company is at converting sales to cash, gauging whether or not the company has higher earnings quality
Return on Invested Capital*	**33%**	Provides an important measure of profitability relative to the capital invested, capturing how much profit a company generates with the assets equity and debtholders have committed, and therefore accounting for leverage
Free Cash Flow Stability*	**33%**	Measures consistency of a company's ability to generate positive free cash flow
MOMENTUM		
12-month Return Minus 1-month Return	**50%**	Cumulative twelve month total return minus last month's total return
Volatility-adjusted 12-month Return Minus 1-month Return	**50%**	Cumulative twelve month total return divided by monthly volatility minus last total month's return
LOW VOLATILITY		
5-yr Standard Deviation of Price Returns	**33%**	Accounts explicitly for the trailing long-term price volatility of each stock, putting more weight on companies with more stable returns (favor stocks with lower standard deviation of returns)
5-yr Beta	**33%**	Measures a stock's sensitivity to market movements, placing more emphasis on stocks that perform better when the market declines (favor stocks with lower beta)
5-yr Standard Deviation of EPS	**33%**	Adds a measure of financial stability by accounting for the volatility of a company's earnings, instead of evaluating only price volatility (favor stocks with lower standard deviation of EPS)

*Composite factor score for stocks in the Banks industry group determined using alternative weighting for the value and quality factors:

Factor	Weight	Definition
VALUE		
Tangible Book Value to Price	**50%**	Company's total book value less the value of any intangible assets per share over share price
Earnings Over Next Twelve Months to Price	**50%**	Based on consensus estimates of earnings per share over share price
QUALITY		
Return on Equity	**50%**	Net income over shareholder's equity
Debt to Assets	**50%**	Total debt divided by total assets; Metric uses -2 for its Z-score for the highest quintile of securities based on Debt to Assets and 0 for all other securities (favor stocks with lower Debt to Assets)

Each of the four super factors (Value, Quality, Momentum, and Low Volatility) are weighted equally.

Constructing the Index

Index construction is an iterative process of combining the composite factor score, security selection and security weighting.

The process targets the selection of approximately 200 stocks.

Within each sector and country intersection group, securities are then selected based on the attractiveness of their composite score. The number of stocks selected is determined by the aggregate weight of each sector and country intersection group in the Developed International investment universe as follows:

- Create groups by intersecting country and sector.
- If the number of stocks that pay a dividend in any sector and country group is less than 10, those stocks are reassigned to a sector and super region group (super region mapping schedule detailed below). If the number of stocks assigned to a sector and super region group are less than 10, those stocks are reassigned to a new super region called "other." This ensures that all groups have an adequate number of stocks for selection.
- Create final groups using country/super region and sector intersection where "other" is included as a country/super region.
- The number of stocks selected within each group is equal to its weight in the investment universe, with a minimum value of 1 (i.e., if the weight is <1%, 1 security is selected).

Country and sector groups are created using the following codes:

Region	Super Region Name
North America	Americas
South America	Americas
Asia	Greater Asia
Pacific	Greater Asia
East Europe	Greater Europe
West Europe	Greater Europe
Africa	Greater Europe
Mid East	Greater Europe

Other	Other

If this results in a country/super region and sector group having one stock, that stock will not receive a composite score, and the group weight will be zero. The market weight of this country and sector group will be redistributed proportionately across the other stocks held in the portfolio.

At each rebalance, determine the current weight of all holdings in the portfolio. Rank all stocks in the universe by the most current composite score from most attractive to least attractive. Start removing the lowest ranked stocks that are in the current portfolio until the weight removed reaches a turnover threshold of 20%. For each name removed, replace it with the highest ranking stock by current composite score that is not already owned.

Within each sector and country/super region intersection group, each stock is weighted based on its market cap weight in the broader Developed International Equity market plus an overweight adjustment. The overweight adjustment applied is equal for all constituents within that intersection group. The purpose of this "equal active" weighting approach is to reduce the potential for concentration in certain stocks based solely on market cap. If necessary, rescale the final portfolio to 100%.

In order to emphasize a lower correlation to the U.S. market, the sectors are weighted relative to the broader developed international equity market depending on the correlation characteristics of the sector. The five sectors that are least correlated to the S&P 500 are overweighted by 5% at the expense of the six sectors that are most correlated to the S&P 500. The purpose is to accommodate only moderate differences in sector exposure between the index and the broad market, while emphasizing sectors that have lower correlations to the U.S. market.

Correlation Factor	Weight	Definition
5-Year Correlation of Total Returns to S&P 500	**100%**	A statistical measure that calculates the strength of the relationship between the relative movements of the sectors' total returns and the S&P 500's total returns

Fidelity Emerging Markets Multifactor Index

Calculating Composite Factor Score

To determine the level of exposure each stock has to the targeted factors, a composite score is calculated. The composite score is a weighted-average score based on multiple measures of four factors. Composite scores are calculated separately within each industry group and then combined for each sector and country intersection group. Stocks are identified for inclusion in the index based on their composite factor score.

Characteristics of Fidelity Emerging Markets Multifactor Index

The Emerging Markets Index provides investors with efficient exposure to the emerging markets based on the following factors:

Factor	Weight	Definition
VALUE		
Free Cash Flow Yield*	**25%**	Free cash flow per share divided by the share price
EBITDA to Enterprise Value*	**25%**	Earnings before interest, tax, depreciation, and amortization divided by enterprise value
Tangible Book Value to Price*	**25%**	Company's total book value less the value of any intangible assets per share over share price
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Each of the four super factors (Value, Quality, Momentum, and Low Volatility) are weighted equally.

Constructing the Index

Index construction is an iterative process of combining the composite factor score, security selection and security weighting.

The process targets the selection of approximately 200 stocks.

Within each sector and country intersection group, securities are then selected based on the attractiveness of their composite score. The number of stocks selected is determined by the aggregate weight of each sector and country intersection group in the Emerging Markets Equity investment universe as follows:

- Create groups by intersecting country and sector.
- If the number of stocks that pay a dividend in any sector and country group is less than 10, those stocks are reassigned to a sector and super region group (super region mapping schedule detailed below). If the number of stocks assigned to a sector and super region group are less than 10, those stocks are reassigned to a new super region called "other." This ensures that all groups have an adequate number of stocks for selection.
- Create final groups using country/super region and sector intersection where "other" is included as a country/super region.
- The number of stocks selected within each group is equal to its weight in the investment universe, with a minimum value of 1 (i.e., if the weight is <1%, 1 security is selected).

Country and sector groups are created using the following codes:

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West Europe	Greater Europe
Africa	Greater Europe
Mid East	Greater Europe

Other	Other

If this results in a country/super region and sector group having one stock, that stock will not receive a composite score, and the group weight will be zero. The market weight of this country and sector group will be redistributed proportionately across the other stocks held in the portfolio.

Within each sector and country/super region intersection group, each stock is weighted based on its market cap weight in the broader Emerging Markets Equity universe plus an overweight adjustment. The overweight adjustment applied is equal for all constituents within that intersection group. The purpose of this "equal active" weighting approach is to reduce the potential for concentration in certain stocks based solely on market cap. If necessary, rescale the final portfolio to 100%.

At each rebalance, determine the current weight of all holdings in the portfolio. Rank all stocks in the universe by the most current composite score from most attractive to least attractive. Start removing the lowest ranked stocks that are in the current portfolio until the weight removed reaches a turnover threshold of 15%. For each name removed, replace it with the highest ranking stock by current composite score that is not already owned.

In order to emphasize a lower correlation to the U.S. market, the sectors are weighted relative to the broader developed international equity market depending on the correlation characteristics of the sector. The five sectors that are least correlated to the S&P 500 are overweighted by 5% at the expense of the six sectors that are most correlated to the S&P 500. The purpose is to accommodate only moderate differences in sector exposure between the index and the broad market, while emphasizing sectors that have lower correlations to the U.S. market.

Begin with the sector neutral portfolio, as noted above. Compute the sector-level weighted average correlation for each portfolio sector, based on the factor below. Sort all sectors by their correlation score and divide them into the top half and bottom half groups (if there is an uneven number of sectors, the extra one is included in the bottom half).

Correlation Factor	Weight	Definition
5-Year Correlation of Total Returns to S&P 500	**100%**	A statistical measure that calculates the strength of the relationship between the relative movements of the sectors' total returns and the S&P 500's total returns

Section 4: Index Maintenance

Frequency of Rebalance

The Fidelity International Multifactor Index and the Fidelity Emerging Markets Multifactor Index are rebalanced semi-annually on the 3rd Friday of February and August.

Proformas will be generated starting 8 days prior to the rebalance date, based on data from 10 business days prior to the scheduled rebalance.

REBALANCE SCHEDULE DETAILS	
Fundamental Data Captured	10 days prior to the rebalance date
Pro Forma Begins	8 days prior to the rebalance date
Rebalance Effective Date	Third Friday of the rebalance month effective at next day market open

Ongoing Maintenance

The index is also reviewed on an ongoing basis to account for corporate events such as mergers, takeovers, delistings, group changes, suspensions, spin-offs/demergers or bankruptcies. Changes to index composition and related weight adjustments are made as soon as they are effective. Corporate actions will be treated as follows:

STOCK EVENT TYPE	SPDJI CORPORATE ACTION TREATMENT	DIVISOR CHANGE
Stock Forward/Reverse Split	Market cap neutral event. Shares change offset by price adjustment in the morning.	No
Investible Weight Factor (IWF) Change	IWF increase/decrease has no impact on index shares as the Additional Weight Factor (AWF) will adjust to offset the IWF change.	No
Share Issuance	Shares outstanding increase/decrease has no impact on index shares as the AWF will adjust to offset the shares outstanding change.	No
Standard rights treatment (market cap neutral) - default	If the rights are in the money, the spot price of the underlying security will be adjusted after market close of the day prior to the exDate and the index shares of the underlying security will adjust to offset the price adjustment thus making the event a market cap neutral event.	No
Special cash dividend (standard treatment)	The spot price of the underlying security will be adjusted after market close of the day prior to the exDate.	Yes
Delisting (due to bankruptcy or cancellation of listing)	The delisted security will be deleted from the index (at either the last traded price or a zero price).	Yes
Spin-off (Price Adjustment)	In the event that SPDJI applies the event as a non-ZPSO event, the spun-off company is added to the index with respect to spinoff ratio. The spot price of the underlying security is adjusted after market close of the day prior to the exDate by the closing spot price of the spunoff company multiplied by the spinoff ratio, thus making it a market cap neutral event. The divisor will not be adjusted.	No
M&A (Cash acquisition)	The acquired company is deleted from the index.	Yes
M&A (Stock acquisition, cash and/or stock acquisition)	The acquired company is deleted from the index. The index shares of the acquirer will not be adjusted.	Yes
Sanctions	S&P DJI reviews sanctions on a case-by-case basis. The sanctioned company will be removed as necessary from the index with approval from the Fidelity Product Services LLC Index Committee	Yes

Section 5: Index Calculations

The index is calculated by means of the divisor methodology. The index value is simply the index market value divided by the index divisor:

$$Index\ Value = \frac{Index\ Market\ Value}{Index\ Divisor}$$

$$Index\ Market\ Value = \sum_{i=1}^{N}(Index\ Shares)_i * (Price)_i$$

In order to maintain basket series continuity, it is also necessary to adjust the divisor at the rebalancing.

$$(Index\ Value)_{before\ rebalancing} = (Index\ Value)_{after\ rebalancing}$$

Therefore,

$$(Divisor)_{after\ rebalancing} = \frac{(Index\ Market\ Value)_{after\ rebalancing}}{(Index\ Value)_{before\ rebalancing}}$$

Index History

Index history will be calculated for daily values and month end holdings going back to 12/31/1995. Base value will be 100.00 starting as of 12/31/1995. The 4 PM WM London fixed rate will be used for foreign exchange valuation.

Data Distribution

Index data is supplied by S&P Dow Jones Custom Indices and index levels are made available through custom hosted websites.

- http://www.customindices.spindices.com/custom-index-calculations/fidelity/all

Index levels and holdings are also being made available to the following investment data providers:
- Bloomberg
  - Fidelity International Multifactor Index PR (FIDINTFP)
  - Fidelity International Multifactor Index TR (FIDINTFT)
  - Fidelity International Multifactor Index NR (FIDINTFN)

  - Fidelity Emerging Markets Multifactor Index PR (FIDEMTFP)
  - Fidelity Emerging Markets Multifactor Index TR (FIDEMTFT)
  - Fidelity Emerging Markets Multifactor Index NR (FIDEMTFN)

- Morningstar

Section 6: Index Governance

Index Sponsor and Index Calculation Agent

The index sponsor is Fidelity Product Services LLC (FPS). FPS has appointed S&P Dow Jones as Index Calculation Agent to calculate and publish the indexes in accordance with this methodology document. The index sponsor may appoint an alternative Index Calculation Agent at any time.

Index Committee

The index is maintained by Fidelity Product Services LLC Index Committee. The Index Committee is responsible for reviewing the design and composition of the indexes. The Committee meets periodically to review market conditions and index performance, or on an as-needed basis to address major market developments. In addition, the Committee reserves the right to exercise its discretion in making decisions with respect to Index Policies or actions.

Fidelity Product Services LLC considers information about changes to its indexes and related matters to be potentially market moving and material. Therefore, all Index Committee discussions are confidential.

Index Policy

Announcements: Announcements regarding changes to any of the indexes will be made publicly available prior to the effective date of the change. All announcements will be published on
https://research2.fidelity.com/pi/FidelityIndex/RebalanceSchedules

Index Holiday Schedule: Index schedule will follow the NYSE holiday schedule

Market Disruption: In situations where calculation of an index may not be possible under certain circumstances, including market disruptions, systems failures, weather conditions, acts of terrorism or any other event that is beyond the reasonable control of the Index Sponsor and/or Index Calculation Agent, the Index Calculation Agent will calculate the closing price of the indexes based on:
  (1) The closing prices published by the exchange, or
  (2) If no closing price is available, the last regular trade reported for each security before the exchange closed

If an exchange fails to open due to unforeseen circumstances, the Index Calculation Agent will treat the closures as a standard market holiday. The index will use the prior day's closing prices and shift any corporate actions to the following business day. If all exchanges fail to open or in other extreme circumstances, the Index Calculation Agent may determine not to publish the indexes for that day.

Disclaimers

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