

MSCI ACWI EMERGING MARKET CONSUMER GROWTH INDEX METHODOLOGY

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1 INTRODUCTION

The MSCI ACWI Emerging Market Consumer Growth Index (the “Index”) aims to reflect the performance of consumer oriented companies from the MSCI ACWI Index¹ that derive high or growing revenues from emerging markets (herein ‘EMs’), while satisfying investability and diversification criteria.

¹The MSCI ACWI Index is a global equity index consisting of developed and emerging market countries across the large and mid cap size-segments. For more information, please visit MSCI’s web site at <https://www.msci.com/index-methodology>.

2 INDEX CONSTRUCTION METHODOLOGY

2.1 ELIGIBLE UNIVERSE:

The eligible universe of the Index is defined based on the Global Industry Classification Standard (GICS®) and includes:

- All constituents of MSCI ACWI classified under the Consumer Staples or Consumer Discretionary Sectors
- All Constituents of MSCI ACWI classified under the Health Care, Industrials, Information Technology or Telecommunication Services sectors that derive at least 60% of their revenues from consumer oriented products and services. These revenues are estimated from the companies' annual accounts and other public sources, through a process described in Appendix I.

2.2 SECURITY SELECTION:

All securities from the eligible universe that meet either of the following criteria are included in the Index:

- Companies that derive at least 50% of their revenues from EMs, or
- Companies that derive at least 25% of their revenues from EMs and have EM revenue compound annual growth rate (CAGR) of at least 10% over the previous 3 years.

The details of determining the economic exposure of a company to EMs (EM exposure) and EM revenue CAGR are set forth in Appendix II.

2.3 WEIGHTING SCHEME:

The securities eligible for inclusion in the Index are weighted by the product of their market capitalization and EM exposure. The issuer weight is capped at 5%.

3 MAINTAINING THE MSCI ACWI EMERGING MARKET CONSUMER GROWTH INDEX

3.1 ANNUAL INDEX REVIEW

The Index is rebalanced annually in May, coinciding with the May Semi-Annual Index Review of the MSCI Global Investable Market Indexes. The pro forma MSCI ACWI Emerging Market Consumer Growth Index is in general announced nine business days before the effective date.

All constituents of the pro forma MSCI ACWI that are not currently a part of the MSCI ACWI Emerging Market Consumer Growth Index are evaluated for inclusion based on the rules described in Section 2. Existing constituents of the current MSCI ACWI Emerging Market Consumer Growth Index will continue to remain in the Index as long as they satisfy the eligible universe criteria set forth in Section 2.1, and also satisfy the following security selection criteria:

- Derive at least 50% of their revenues from EMs, or
- Derive at least 25% of their revenues from EMs and have EM revenue compound annual growth rate (CAGR) of at least 7.5% over the previous 3 years.

3.2 QUARTERLY INDEX REVIEWS

Additions to MSCI ACWI at the November Semi-Annual Index Review and the February and August Quarterly Index Reviews are only considered for inclusion in the MSCI ACWI Emerging Market Consumer Growth Index at the next Annual Index Review.

Deletions from MSCI ACWI at the November Semi-Annual Index Review and the February and August Quarterly Index Reviews are simultaneously deleted from the MSCI ACWI Emerging Market Consumer Growth Index.

3.3 ONGOING EVENT RELATED CHANGES

The general treatment of corporate events in the MSCI ACWI Emerging Market Consumer Growth Indexes aims to minimize turnover outside of Index Reviews. The methodology aims to appropriately represent an investor's participation in an event based on relevant deal terms and pre-event weighting of the index constituents that are involved. Further, changes in index market capitalization that occur as a result of corporate event implementation will be offset by a corresponding change in the Variable Weighting Factor (VWF) of the constituent.

Additionally, if the frequency of Index Reviews in the Parent Index is greater than the frequency of Index Reviews in the MSCI ACWI Emerging Market Consumer Growth Index, the changes made to the Parent Index during intermediate Index Reviews will be neutralized in the MSCI ACWI Emerging Market Consumer Growth Index.

The following section briefly describes the treatment of common corporate events within the MSCI ACWI Emerging Market Consumer Growth Indexes.

No new securities will be added (except where noted below) to the Index between Index Reviews. Parent Index deletions will be reflected simultaneously.

EVENT TYPE	EVENT DETAILS
Constituent Changes	A new security added to the parent index (such as IPO and other early inclusions) will not be added to the index.
Spin-Offs	All securities created as a result of the spin-off of an existing Index constituent will be added to the Index at the time of event implementation. Reevaluation for continued inclusion in the Index will occur at the subsequent Index Review.
Merger/Acquisition	For Mergers and Acquisitions, the acquirer's post event weight will account for the proportionate amount of shares involved in deal consideration, while cash proceeds will be invested across the Index. If an existing Index constituent is acquired by a non-Index constituent, the existing constituent will be deleted from the Index and the acquiring non-constituent will not be added to the Index.
Changes in Security Characteristics	A security will continue to be an Index constituent if there are changes in characteristics (country, sector, size segment, etc.) Reevaluation for continued

inclusion in the Index will occur at the subsequent Index Review.

Further detail and illustration regarding specific treatment of corporate events relevant to this Index can be found in the MSCI Corporate Events Methodology book under the sections detailing the treatment of events in Capped Weighted and Non-Market Capitalization Weighted indexes.

The MSCI Corporate Events methodology book is available at:
<https://www.msci.com/index-methodology>

APPENDIX I: ESTIMATION OF CONSUMER EXPOSURE OF COMPANIES

The proportion of revenues of a company derived from consumer oriented products and services (consumer exposure) is estimated from the companies' annual accounts and other public sources. Various aspects of the estimation process are described below.

DEFINITION OF CONSUMER ORIENTED PRODUCTS AND SERVICES

The definition of consumer oriented products and services is based on the personal consumption expenditure (PCE), a component statistic for consumption in the GDP, collected by the Bureau of Economic Analysis (BEA). The categories included in the PCE are reproduced below²:

- *Durable goods: motor vehicles and parts, furnishings and durable household equipment, recreational goods and vehicles, and other durable goods.*
- *Nondurable goods: food and beverages purchased for off-premises consumption, clothing and footwear, gasoline and other energy goods, and other nondurable goods.*
- *Services: housing and utilities, health care, transportation services, recreation services, food services and accommodations, financial services and insurance and other services.*

COMPANY LEVEL DATA USED FOR DETERMINING CONSUMER EXPOSURE

The following data points are collected at a company level:

- The company's GICS® sub-industry classification
- Product segment information from company annual reports and vendor databases (segment name and revenues)
- A summary description of the company's businesses from public sources
- Any additional information about the company's business from public sources³

² Source: Bureau of Economic Analysis National Income and Product Accounts Handbook *Chapter 5: Personal Consumption Expenditures*. <https://www.bea.gov/national/pdf/NIPAhandbookch5.pdf> (Pages 4-5). Pages 11-30, for example lists the components underlying the 3 categories, and includes items such as Air transportation, Motor vehicle services (Parking fees and tolls).

³ For example, some vendors associate a company's product segment with a specific SIC (Standard Industry Classification) description for products and services, used by official agencies within the US government. These descriptions provide additional information on the nature of the segment.

ASSIGNMENT OF CONSUMER EXPOSURE MULTIPLIERS

Each of the product segments of the company is assigned a consumer exposure multiplier of 0, 0.5 or 1 based on the following criteria:

- If the company's GICS sub-industry, segment name, business summary, and any additional information considered together convey a non-consumer orientation, the consumer exposure multiplier is assigned as 0.
- If the combination described above conveys a consumer orientation, the consumer exposure multiplier is assigned as 1.
- If the combination conveys both a consumer and a business orientation, the consumer exposure multiplier is assigned as 0.5.

Lastly, the consumer revenues of a company are the sum-product of consumer exposure multipliers and segment revenues. The consumer exposure (%) is the consumer revenues divided by the total segment revenues. For the purposes of computing consumer exposure, only revenues from product segments revenues are considered, and any non-product segments (such as Miscellaneous, corporate center, eliminations and other) are ignored from the computation.

Illustrations:

1. Johnson & Johnson (GICS Sub-industry: Pharmaceuticals):

Business description: Johnson & Johnson is a holding company. The Company is engaged in the research and development, manufacture and sale of a broad range of products in the health care field. The business of Johnson & Johnson is conducted by more than 275 operating companies located in 60 countries, including the United States, which sell products in virtually all countries throughout the world. In March 2013, Johnson & Johnson's Cordis Corporation announced the acquisition of Flexible Stenting Solutions, Inc. In June 2013, Johnson & Johnson announced the opening of the Johnson & Johnson Innovation center in Boston. In August 2013, Johnson & Johnson announced it had completed its acquisition of Aragon Pharmaceuticals, Inc., a pharmaceutical discovery and development company focused on drugs to treat hormonally driven cancers.

Segment Information (Dec 2013)

Segment name	Segment Sales (\$ bn)	Consumer exposure multiplier	Consumer Sales (\$ bn)
Pharmaceutical	28.1	1	28.1
Medical Devices & Diagnostics	28.5	0	0.0
Consumer	14.7	1	14.7
Total	71.3		42.8
Consumer Exposure (%)	60.0		

Additional information (extracted from Dec 2013 annual report)

- *The Pharmaceutical segment includes products in the following areas: anti-infective, antipsychotic, contraceptive, gastrointestinal, hematology, immunology, infectious diseases, neurology, oncology, pain management, thrombosis and vaccines. These products are distributed directly to retailers, wholesalers and health care professionals for prescription use.*
- *The Medical Devices and Diagnostics segment includes a broad range of products distributed to wholesalers, hospitals and retailers, used principally in the professional fields by physicians, nurses, hospitals and clinics.*
- *The Consumer segment includes a broad range of products used in the baby care, skin care, oral care, wound care and women's health fields, as well as nutritional and over-the-counter pharmaceutical products and wellness and prevention platforms. These products are marketed to the general public and sold both to retail outlets and distributors throughout the world.*

2. Aditya Birla Nuvo (GICS Sub-industry: Industrial Conglomerates)

Business Description: Aditya Birla Nuvo Limited is an India-based diversified conglomerate. The Company operates in Financial Services, Fashion & Lifestyle, Telecom, IT-ITeS and Manufacturing. Financial Services provides life insurance, asset management, Non-Bank Financial Corporation (NBFC), private equity, broking, wealth management and general insurance advisory businesses. Fashion & Lifestyle segment is engaged in branded apparels and accessories, and textiles. IT-ITeS segment is engaged in business process outsourcing services and software services. Manufacturing includes Agri-business, Carbon Black, Insulators and Rayon Yarn.

Segment Information (Mar 2013)

Segment name	Segment sales (INR bn)	Additional information*	Consumer exposure multiplier	Consumer sales (INR bn)
Telecom	56.6	Telephone Communications, Except Radiotelephone	1	56.6
Life Insurance	50.4	Life Insurance	1	50.4
Fashion & Lifestyle	38.0	Broad woven Fabric Mills, Manmade Fiber and Silk	1	38.0
Agri-business	29.2	chemical and fertilizer mineral mining	0	0.0
IT-ITES	24.2	Information Retrieval Services	0	0.0
Carbon Black	20.4	Carbon Black	0	0.0
Other Financial Services	12.5	Asset management, Wealth management, Private equity, NBFC and broking	0.5	6.2
Textiles	11.3	Textile Goods, NEC	1	11.3
Rayon	7.8	Cellulosic Manmade Fibers	0	0.0
Insulators	4.5		0	0.0
Total	254.9			162.5
Consumer Exposure (%)	63.8			

* Additional information based on SIC descriptions and business description.

3. Visa (GICS sub-industry: Data Processing and Outsourced Services)

Business Description: *Visa Inc. (Visa) is a global payments technology company that connects consumers, businesses, banks and governments in more than 200 countries and territories to fast, secure and reliable electronic payments. The Company operates processing networks, VisaNet, offering fraud protection for consumers and*

assured payment for merchants. The Company operates an open-loop payments network, a multi-party system in which Visa connects issuing financial institutions, or issuers, that issue cards to cardholders, and acquiring financial institutions, or acquirers, that have the banking relationship with merchants-and manage the exchange of information and value between them. The Company derives revenues primarily from fees paid by its clients based on payments volume, transactions that it processes and other related services the Company provides. Its clients deliver Visa products and payment services to consumers and merchants based on product platforms it defines and manages.

Segment information (Sep 2013)

Visa provides information on the following operating revenue categories.

Segment name	Segment revenues (\$ mn)	Consumer exposure multiplier	Consumer revenues (\$ mn)
Service revenues	5.4	0.5	2.7
Data Processing fees	4.6	0.5	2.3
International transaction revenues	3.4	0.5	1.7
Other revenues	0.7	0	0.0
Total	14.1		6.7
Client incentives	-2.3		
Net revenues	11.8		
Consumer Exp (%)	47.5		

Additional Information (extracted from Sep 2013 annual report)

- *Service revenues. Service revenues consist of revenues earned for providing financial institution clients with support services for the delivery of Visa-branded payment products and solutions. Service revenues are primarily generated from payments volume on Visa-branded cards and payment products for purchased goods and services.*
- *Data processing revenues. Data processing revenues consist of revenues earned for authorization, clearing, settlement, network access and other maintenance and support services that facilitate transaction and information processing*

among our financial institution clients globally and with Visa Europe. Data processing revenues are primarily generated from the number of transactions we process.

- *International transaction revenues. International transaction revenues consist of revenues earned for cross-border transaction processing and currency conversion activities. Cross-border transactions arise when the country of origin of the issuer is different from that of the merchant. International transaction revenues are primarily generated by cross-border payments and cash volume.*
- *Other revenues consist mainly of license fees for use of the Visa brand, revenues earned from Visa Europe in connection with the Visa Europe Framework Agreement, fees from account holder services, licensing and certification and other activities related to our acquired entities. Other revenues also include optional service or product enhancements, such as extended account holder protection and concierge services.*
- *Client incentives. Client incentives consist of long-term contracts with financial institution clients and other business partners for various programs designed to build payments volume, increase Visa-branded card and product acceptance and win merchant routing transactions over our network. These incentives are primarily accounted for as reductions to operating revenues.*

APPENDIX II: ESTIMATION OF ECONOMIC EXPOSURE OF COMPANIES

The economic exposure of a company to a target region or country is the proportion of its revenues coming from that region. As a general principle, MSCI estimates economic exposure from the geographic segment distribution of revenues by final markets/destination as reported by a company and the GDP weight of the countries and regions within a specific geographic segment.

Example:

For the purposes of economic exposure, the emerging markets countries are defined as all countries and regions (including frontier markets) excluding Developed Markets. The EM exposure of a security is derived as the weighted average of the percentage segment revenue and the GDP weight of the emerging market countries within each of the geographic segments (16.3% in this example)⁴

Geographic segment	Revenue (\$ bn)	Revenue (%) (1)	EM GDP as a % of total GDP of the geographic segment (2)	EM Exposure contribution (%) (3) = (1) * (2)
France	2,000	12.1	0	0.0
United States	5,000	30.3	0	0.0
Japan	4,000	24.2	0	0.0
Rest of Europe	3,000	18.2	20	3.6
Rest of Asia	1,500	9.1	95	8.6
Rest of the World	1,000	6.1	67	4.1
Total	16,500	100.0		16.3

⁴ For more details on the estimation of economic exposure at a company level, please refer to the [MSCI Economic Exposure Data Methodology](#).

EM revenue compounded annual growth rate (in USD terms) over the past 3 years is computed as follows:

$$\left[\frac{\left(EM \text{ Exposure} * Total \text{ segment revenues} * \frac{1}{\text{exchange rate}} \right) \text{ at time } t}{\left(EM \text{ Exposure} * Total \text{ segment revenues} * \frac{1}{\text{exchange rate}} \right) \text{ at time } t - 3y} \right]^{\left(\frac{1}{3} \right)} - 1$$

where t is the rebalancing date; ^ denotes 'to the power of'

The following sections have been modified since April 2014:

- Appendix III in the previous version of the methodology book describing the Corporate Events treatment has been deleted. The details on the Corporate Events treatment are now included in Section 3.3.

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