MSCI

How MSCI Builds Thematic Indexes

A Step-by-Step Guide

Have you ever wondered how MSCI builds its thematic indexes?

To capture long-term, structural trends that could drive company performance in the future, MSCI follows a **systematic approach.**

1 Develop an index objective

MSCI first builds a broad statement of what the theme aims to capture based on extensive research and insights from industry experts.

Example used for all steps:
MSCI ACWI IMI Food Revolution Index

The MSCI ACWI IMI Food Revolution Index aims to represent the performance of a set of companies associated with the development of new products and services focused on improving the way food is produced and consumed.

2 List sub-themes

Together with experts, MSCI creates a list of sub-themes and "seedwords" to identify aligned business activities.

3 Generate keyword list

MSCI assembles a collection of suitable documents describing the theme.

Then, natural language processing efficiently analyzes word frequency and relevance to generate a more detailed set of keywords that are contextually similar to the seedwords.

Sustainable and responsible farming	Vertical farming	Precision farming	Smart farming	Hydroponics
Plant-based meat substitutes and agricultural technology	Plant-based meat	Plant genome	Satellite image	Soil sensor
Food delivery technology	Online food	Grocery online	Meal delivery	Food delivery
Biosecurity and zoonotic disease mitigation	Anti-infective	Virology	Biodefense	Antiviral
Insect-based protein	Insect farming	Edible insect		

Only a representative sample of keywords are shown for ease of readability.

4 Find relevant companies

By analyzing financial reports, MSCI establishes an economic link between companies and the theme using two methods:

Direct approach

Revenue from a company's business segment is considered 100% relevant if the segment name matches a theme keyword.

Sustainable food

SIC codes* from directly-matched segments make up the eligible SIC code list used in the indirect approach.

Sustainable food 2899

Indirect approach

If a segment name doesn't match theme keywords, MSCI will:

Analyze the density of **theme keywords** mentioned in the company's description (min. two unique keywords required).

The keyword density determines a "discount factor" to reflect lower certainty in theme alignment.

Revenue from business segments with an eligible SIC code, regardless of how they are named, is scaled down by the discount factor.

EXAMPLE COMPANY DESCRIPTION

segments Food and Biochemicals, as well as Innovation Platforms. The Food segment develops **preservation ingredients** and **microbial spoilage** prevention products for the baking, meat, dairy, confectionery and beverage industries, and the Biochemicals segment produces bio-based chemicals

Discount factor based on keyword density = 0.45

Only an excerpt of the company description is shown for ease of readability.

The total percentage of revenue applicable to the theme from both approaches determines a company's relevance score.

Example company segment name and SIC code	Direct keyword match?	Indirect SIC code match?	Sales	Revenue attributable to theme
Sustainable food solutions 2899	✓	✗	$668M	$668M
Lactic acid & specialties 2899	✗	✓	$337M	$152M
Non-core 2899	✗	✓	$185M	$83M
Incubator 2899	✗	✓	$16M	$7M
Total			$1,206M	$910M

= 100M

*A SIC code is a 4-digit code that is assigned to a granular set of similar business segments/activities irrespective of the way these activities are self-declared by companies.

Example company relevance score = **$910 / $1,206 = 75%**

5 Select the stocks

Finally, MSCI narrows down the stocks that will be included.

Global parent universe

The MSCI ACWI Investable Market Index (IMI) is the starting point for standard thematic indexes.

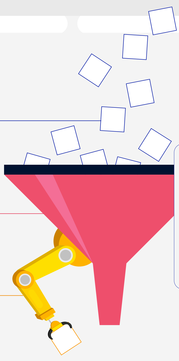
Securities in MSCI ACWI IMI Index: **9,093**

Relevance filter

The universe is filtered for companies with a relevance score of at least 25%.

False positive control

MSCI removes eligible companies that are mapped to un-related GICS sub-industries.



Companies with a higher relevance score X market cap have a higher weighting in the index, with the maximum weighting for any one issuer* capped at 5%.

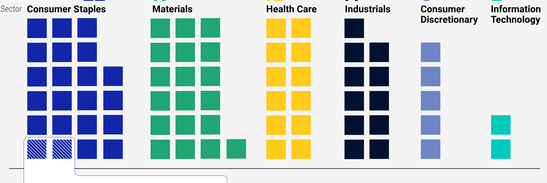
Hypothetical example

25% relevance score × $40B market cap = $10B
⬇ Lower weighting

50% relevance score × $40B market cap = $20B
⬆ Higher weighting

*An issuer is a company that sells securities, and it may sell multiple share classes that are publicly traded.

These stocks span various sectors.



MSCI excludes two securities within the consumer staples sector because they are mapped to the unrelated personal care products sub-industry.

Securities in MSCI ACWI IMI Food Revolution Index: 69

Data for the MSCI ACWI IMI Food Revolution Index is as of December 1, 2023.

Regularly Updated & Rules-Based

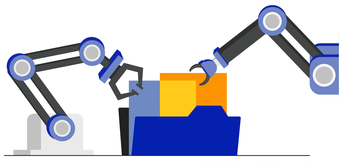
Once an index is built, it is reviewed semi-annually and updated based on:

- **Changes to the parent index**
- **Changes at individual companies**
- **Theme developments based on expert input**

Theme keywords are reviewed yearly in May.

Overall, MSCI's thematic index construction process is objective, scalable, and flexible. The process can be customized based on the theme(s) you want to capture.

Learn more about thematic investing



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