

# Business Involvement Methodology Overview

MSCI ESG Research

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## Business Involvement Screening Research

In order to help asset owners and managers ensure that their investment decisions comply with client mandates, MSCI ESG Research provides research on companies involved in specific business activities. This summary is an abridge version of the methodology governing MSCI ESG Research’s Business Involvement Screening Research. For more detail please see the full document.

### Coverage Universe

The coverage universe for the MSCI Business Involvement Screening Research (BISR) in the below areas of involvement is comprised of global equity issuers, plus coverage for selected bond-issuing subsidiaries, selected corporate bond issuers and selected government-owned entities that operate as corporations

- Abortion Providers,
- Abortifacients,
- Adult Entertainment,
- Alcohol,
- Animal Welfare,
- Biocides,
- Breast Milk Substitutes,
- Cannabis,
- Contraceptives,
- Gambling,
- Genetic Engineering,
- Nuclear Power,
- Pork,
- Stem Cells,
- Tobacco,
- Defense and Weapons

For other business involvement areas, the coverage is specified in the relevant sections below.

## Research Process

The MSCI ESG Research team includes a team of content specialists dedicated to producing research on controversial types of business involvement. These analysts are specialists responsible for identifying involvement in issue areas within a company.

Using a combination of industry classifications, business descriptions, and keyword searches in select company filings, we identify issuers that could have potential involvement in each of the screening topics. If this initial review process identifies the potential for involvement, an analyst will review the company’s regulatory filings, annual reports, company websites and third-party sources, including news, media and non-governmental organizations, to determine if a company is in fact involved in one of the covered activities. If after this step there is no evidence to flag the company for one of the covered activities, then the company is also categorized as “Not Involved – Verified.” If during the screening process or analyst review evidence is captured relating to the companies’ involvement in a covered activity, then the company is categorized as “Involved.”

**Screens are designed only to flag companies with involvement in the covered activity and should not be used to produce comprehensive lists of companies without involvement.**

### Ongoing Monitoring and Update Cycle

MSCI ESG Research regularly reviews all companies in the coverage universe throughout the year, based on fiscal-year reporting cycles.

### Corporate Actions

MSCI ESG Research analysts review and incorporate corporate actions to the research following the event’s completion. Corporate events include: acquisitions, consolidations, mergers, name changes, public offerings and spinoffs.

Spin-offs: both the company that spins off operations as well as the new business entity are assessed to estimate the extent of their involvement in screened business activities (if any).

Mergers and Acquisitions: We assess involvement in screened business activities for merged entities, acquiring companies and acquired companies.

Name changes: The name of the company in our systems will reflect the new name; however the body of the company’s report may continue to reflect the old name until the company undergoes scheduled data review.

### Additions and Deletions

Companies are added to or removed from MSCI ESG Research Business Involvement Screens under the following circumstances:

- **If MSCI ESG Research determines conclusively that the company is no longer involved with the relevant activity.**
- **In the event that there is no conclusive evidence of either continued involvement or a discontinuation of involvement in a subject activity, MSCI ESG Research retains a company’s involvement flags for up to three years. After this period, if there is no evidence of continued involvement, MSCI ESG Research considers the company no longer involved.**

### Sources

MSCI ESG Research uses a wide range of information tools and sources, including:

- **Company websites,**
- **Company annual reports and regulatory filings,**
- **Media search services,**
- **Business directories,**
- **Nongovernmental organization (NGO) reports and websites,**
- **Government agencies and disclosures,**
- **Financial data providers, and**
- **Direct communication with company.**

### Company Communication

MSCI ESG Research seeks input from every company that is included in any of the business involvement screens when its information is updated, at a minimum of once a year. Where MSCI ESG Research has the e-mail contact information, the companies are invited to review MSCI ESG Research’s assessments and reports, and to provide updates, clarifications and comments. Information provided by companies during this process is reviewed by analysts and incorporated into the research as appropriate.

### Revenue

MSCI ESG Research provides company revenue percentages for companies with certain types of business activity. Where the revenue for a covered business activity is not disclosed by a company and is not available through other publicly available sources, a revenue estimate is supplied.

### Revenue Estimation Process

When companies do not report exact revenue figures for a covered business activity, MSCI ESG Research provides an estimate of the extent of companies' involvement in the subject activity. The estimation approach is as follows:

- **The reported business segment of the business involvement activity is identified.**
- **The other activities in that segment(s) are determined and considered in order to calculate the estimated revenue for said business involvement activity. All available disclosures are considered.**
- **In the absence of information indicating otherwise, assumptions are made that product lines are of equal weight in terms of revenue contribution.**

### Quality Review

Initial company research and analysis is followed by a rigorous quality review process. Data accuracy and company profiles are peer-reviewed, then sent to content leads for final approval. In specific cases in which a company's business activity is not clearly defined by MSCI ESG Research's methodology and there is no precedent, the case is escalated to the Head of Screening Research. Cases that require further interpretation or an update to the methodology are brought to the MSCI ESG Impact and Screening Methodology Committee for resolution.

## Business Involvement Screens

### Abortion Providers

MSCI ESG Research's abortion provider research identifies companies that own or operate facilities where abortions are performed. Companies are not placed on the Abortion Provider screen unless MSCI ESG Research has received confirmation from the company within the last three fiscal years that an abortion has been performed at a company facility.

In addition, MSCI ESG Research identifies companies that own or operate acute care facilities with the capacity to perform abortions.

### Abortifacients

MSCI ESG Research's abortifacients research identifies companies that manufacture abortifacient products. The research describes both the type of involvement and the revenue from that involvement.

An abortifacient is defined as any drug, compound or chemical that results in the termination of pregnancy by causing the cervix to dilate and the uterus to

prematurely contract. MSCI ESG Research includes drugs or other agents primarily designed or approved for use in the termination of pregnancy, as well as drugs or other agents recognized by medical authorities as having a significant secondary use in the termination of pregnancy, including methotrexate, misoprostol, oxytocin, dinoprost, hemabate (carboprost), RU 486 (mifepristone) or gemeprost.

In addition, MSCI ESG Research identifies companies that own or operate acute care facilities with the capacity to perform abortions.

## Adult Entertainment

MSCI ESG Research’s adult entertainment research identifies companies that are involved in the production, distribution or retailing of adult entertainment products. The research describes both the type of involvement and the revenue from that involvement. The total revenue derived from adult entertainment is available, as well as revenue derived from each of the following subcategories: producer, retailer and distributor.

MSCI ESG Research defines adult entertainment products as material in which the dominant theme is “sexually explicit” conduct, specifically the depiction or description of sexual or excretory activities in a lascivious way. MSCI ESG Research uses the term “adult entertainment” interchangeably with “sexually explicit material” and “sexually explicit adult entertainment.”

## Alcohol

MSCI ESG Research’s alcohol research identifies companies that produce, distribute, retail, license or supply alcoholic beverages, key products and services. The research describes both the type of involvement and the revenue from that involvement. The total revenue derived from alcohol is available, as well as revenue derived from each of the following subcategories: producer, distributor, supplier, retailer, and licensor.

An alcoholic beverage is defined as any fermented liquor that contains ethyl alcohol or ethanol as an intoxicating agent. MSCI ESG Research captures beverages with any amount of alcoholic content.

## Animal Welfare

MSCI ESG Research’s animal welfare research identifies companies involved in testing products or product ingredients of any sort on animals, breeding animals for animal testing purposes, exhibiting animals and operating factory farms. MSCI ESG Research includes publicly traded companies that perform testing activities in-house, as well as those that outsource that testing to third parties.

Animal Welfare research refers to the research and testing performed on animals to determine safety and efficacy of specific products; factory farming; and the breeding and exhibiting of animals.

## Biocides

MSCI ESG Research’s biocides research identifies companies that are involved in the production or the supply of chemicals that are used to control unwanted organisms. The total revenue derived from biocides is available, as well as revenue derived from each of the following subcategories: supplier and producer.

Biocides are defined as products that are used to control unwanted organisms. These include pesticides, rodenticides, insecticides, and antifouling products.

## Breast Milk Substitutes

MSCI ESG Research’s BMS screen identifies companies that have been flagged by the International Baby Food Action Network (IBFAN) as violating the International Code of Marketing of Breast Milk Substitutes.

## Cannabis

MSCI ESG Research’s Cannabis research identifies companies that are involved in the production, retailing or pharmaceutical research of cannabis. The research describes both the type of involvement and the revenue from that involvement. The total revenue derived from cannabis is available, as well as revenue derived from each of the following subcategories: producer and retailer.

Cannabis products and derivatives usually come from the dried leaves and flowers of the *Cannabis sativa* or *Cannabis indica* plant. It has a psychoactive substance that can be used for both medicinal and recreational use. Its main psychoactive chemical component, tetrahydrocannabinol (THC), works as an anti-emetic drug that is effective against vomiting and nausea during medical treatments. Additionally, THC can also induce a euphoric high, which lets users experience a state of relaxation. Consumption of Cannabis is most commonly done through smoking, vaporizing or ingestion by mixing with food. It is also known as marijuana, weed, grass, ganja, bud, hash, pot, blunts, or joint.

**Note that companies that produce or retail products that are CBD-based and do not contain significant amounts of THC, and companies that manufacture miscellaneous paraphernalia (such as pipes, bonds, hookahs, papers, etc) are excluded from this screen.**

## Contraceptives

MSCI ESG Research’s contraceptives research identifies companies that manufacture or license their company brand name to contraceptive products. The research describes both the type of involvement and the revenue from that involvement.

Contraception is defined as the prevention of fertilization of the ovum by sperm cells.

**Note that retailers of contraceptives are excluded from this screen.**

## Fur

MSCI ESG Research’s fur screen identifies companies that derive any detectable revenues from the production and/or sale of fur products, including those that raise, trap or slaughter animals for their fur as well as those deriving revenue from the sale of products made from or incorporating fur, such as coats, muffs, hats and stoles, as well as home décor, craft supplies, etc. The total revenue derived from fur is available, as well as revenue derived from each of the following subcategories: producer and retailer.

MSCI ESG Research’s definition of fur includes shearling and astrakhan. Leather is not included in the screen.

Coverage Universe: MSCI ACWI IMI

## For Profit Healthcare

MSCI ESG Research’s for-profit healthcare screen identifies companies with ties to abortion or birth control, including HMOs that offer coverage for these products and services, as well as companies offering standard healthcare services.

Coverage Universe: MSCI World excluding US + US Top 3,000

## For Profit Prisons

MSCI ESG Research’s For-Profit Prisons screen identifies companies that derive any detectable revenue from the operation of private prisons, jails, detention centers or correctional facilities or from the provision of integral services to these types of facilities. Integral services include: complete facilities management (end-to-end), security services and detention services. For-Profit Prisons may be alternatively known as private prisons. The total revenue derived from for profit prisons is available.

**Note that companies that provide supplemental services to for-profit prisons (such as cleaning, catering, recreational programs, rehabilitation, probation, etc.) are excluded from this screen.**

Coverage Universe: MSCI ACWI IMI

## Gambling

MSCI ESG Research’s gambling research identifies companies that own or operate gambling facilities or provide support or services to the gambling industry. The research describes both the type of involvement and the revenue from that involvement. The total revenue derived from gambling is available, as well as revenue derived from each of the following subcategories: operations, support services, and licensing agreements.

Gambling is defined as the betting or staking of money or something of value, with consciousness of risk and hope of gain, on the outcome of a game, a contest or an event, the outcome of which is determined by chance.

**Note that companies that only own property on which casinos are located or companies that lease land or space on which casinos are operated are excluded from this screen.**

## Genetic Engineering

MSCI ESG Research’s genetic engineering research includes companies that genetically modify organisms (GMOs) for agricultural use or human consumption. Specifically, this includes companies that have filed for a notification with the USDA’s Animal and Plant Health Inspection Service (APHIS) for field testing of organisms engineered to produce compounds intended for agricultural use; companies included in the European Union (EU) – Food Safety Administration (EFSA) list that have applied for permits to market genetically engineered material for food or food additives in the EU; and companies found in the GM crop database from the Center for Environmental Risk Assessment (CERA).

**Note that companies that use genetically modified ingredients in their products, and companies that retail foodstuffs that contain genetically modified organisms as an ingredient are excluded from this screen.**

## Lending Practices

Controversial lending practices are defined as those in which lenders take advantage of borrowers’ lack of understanding and/or lack of access to more traditional financial services to impose loan terms that place a disproportionately and often untenably high burden on the borrower. This is often done through deception, fraud, or manipulation via aggressive sales tactics.

### Lending Practices

MSCI ESG Research’s Lending Practices research is designed to identify companies involved in the provision of products and services associated with controversial lending practices including payday loans, installment loans, pawn loans, title loans, tax refund anticipation loans, and doorstep loans. In addition, the total revenue derived from the above activities is available.

### Lending Controversy Ties

The Lending Practices research also identifies companies with severe or very severe controversies within the past three years related to consumer lending such as allegations of usurious interest payments, discriminatory lending practices, or deceptive or dubious home loan or subprime mortgage marketing practices.

Coverage Universe: MSCI ACWI and US Top 3000 by Market Cap

### CRA Rating

MSCI ESG Research also provides a list of companies that are given a "Needs to improve" or "Substantial Noncompliance" rating under the Community Reinvestment Act (CRA) of the United States.

The CRA is intended to encourage depository institutions to help meet the credit needs of the communities in which they operate, including low- and moderate income neighborhoods, consistent with safe and sound banking operations.

U.S. financial institutions that received a rating of "Needs to improve" or "Substantial Noncompliance" after taking the CRA examination within the last three years.

### Nuclear Power

MSCI ESG Research’s nuclear power research is designed to identify companies that own or operate nuclear power plants, and manufacture and supply key products or services to the nuclear power industry. The research describes the type of involvement, the company's percentage of power generation derived from nuclear sources, percentage of total nuclear installed capacity and the revenue from nuclear power-related activities. The total revenue derived from nuclear power is available, as well as revenue derived from each of the following subcategories: utility, supplier, and uranium mining.

**Note companies that provide generic / non-essential components (such as nuts, bolts, screws, wiring, etc.) or raw materials (such as metal or steel) are excluded from this screen.**

## Palm Oil

MSCI ESG Research's Palm Oil Screen identifies companies that are involved in the production and distribution of palm oil products. The research describes both the type of involvement and the revenue from that involvement. The total revenue derived from palm oil is available, as well as revenue derived from each of the following subcategories: Producer and Distributor. In addition, MSCI ESG Research monitors the Round Table for Sustainable Palm Oil (RSPO) Annual Communication of Progress Reports that indicate palm oil plantation certification to RSPO's standards.

MSCI ESG Research defines palm oil as a yield of the African oil palm or *Elaeis guineensis* Jacq. The oil can either be extracted from the flesh of the fruit of the palm or the crushed extract of the kernel of the fruit.

**Note that companies that manufacture or sell products that use palm oil as an ingredient are excluded from this screen.**

Coverage Universe: MSCI ACWI IMI

## Pork

MSCI ESG Research's pork research identifies companies that are involved in the production of pork products, including pig breeding, slaughtering and processing meat and food products with pork ingredients. The research also includes companies with significant retailing and distribution activities. The total revenue derived from pork is available, as well as revenue derived from each of the following subcategories: Producer and Retailer.

Pork is the culinary name for meat from the domestic pig (swine or *Sus domesticus*).

## Stem Cells

MSCI ESG Research's stem cell research identifies companies that conduct research using stem cells derived from human embryos, human fetal tissue or human adult tissue. MSCI ESG Research also identifies publicly traded companies with research partnerships or collaborations that conduct stem cell research through a third party; companies using human fetal cell lines; and companies that produce technology or products that enable stem cell research.

## Tobacco

MSCI ESG Research's tobacco research identifies companies that produce, distribute, retail, license or supply key tobacco products and services. The research describes both the type of involvement and the revenue from that involvement. The total revenue derived from tobacco is available, as well as revenue derived from each of the following subcategories: Producer, Distributor, Retailer, Licensor and Supplier.

Tobacco is produced from the dried nicotina plant.

## Defense and Weapons

MSCI ESG Research's Defense and Weapons research includes companies that are involved in the production of civilian Firearms, Controversial and Conventional Military Weapons. Defense and Weapons screens available are listed below:

### Firearms

MSCI ESG Research's Firearms research identifies companies that manufacture handguns, pistols, shotguns, rifles, revolvers, and ammunition for civilian (non-military) use. The research describes both the type of involvement and the revenue from that involvement.

Firearms are devices capable of firing a projectile and using an explosive charge as a propellant.

**Note that companies manufacturing firearm / ammunition components, firearm accessories (such as scopes, mounts, gun cases, etc.), and air rifles are excluded from this screen.**

### Cluster Munitions

MSCI ESG Research's Cluster Munitions screen identifies companies involved in the production of cluster munitions, components and delivery platforms. The research may also include select significant or notable private companies. The following definitions are used:

Cluster munition: a bomb, missile, rocket or shell that carries submunitions and disperses them over an area

Submunition: a small bomb contained with other submunitions in a cluster munition. The submunition is designed to detonate prior to, on, or after impact.

Cluster munition component: an integral part to the basic function of a cluster munition weapon system. It may also provide added lethality, precision or other functionalities, such as targeting, guidance and navigation.

Cluster munition delivery platform: an independent weapons system capable of carrying and deploying cluster munitions to the designated target area. Delivery platforms can include self-propelled rocket launcher systems and aircraft.

### Landmines

MSCI ESG Research's Landmines Screen identifies companies involved in the production of anti-personnel landmines (APMs), components and anti-vehicle

landmines. The research may also include select significant or notable private companies. The following definitions are used:

**Anti-personnel landmine:** a munition that is placed under, on, or near the ground or other surface area and explodes by the presence, proximity or contact with a person or upon command by an operator from a remote location.

**Anti-personnel landmine component:** an integral component to the basic function of the weapon. It may also provide added lethality, precision or other functionalities to the weapon.

**Anti-vehicle landmine:** munition that is placed under, on, or near the ground or other surface area and explodes by the presence, proximity or contact with a vehicle.

MSCI ESG Research also considers and includes weapons or munitions that fulfill the same function, role and/or purpose as landmines.

### Global Weapons Production

MSCI ESG Research's weapons research identifies companies that manufacture military weapons systems and weapons components. The research describes both the type of involvement and the revenue from that involvement. MSCI ESG Research's weapons research distinguishes between involvement in whole weapons systems and components of those systems. Additionally, the research includes recent-year percentage of revenue for the following main categories: Conventional Weapons and Components, Chemical and Biological Weapons and Components, Nuclear Weapons and Components, and Support Systems and Services. Analysts capture each company's total revenue from weapons, including both weapons-specific DOD contract revenue, if applicable, and all other sources of weapons revenue.

### Depleted Uranium Weapons

MSCI ESG Research's Depleted Uranium research identifies companies that manufacture weapons, ammunition and armor made with Depleted Uranium (DU) and DU alloys. DU is a by-product of the uranium-enrichment process used to make nuclear weapons and nuclear-reactor fuel. The U.S. Nuclear Regulatory Commission defines depleted uranium as uranium whose percentage fraction by weight of the U-235 isotope is less than 0.711%.

### Blinding Laser Weapons

MSCI ESG Research's Blinding Laser Weapons' research identifies companies that manufacture weapons using laser technology that causes permanent blindness to the target.

**Incendiary Weapons**

MSCI ESG Research's incendiary weapons research identified companies that manufacture incendiary weapons using white phosphorus.

**Non-detectable Fragments**

Non-Detectable Fragments Weapons are defined as any weapon with a primary effect to injure with fragments that cannot be detected by X-rays once inside the human body.

**Nuclear Weapons**

MSCI ESG Research's Nuclear Weapons screen identifies companies with different types of ties to nuclear weapons including warheads and missiles, delivery platforms, weapon components, and support / service providers.

**Weapons General Exclusions**

Companies that are involved in the production of generic or dual use components to weapons systems, military material (such as uniforms, footwear, foodstuffs), supporting vehicles that do not have an offensive capability, and raw materials are excluded from this screen.

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