

Industry Classification Benchmark (Equity)

v3.4

The Structure and Definitions shown in Section 6 of this document were effective from 1 July 2019.

ftserussell.com February 2020



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Introduction

1.0 Introduction

1.1 The Industry Classification Benchmark (ICB) is a detailed and comprehensive structure for sector and industry analysis, facilitating the comparison of companies across four levels of classification and national boundaries. The classification system allocates companies to the Subsector whose definition closely describes the nature of its business as determined from the source of its revenue or the source of the majority of its revenue where available, as detailed in Rule 4.2.1.

The structure and definitions of all Subsectors of ICB are available in Section 6.

1.2 FTSE Russell

FTSE Russell is a trading name of FTSE International Limited, Frank Russell Company, FTSE Global Debt Capital Markets Limited (and its subsidiaries FTSE Global Debt Capital Markets Inc. and MTSNext Limited), Mergent, Inc., FTSE Fixed Income LLC, The Yield Book Inc and Beyond Ratings.



Management Responsibilities

2.0 Management Responsibilities

- 2.1 FTSE Russell
- 2.1.1 FTSE Russell is responsible for maintaining ICB, and for the classification of all companies within ICB.
- 2.1.2 FTSE Russell will maintain a record of all changes in the classification of companies and is responsible for ensuring the timely publication of all company classification changes.
- 2.1.3 FTSE Russell will monitor corporate events, which occur between quarterly meetings, that may affect the industrial classification of a company.
- 2.2 FTSE Russell Industry Classification Advisory Committee
- 2.2.1 The FTSE Russell Industry Classification Advisory Committee has been established by FTSE Russell. The Committee may recommend changes to the ICB Ground Rules and the ICB structure, for approval by the FTSE Russell Governance Board.
- 2.2.2 The Terms of Reference of the FTSE Russell Industry Classification Advisory Committee are set out on the FTSE Russell website and can be accessed using the following link:
 - FTSE Russell Industry Classification Advisory Committee.pdf
- 2.3 FTSE Russell Policy Advisory Board
- 2.3.1 The FTSE Russell Policy Advisory Board, whose membership is representative of users of FTSE Russell Indexes, has been established by FTSE Russell as an independent committee. The FTSE Russell Policy Advisory Board provides strategic advice to FTSE Russell on the construction and maintenance of agreed indexes (as stipulated in their terms of reference) and to oversee the practitioner committees established by FTSE Russell to assist in the management of the indexes. The FTSE Russell Policy Advisory Board terms of reference also include the provision of strategic advice on the construction and maintenance of ICB.
- 2.3.2 The Terms of Reference of the FTSE Russell Policy Advisory Board are set out on the FTSE Russell website and can be accessed using the following link:
 - FTSE_Russell_Policy_Advisory_Board.pdf



FTSE Russell Index Policies

3.0 FTSE Russell Index Policies

These Ground Rules should be read in conjunction with the following policy documents which can be accessed using the links below:

- 3.1 Challenges and Appeals
- 3.1.1 FTSE Russell's Challenges and Appeals procedure can be accessed using the following link:
 - ICB_Challenges_and_Appeals.pdf?
- 3.2 Policy for Benchmark Methodology Changes
- 3.2.1 Details of FTSE Russell's policy for making benchmark methodology changes can be accessed using the following link:
 - Policy for Benchmark Methodology Changes.pdf



Classification Guidelines

4.0 Classification Guidelines

- 4.1 Basis of Decisions
- 4.1.1 FTSE Russell will at all times approach decisions affecting the industry classification of companies with reference to these guidelines.
- 4.2 Allocation of Companies to Subsectors
- 4.2.1 A company will be allocated to that Subsector of ICB whose definition most closely coincides with the source of the company's revenue or the source of the majority of its revenue. The principal source of information used for the classification of a company shall be its audited accounts and directors' report. Where a company carries out two or more lines of business that differ substantially from each other, FTSE Russell will base its decision on the accounting segmentation published in the audited accounts and directors' report. Interim statements will not normally be used. Changes in a company's business or structure will be considered under Rule 4.3.1.
 - Where revenue information is unavailable or insufficient, or where a company is new or is in the course of changing its line of business, the company will be allocated to that Subsector whose definition most closely coincides with the description of the company's business as stated in the company's annual report, or if the annual report is not available, the description of the company's business provided in the company's listing prospectus or in the company's regulatory filings or, if none of these is available, the business description provided on the company's website.
- 4.2.2 Segmental reporting normally discloses revenue before tax, minority interests, extraordinary items and interest earned or incurred. Unless there is audited evidence that any of these items is specifically attributable to a class of business for which revenue is disclosed, it will be disregarded in assessing the sources of revenue. Where any part of the company's business is to earn interest or incur interest, or interest expenses are central to the business, then such interest shall be taken into account in determining the company's business.
- 4.2.3 A company which has businesses in two or more Subsectors is allocated to that Subsector which provides the largest part of the revenue as indicated by the latest available report and accounts, subject to Rule 4.2.2.
 - A company engaged in businesses in three or more Subsectors, but within a specific Industry, will be classified as Diversified Industrials, Diversified Materials, General Mining, Multi-utilities, Diversified Retailers, Diversified Financial Services or Diversified REITs.

A company engaged in businesses in three or more Subsectors that are in two or more Industries will be classified as a Diversified Industrials.

A company engaged in three or more classes of business within the Industrials Industry that differ substantially from each other, no one of which contributes 50% or more of revenue nor less than 10%, will be classified as Diversified Industrials. If there is a contribution of over 50% from any other one Industry group, the Subsector of that Industry group with the highest revenue will be assigned to the company.

- 4.2.4 Companies which are classified as ICB Subsectors Closed End Investments and Open End and Miscellaneous Investment Vehicles are classified based on their structure and not the source of the company's revenue.
- 4.2.5 FTSE Russell will seek to maintain stability in the classification of companies by disregarding what it considers to be temporary fluctuations in the fortunes of individual businesses.
- 4.2.6 In exceptional circumstances, the classification may reflect other factors, if the FTSE Russell Industry Classification Advisory Committee considers that ignoring these factors may result in a misleading classification.

For example, FTSE Russell may, in consultation with the FTSE Russell Industry Classification Advisory Committee, classify companies on the basis of either the immediate end use of their product or the industrial process used.

4.3 Changes to the Classification of a Company

- 4.3.1 Where a significant change takes place in a company's structure as a result of a corporate event (such as a merger or demerger), its ICB classification will be reassessed on the basis of financial data formally published by the company. The ICB classification will be allocated in line with Rule 4.2.1
- 4.3.2 Any adjustment resulting from a change in a company's classification under Rule 4.3.1 will be implemented either concurrent with, or shortly after (e.g. T+2), the implementation of the associated corporate event.
- 4.3.3 A company's classification may also be reviewed by FTSE Russell either at its discretion or at the request of the company or professional advisors acting on the company's behalf.

Any adjustment resulting from a change in a company's classification will be effective on the Monday after the third Friday of March, June, September and December. The cut-off date for the receipt of data or other justification relating to any such change is the second Friday of February, May, August and November.

Please note: in circumstances where an incorrect ICB classification has been assigned to a company at IPO, FTSE Russell reserves the right to update the ICB classification with a minimum T+2 notice.

4.4 Industry Sectors

4.4.1 FTSE Russell will seek to avoid the maintenance of Sectors or Subsectors containing a single company.

4.5 Changes to the Industry Classification Benchmark

Changes to the structure of ICB will be evolutionary. Any changes to the ICB structure (Subsectors, Sectors, Supersectors or Industries) shall take place with a minimum of six months' notice. These changes will be considered by the FTSE Russell Industry Classification Advisory Committee and will be based on long-term trends, rather than what it considers may be temporary fluctuations within individual industries.



Periodic Reviews

5.0 Periodic Reviews

- 5.1 The classification of all companies in the ICB global universe will be reviewed following receipt of their annual report.
- 5.1.1 The cut-off dates for the receipt of data for consideration at periodic reviews and the corresponding implementation dates are shown below:

Cut-Off Date	Implementation Date		
Second Friday of February	Monday after the third Friday of March		
Second Friday of May	Monday after the third Friday of June		
Second Friday of August	Monday after the third Friday of September		
Second Friday of November	Monday after the third Friday of December		

- 5.1.2 **Review Procedures**: the industry classification of each company will be determined by analysing the financial reports based on the rules under Section 4 of these Classification Guidelines.
- 5.1.3 **Implementation**: periodic changes to the industry classification of a company will be implemented after the close on the third Friday of March, June, September and December.
- 5.1.4 **Announcement**: periodic changes will be announced on the Wednesday following the second Friday of February, May, August and November. Any revisions to those announcements may be made up until the Friday two weeks prior to the implementation date. Revisions after this date will only be considered under exceptional circumstances.

5.2 Classification Queries

Market participants who wish to query the classification of a company can access the form using the following link

ICB_Classification_Data_Form.pdf

or request an ICB Classification Data Form by contacting info@ftserussell.com.



Structure and Definitions

6.0 Structure and Definitions

Effective 1 July 2019

6.1 Technology

Companies that are primarily engaged in the advancement of the information technology and electronics industries. It includes companies developing integrated computer systems and services, application software not specific to industry market segments, digital platform providers that generate revenue from advertising contents, and derive subscription fees from an advertiser. Also included are companies that develop next generation electronics and related components.

Disruptors leveraging "new" technology will not generally constitute their placement in the Technology Industry. Rather, individual company technology applications and services will be reviewed as to the markets they serve. Examples include: companies that provide health care, technology equipment, electronic entertainment (video games), e-retailers, and transaction processing service companies.

Industry	Supersector	Sector	Subsector	Definition	
10 Technology	1010 Technology 101010 Software and Computer Services		10101010 Computer Services	Companies that provide consulting or integration services to other businesses relating to information technology. Includes providers of computer-system design, systems integration, network and systems operations, cloud computing, distributed ledger technology (DLT) consulting and integration, data management and storage, repair services and technical support.	
					10101015 Software
		10101020 Consumer Digital Services	Companies involved in digital platforms that primarily generate revenue from advertising, content delivery and other virtual products for consumers. To a lesser extent they generate subscription fee revenue through related services offered by the platform and/or by the advertisers to utilize data content and customer insight.		

	101020 Technology Hardware and Equipment	10102010 Semiconductors	Producers and distributors of semiconductors and other integrated chips, including other products related to the semiconductor industry, such as semiconductor capital equipment and motherboards. Excludes makers of printed circuit boards, which are classified under Electronic Components Subsector.
		10102015 Electronic Components	Companies involved in the application of high-technology parts to finished products, including printed circuit boards. Excludes communications-related equipment, which are classified under Telecommunications Equipment Subsector.
		10102020 Production Technology Equipment	Manufactures of tools and/or devices that are used in the creation of semiconductors, lasers, photonics, wafers, and other high-technology components.
		10102030 Computer Hardware	Manufacturers and distributors of computers, servers, mainframes, workstations and other computer hardware and subsystems, such as mass-storage drives, mice, keyboards and printers. Companies in this group can provide diverse applications for consumer and commercial use. Including companies providing computing hardware for cryptocurrency mining.
		10102035 Electronic Office Equipment	Manufacturers and distributors of electronic office equipment, including photocopiers and fax machines.



6.2 **Telecommunications**

Contains companies that own and operate telecommunication infrastructures to provide content delivery services. Also included are manufacturers of telecommunication equipment and components.

Industry	Supersector	Sector	Subsector	Definition
15 Telecommunication s	1510 Telecommunications	151010 Telecommunications Equipment	15101010 Telecommunicatio ns Equipment	Makers and distributors of high-technology communication products, including satellites, mobile telephones, fibers optics, switching devices, local and wide-area networks, teleconferencing equipment and connectivity devices for computers, including hubs and routers.
		151020 Telecommunications Service Providers	15102010 Cable Television Services	Companies that distribute media content through cable and wireless networks, accessed through computers or televisions.
			15102015 Telecommunicatio ns Services	Providers of mobile and fixed-line telephone services, including cellular, satellite and paging services. Includes wireless tower companies that own, operate and lease mobile site towers to multiple wireless service providers. Includes companies that primarily provides telephone services through the internet. Excludes companies whose primary business is internet access.

6.3 Health Care

Consists of companies that manufacture health care equipment and supplies or that provide health care-related services such as lab services, in-home medical care and operate health care facilities. Also included are companies involved in research, development and production of pharmaceuticals and biotechnology products, and medical cannabis producers.

Industry	Supersector	Sector	Subsector	Definition
20 Health Care	2010 Health Care	201010 Health Care Providers	20101010 Health Care Facilities	Owners and operators of primary healthcare property, community hospitals, retirement homes, nursing homes, and related medical businesses.
			20101020 Health Care Management Services	Companies that offers managed health care benefits and services (e.g., Health Management Organizations (HMO) including state sponsored programs
			20101025 Health Care Services	Companies that provide various specialized disease management services to physicians, health plans, and hospitals. Primary business lines in this category can also include general consultation services, paramedical services, operation of health portals and distribution of health food products.
			20101030 Health Care: Misc.	Includes Healthcare companies that are not classified in the Healthcare Facilities, Healthcare Management Services or Healthcare Services Subsectors.
	201020 Medical Equipment and Services 201030 Pharmaceuticals and Biotechnology	Equipment and Services 201030 Pharmaceuticals and	20102010 Medical Equipment	Manufacturers and distributors of medical devices such as MRI scanners, prosthetics, pacemakers, X-ray machines and other non-disposable medical devices.
			20102015 Medical Supplies	Manufacturers and distributors of medical supplies used by health care providers and the general public. Includes makers of contact lenses, eyeglass lenses, bandages and other disposable medical supplies.
			20102020 Medical Services	Companies that operate and manage medical labs and testing services.
			20103010 Biotechnology	Companies engaged in research into and development of biological substances for the purposes of drug discovery and diagnostic development, and which derive the majority of their revenue from either the sale or licensing of these drugs and diagnostic tools.
				20103015 Pharmaceuticals
		20103020 Cannabis Producers	Companies that engage in cannabis cultivation, cannabis distribution including dispensaries, the processing and distribution of cannabis plants, and the creation of cannabis derivative products. Companies that primarily engage in the research, development and manufacturing of cannabis (THC/CBD) based drugs are classified in the Biotechnology or the Pharmaceuticals Subsector.	

6.4 Financials

Consists of companies engaged in savings, loans, security investment and related activities such as financial data and information providers. Other examples include mortgage/consumer/corporate financing, investment banking and brokerage, asset management and custody, insurance, and Mortgage REITs.

Industry	Supersector	Sector	Subsector	Definition
30 Financials	3010 Banks	301010 Banks	30101010 Banks	Banks providing a broad range of financial services, including retail banking, loans and money transmissions.
	3020 Financial Services	302010 Finance and Credit Services	30201020 Consumer Lending	Companies that provide financial services to consumers including payday loans, student loans, automobile loans, etc.
			30201025 Mortgage Finance	Companies that provide mortgages, mortgage insurance and other related services.
			30201030 Financial Data Providers	Companies provide financial decision support tools for investment institutions. Including financial database operators and index data providers.
		302020 Investment Banking and Brokerage Services	30202000 Diversified Financial Services	Companies providing a diversified range of services such as investment banking, trading, and asset management. Diversified Investment Holding companies engaged in acquiring equity stake of listed securities are also classified in this group.
			30202010 Asset Managers and Custodians	Companies that provide custodial, trustee and other related fiduciary services. i.e. mutual fund and private investment management. Also includes companies engaged in private equity and venture capital.
			30202015 Investment Services	Companies that provide trading and brokerage services for financial assets such as equities, commodities, debts, currency, cryptocurrency. Also includes th operators of stock, currency, and other financial market exchanges.
		302030 Mortgage Real Estate Investment Trusts	30203000 Mortgage REITs: Diversified	Mortgage REITs that invest in a combination of segments with no specific dominance over one or the other.
			30203010 Mortgage REITs: Commercial	REITs primarily involved in lending money to commercial real estate owners and operators directly or indirectly through the purchase of mortgages, mortgage backed securities and other mortgage related assets.
			30203020 Mortgage REITs: Residential	REITs primarily involved in lending mone to residential real estate owners and operators directly or indirectly through the purchase of mortgages, mortgage backed securities and other mortgage related assets.
		302040 Closed End Investments	30204000 Closed End Investments	Corporate closed-ended investment entities identified under distinguishing legislation, such as investment trusts and venture capital trusts.
		302050 Open End and Miscellaneous Investment Vehicles	30205000 Open End and Miscellaneous Investment Vehicles	Cash shells, Special Purpose Acquisition Company (SPACs), Non-corporate, openended investment instruments such as open-ended investment companies and funds, unit trusts, ETFs and currency fundand split capital trusts.
	3030 Insurance	303010 Life Insurance	30301010 Life Insurance	Companies engaged principally in life and health insurance.
		303020 Nonlife Insurance	30302010 Full Line Insurance	Companies that provide a wide range of insurance products such as a combination of life, property/casualty, and specialty insurance
			30302015 Insurance Brokers	Insurance brokers and agents

30302020 Reinsurance	Companies engaged principally in reinsurance.
30302025 Property and Casualty Insurance	Companies engaged principally in accident, fire, automotive, marine, malpractice and other classes of nonlife insurance.



6.5 Real Estate

Consists of companies engaged in real estate investment, development, and other real estate related services. Also includes Equity REITs. Mortgage REITs are classified under Financials Industry.

Industry	Supersector	Sector	Subsector	Definition	
35 Real Estate	3510 Real Estate	351010 Real Estate Investment and Services Development	35101010 Real Estate Holding and Development	Companies that invest directly or indirectly in a variety of types of properties without a concentration on any single type.	
		35101	35101015 Real Estate Services	Companies that provide services to real estate companies but do not own the properties themselves. Includes agencies, brokers, leasing companies, management companies and advisory services.	
		351020 Real Estate Investment Trusts	35102000 Diversified REITs	REITs that invest in a combination of other defined REIT categories.	
			35102010 Health Care REITs	REITs that primarily invest in health care facilities including hospitals, nursing homes and assisted living properties.	
			35102015 Hotel and Lodging REITs	REITs that primarily invest in hotels, motels, resorts or other lodging properties.	
			35102020 Industrial REITs	REITs that primarily invest in industrial properties including industrial warehouses and distribution properties.	
				35102025 Infrastructure REITs	REITs that primarily invest in infrastructure assets including roads, bridges, tunnels, airports, power generation, fuels, pipelines, water and waste management, and communication assets.
			35102030 Office REITs	REITs that primarily invest in office properties.	
			35102040 Residential REITs	REITs that primarily invest in residential properties including manufactured homes, multifamily homes, apartments, and student housing properties.	
			35102045 Retail REITs	REITs that primarily invest in retail properties including malls, shopping centers, neighborhood and community shopping centers, strip malls, free standing stores, and factory outlets.	
			35102050 Storage REITs	REITs that primarily invest in public self- storage properties.	
				35102060 Timber REITs	REITs that primarily invest in timberland and timber-related products and activities.
			35102070 Other Specialty REITs	REITs that primarily invest in any single type of facility or property not specifically defined within another REITs industry.	

6.6 **Consumer Discretionary**

Contains companies that provide products and services directly to the consumers, and their purchasing habits are non-cyclical in nature (discretionary). Includes companies that manufacture and distribute Household durable goods, apparel, home electronic devices, leisure equipment, and automotive and related parts. The services segment includes hotels, restaurants, retail/e-retail, passenger transportation, and other leisure facilities. Also includes media companies that engage in entertainment content creation and traditional advertisement. Excludes web-portal/hosts that generate revenue through advertisement, which are classified under Technology – Consumer Digital Services.

Industry	Supersector	Sector	Subsector	Definition	
40 Consumer Discretionary	4010 Automobiles and Parts	401010 Automobiles and Parts	40101010 Auto Services	Companies that provide assistance to individual vehicle owners.	
			40101015 Tires	Manufacturers, distributors and retreaders of automobile, truck and motorcycle tires.	
			40101020 Automobiles	Makers of passenger vehicles, including cars, sport utility vehicles (SUVs) and light trucks. Excludes makers of heavy trucks and makers of recreational vehicles (RVs and ATVs).	
			40101025 Auto Parts	Manufacturers and distributors of new and replacement parts for motorcycles and automobiles, such as engines, carburetors and batteries. Excludes producers of tires, which are classified under Tires Subsector.	
	4020 Consumer Products and Services	402010 Consumer Services	40201010 Education Services	Companies that own and manage higher education systems, post-secondary degree programs or other educational services.	
				40201020 Funeral Parlors and Cemetery	Companies that own and operate funeral homes, cemeteries, crematoriums and/or provide other funeral services.
			40201030 Printing and Copying Services	Companies specializing in printing, copying and/or similar solutions for individuals and small businesses.	
				40201040 Rental and Leasing Services: Consumer	Companies that lease automobiles, appliances, electronics or furniture to consumers.
					40201050 Storage Facilities
			40201060 Vending and Catering Service	Companies that provide catering and food service and/or food ingredients to individuals or institutions.	
			40201070 Consumer Services: Misc.	Consumer Services companies that are not categorized in the Education Services, Funeral Parlors and Cemeteries, Printing and Copying Services, Rental and Leasing Services, Storage Facilities or Vending and Catering Services categories.	
		402020 Household Goods and Home Construction	40202010 Home Construction	Constructors of residential homes, including manufacturers of mobile and prefabricated homes intended for use in one place.	
			40202015 Household Furnishings	Manufacturers and distributors of furniture, including chairs, tables, desks, and office furniture.	
			40202020 Household Appliance	Companies that manufacture and market household electrical appliances.	

		40202025 Household Equipment and Products	Companies that manufacture and supply various household products. Includes manufacturers of gardening tools, kitchen utensils, dishes and other home related products.
	402030 Leisure Goods	40203010 Consumer Electronics	Companies involved in the application of technology and electronics to the consumer discretionary sector.
		40203040 Electronic Entertainm ent	Companies that design, manufacture and market video game software and related elements. Also includes non-consumer entertainment technology, e.g. Dolby.
		40203045 Toys	Manufacturers and distributors of toys, including such toys and games as playing cards, board games, stuffed animals and dolls.
		40203050 Recreational Products	Manufacturers and distributors of recreational equipment not classified in other "Leisure Goods" categories, including Musical Instruments.
		40203055 Recreational Vehicles and Boats	Companies that design, manufacture and market recreation vehicles (RVs), motorcycles or passenger boats.
		40203060 Photography	Companies that produce and/or market professional and/or personal imaging products including digital cameras and film cameras.
	402040 Personal Goods	40204020 Clothing and Accessories	Manufacturers and distributors of all types of clothing and accessories. Includes sportswear, sunglasses, eyeglass frames, leather clothing and goods, and processors of hides and skins. Excludes jewelry, which is categorized under Luxury Items.
		40204025 Footwear	Manufacturers and distributors of shoes, boots, sandals, sneakers and other types of footwear.
		40204030 Luxury Items	Companies that manufacture and market jewelry, watches and gemstones.
		40204035 Cosmetics	Companies that produce and market make-up and fragrance products (perfume). Excludes personal care products, which are classified under Consumer Staples Industry.
4030 Media	403010 Media	40301010 Entertainment	Companies that provide various media services including feature films, music and television shows and stations.
		40301020 Media Agencies	Companies that provide a wide range of marketing and public relations services such as promoting advertising space in telephone and professional directories, analyzing market research and other various marketing activities. Excluding website design/publishing, which are classified under the Consumer Digital Services Subsector.
		40301030 Publishing	Companies that provide advertising and publishing services to customers in industrial, commercial, and design markets. This includes companies that publish books, magazines, comics, encyclopedias, financial reports, journals and/or newspapers.
		40301035 Radio and TV Broadcasters	Companies with principal activities that include operating commercial TV stations and/or radio broadcasting.
4040 Retailers	404010 Retailers	40401010 Diversified Retailers	Retail outlets and wholesalers offering a wide variety of products including both hard goods and soft goods.

		40401020 Apparel Retailers	Retailers and wholesalers specializing mainly in clothing, shoes, jewelry, sunglasses and other accessories.
		40401025 Home Improvement Retailers	Retailers and wholesalers concentrating on the sale of home improvement products, including garden equipment, carpets, wallpaper, paint, home furniture, blinds and curtains, and building materials.
		40401030 Specialty Retailers	Retailers and wholesalers concentrating on a single class of goods, such as electronics, books, automotive parts or closeouts. Includes automobile dealerships, video rental stores, dollar stores, duty-free shops and automotive fuel stations not owned by oil companies. Excludes Apparel and Home Improvement Retailers.
4050 Travel and Leisure	405010 Travel and Leisure	40501010 Airlines	Companies providing primarily passenger air transport. Excludes airports, which are classified under Transportation Services Sector.
		40501015 Travel and Tourism	Companies providing travel and tourism related services, including travel agents, online travel reservation services, and companies that provide passenger transportation for leisure are included, such as tour buses, leisure cruisers and railways, and taxis. Excludes mass public transportation services which are classified under Industrial Transportation Sector.
		40501020 Casino and Gambling	Providers of gambling and casino facilities. Includes online casinos, racetracks and the manufacturers of pachinko machines and casino and lottery equipment.
		40501025 Hotels and Motels	Operators and managers of hotels, motels, lodges, resorts, spas and campgrounds.
		40501030 Recreational Services	Providers of leisure facilities and services, including fitness centers, amusement parks, concerts and sports/e-sports event promotion. Also includes companies that own and manage professional sports teams.
		40501040 Restaurants and Bars	Operators of restaurants, fast-food facilities, coffee shops and bars. Includes integrated brewery companies. Excludes catering companies, which are classified under Vending and Catering Service Subsector.

6.7 Consumer Staples

Contains companies that provide products and services directly to the consumers, and their purchasing habits are cyclical in nature (staples). Includes companies that manufacture, distribute, and/or retail food, beverages, and other non-durable household goods. It also includes drug-retailing companies as well as agriculture, fishing, ranching and milling companies.

ndustry	Supersector	Sector	Subsector	Definition
45 Consumer Staples	4510 Food, Beverage and Tobacco	451010 Beverages	45101010 Brewers	Manufacturers and shippers of cider or malt products such as beer, ale and stout.
	Tobacco		45101015 Distillers and Vintners	Producers, distillers, vintners, blenders and shippers of wine and spirits such as whisky, brandy, rum, gin or liqueurs.
			45101020 Soft Drinks	Manufacturers, bottlers and distributors of non-alcoholic beverages, such as soda, fruit juices, tea, coffee and bottled water.
		451020 Food Producers	45102010 Farming, Fishing, Ranching and Plantations	Companies that grow crops or raise livestock, operate fisheries or own nontobacco plantations. Includes manufacturers of livestock feeds and seeds and other agricultural products.
			45102020 Food Products	Food producers, including meatpacking, snacks, fruits, vegetables, dairy products and frozen seafood. Includes producers opet food and manufacturers of dietary supplements, vitamins and related items. Excludes producers of fruit juices, tea, coffee, bottled water and other non-alcoholic beverages, which are classified under Soft Drinks Subsector.
			45102030 Fruit and Grain Processing	Companies involved in the value-adding process of various "raw" or "unprocessed agricultural products. May also produce and market such products.
			45102035 Sugar	Companies that grow, refine, process and distribute sugar.
		451030 Tobacco	45103010 Tobacco	Manufacturers and distributors of cigarettes, cigars and other tobacco products. Includes tobacco plantations.
	4520 Personal Care, Drug and Grocery Stores 452010 Personal Care, Drug and Grocery Stores Crocery Stores		45201010 Food Retailers and Wholesalers	Supermarkets, food-oriented convenience stores and other food retailers and distributors. Includes retailers of dietary supplements and vitamins.
			45201015 Drug Retailers	Operators of pharmacies, including wholesalers and distributors catering to these businesses.
			45201020 Personal Products	Makers and distributors of toiletries and personal-care and hygiene products, including deodorants, soaps, toothpaste, perfumes, diapers, shampoos, razors, condoms and feminine-hygiene products. Excludes makers of hormonal (oral or injection) and implants (intrauterine devices) and contraceptives, which are classified under the Pharmaceuticals Subsector.
			45201030 Nondurable Househ old Products	Producers and distributors of pens, paper goods, batteries, light bulbs, tissues, toile paper and cleaning products such as soaps and polishes.
			45201040 Miscellaneous Consumer Staple Goods	Includes Consumer Staples companies that are not classified in any other Consumer Staples industry.

6.8 Industrials

Consists of companies engaged in manufacturing and distribution of capital goods and provider of business support services. Includes aerospace, weapons/defense, commercial vehicles, construction materials, industrial machinery and equipment manufacturers. The service segment includes commercial transportation services, business support, maintenance and security services, international trade, transaction processing, and diversified logistic support services.

Industry	Supersector	Sector	Subsector	Definition
50 Industrials	5010 Construction and Materials	501010 Construction and Materials	50101010 Construction	Companies that provide construction and infrastructure development services to private and/or public-sector clients.
			50101015 Engineering and Contracting Services	Companies that provide capital project planning and solutions. Includes engineering contracts, infrastructure development, bid preparation, interior enhancement designs and architects.
			50101020 Building, Roofing/Wallboard and Plumbing	Companies that design, manufacture, market and/or install non-climate control systems and related products such as siding, windows and water pipes.
			50101025 Building: Climate Control	Companies that design, manufacture, market and/or install air conditioning, heating and/or refrigeration systems.
			50101030 Cement	Companies primarily engaged in manufacturing and distributing cement and cement-derived products.
			50101035 Building Materials: Other	Companies that provide materials to the building and construction industry, excluding air-conditioning, cement, heating, plumbing, roofing, and wall boards.
	5020 Industrial Goods and Services	502010 Aerospace and Defense	50201010 Aerospace	Manufacturers, assemblers and distributors of aircraft and aircraft parts primarily used in commercial or private air transport. Excludes manufacturers of communications satellites, which are classified under Telecommunications Equipment Subsector.
			50201020 Defense	Producers of components and equipment for the defense industry, including military aircraft, radar equipment and weapons.
		502020 Electronic and Electrical Equipment	50202010 Electrical Components	Makers and distributors of electrical parts for finished products such as radios, televisions and other consumer electronics. Includes makers of cables, wires, ceramics, transistors, and electric adapters.
			50202020 Electronic Equipment: Control and Filter	Companies primarily involved in providing mechanical and electronic security and/or filtration systems.
			50202025 Electronic Equipment: Gauges and Meters	Companies that design, manufacture and market products used to measure electric, gas, water and other data for use in a variety of industries.
			50202030 Electronic Equipment: Pollution Control	Companies primarily engaged in the production of pollution control equipment for purification of air and liquids. Also included are companies that provide services such as decontamination, solvent disposal management, used oil collection, vacuum truck services and recycling.

		50202040 Electronic Equipment: Other	Companies that specialize in the development and production of electrical devices/components marketed to business clients.
	502030 General Industrials	50203000 Diversified Industrials	Companies engaged in three or more industrial business activities, none of which is the dominant business line.
		50203010 Paints and Coatings	Companies that manufacture and distribute paint, material coatings, and resins.
		50203015 Plastics	Companies that manufacture and market plastic products or chemicals used to make plastic.
		50203020 Glass	Companies that manufacture various structural glasses such as float glass, architectural glass, delicacy glass, automotive glass, and other glass products. Excludes glass containers/bottles prepared for other markets.
		50203030 Containers and Packaging	Companies that may produces a wide range of packaging products and packaging related materials, including cartons, plastic bottles, jars, glass bottles, aluminum cans, dispensing pumps, aerosol valves, etc.
	502040 Industrial Engineering	50204000 Machinery: Industrial	Companies that design, develop, manufacture, sell, and support general industrial machines and parts. This excludes all the other machinery Subsectors specified.
		50204010 Machinery: Agricultural	Manufacturers and distributers of a range of farming equipment for irrigation, harvesting, plowing and other processes.
		50204020 Machinery: Construction and Handling	Companies that design, manufacture and market large-size industrial equipment for construction and ports.
		50204030 Machinery: Engines	Companies that manufacture and distribute energy output devices and component parts, including diesel engines and gas engines.
		50204040 Machinery: Tools	Companies that manufactures and market value-adding equipment for various heavy industries.
		50204050 Machinery: Specialty	Companies that design, manufacture and market a specific type or group of industrial machines and parts. This excludes all the other Machinery industries categorized in the Machinery Subsector.
	502050 Industrial Support Services	50205010 Industrial Suppliers	Distributors and wholesalers of diversified products and equipment primarily used in the commercial and industrial sectors. Includes builder's merchants and companies providing Maintenance/Repair services.
		50205015 Transaction Processing Services	Providers of computerized transaction processing services. Includes companies that engages in any aspects of global payment services such as routing of payment information and related data services that facilitate the authorization, clearing, and settlement of transactions. Includes card network operators, issuer and acquirer processors.
		50205020 Professional Business Support Services	Companies that provide outsourced business operation services. This includes consulting services, corporate taxes, and business decision tools such as credit monitoring and KYC database service. Credit Agencies and Rating firms are classified under the Financial Data Providers Subsector.

50205025 Business Training and Employment Agencies 50205030 Forms and Bulk Printing Services 50205040 Security Services Providers of business or management training courses and employment services and employment services training courses and employment services and employment services training courses and employment services training courses and employment services and Bulk Printing products including forms, checks, laber and IDs. Companies that provide security services install, service and monitor alarm and security systems.	ess Is
and Bulk Printing Services products including forms, checks, laber and IDs. 50205040 Security Services Companies that provide security service install, service and monitor alarm and	ls
Services install, service and monitor alarm and	es.
	,
502060 Industrial Transportation 50206010 Trucking Companies that provide commercial trucking or mass public bus services. Excludes road and tunnel operators, ware classified under Transportation Services Subsector.	hich
50206015 Companies that design, develop, Commercial manufacture, and distribute light, med Vehicles and Parts and heavy-duty trucks and vans. Also includes related aftermarket distributio parts.	
50206020 Companies that operate railway system for transporting goods and mass public services.	
50206025 Railroad Companies that manufacture, supply a Equipment distribute railroad supplies.	nd
50206030 Marine Transportation Transportation Providers of on-water transportation for commercial markets, such as contained shipping. Excludes ports, which are classified under Transportation Service and shipbuilders.	r
50206040 Delivery Services Operators of mail and package deliver services for commercial and consume use. Includes courier and logistic servi primarily involving air transportation.	
50206050 Companies that rents and lease operational equipment to commercial vehicle-Equipment Leasing clients, such as: rails, tankers, freight related equipment plus aviation assets and airplanes).	,
50206060 Transportation Services Companies providing services to the Industrial Transportation sector, include companies that manage airports, train depots, roads, bridges, tunnels, ports, providers of logistic services to shippe goods. Includes companies that provide aircraft and vehicle maintenance services.	and s of

6.9 Basic Materials

Consists of companies that extract or process raw materials, and manufacturers of semi-finished goods such as chemicals, textile, paper, forest products and related packaging products. Metals and minerals miners, metal alloy producers, and metal fabricators are also included.

Industry	Supersector	Sector	Subsector	Definition
55 Basic Materials	5510 Basic Resources	551010 Industrial Materials	55101000 Diversified Materials	Companies involved in manufacturing a diversified range of materials (e.g., bauxite, abrasive materials and composite material).
			55101010 Forestry	Owners and operators of timber tracts, forest tree nurseries and sawmills. Excludes providers of finished wood products such as wooden beams, which are classified under Building Materials. Also excludes timber REITs, which are classified under Real Estate Industry.
			55101015 Paper	Companies that manufacture and market paper products including office paper, cardboard, tissue paper, newsprint, commercial pulp, etc.
			55101020 Textile Products	Companies that produce and distribute various textile products such as cotton yarns, denims, and other finished fabrics.
		551020 Industrial Metals and Mining	55102000 General Mining	Companies engaged in the exploration, extraction or refining of minerals not defined elsewhere within the Mining sector. Also includes companies engaged in diversified metals and mining and providers of contracted drilling services. Excludes companies that primarily provide services to Oil and Gas companies which are classified in Oil Equipment and Services Subsector.
			55102010 Iron and Steel	Companies that mine for iron ore and companies that produce, process, and distribute steel products. This can include welding consumables, strip steel, rods, bars, wires, piping, tubing, rails, and structural products as well as sheets and coils.
			55102015 Metal Fabricating	Companies that manufacture and supply fabricated metal components such as, rings, piping materials, hinges, springs, etc.
			55102035 Aluminum	Companies that mine or process bauxite or manufacture and distribute aluminum bars, rods and other products for use by other industries. Excludes manufacturers of finished aluminum products, such as siding, which are categorized according to the type of end product.
			55102040 Copper	Companies primarily involved in the mining, extraction and distribution of copper and related minerals
			55102050 Nonferrous Metals	Producers and traders of metals and primary metal products other than iron, aluminum and steel. Excludes companies that make finished products, which are categorized according to the type of end product.
		551030 Precious Metals and Mining	55103020 Diamonds and Gemstones	Companies engaged in the exploration for and production of diamonds and other gemstones.
			55103025 Gold Mining	Prospectors for and extractors or refiners of gold-bearing ores.

		55103030 Platinum and Precious Metals	Companies engaged in the exploration for and production of platinum, silver and other precious metals not defined elsewhere.
5520 Chemicals	552010 Chemicals	55201000 Chemicals: Diversified	Companies that manufacture and market a diversified range of industrial chemicals.
		55201010 Chemicals and Synthetic Fibers	Companies that manufacture and distribute chemical fibers for various applications.
		55201015 Fertilizers	Companies that manufacture and market nitrogen fertilizers and other agricultural chemicals.
		55201020 Specialty Chemicals	Companies that manufacture and market a specific type or group of chemicals elsewhere in the Chemicals Subsector.

6.10 Energy

Contains of companies that engage in energy extraction, process, and production activities and produce related energy equipment. Includes both renewable and non-renewable energy companies. Companies that primarily engages in distribution of energy are classified in Utilities Industry.

Industry	Supersector	Sector	Subsector	Definition
60 Energy	6010 Energy	601010 Oil, Gas and Coal	60101000 Integrated Oil and Gas	Companies that engage in all three fields of petroleum production: Extraction (upstream), Transportation (midstream), and Refining and Marketing (downstream).
			60101010 Oil: Crude Producers	Companies engaged in the exploration for and drilling, production, and supply of crude oil on land.
			60101015 Offshore Drilling and Other Services	Companies that primarily explore and drill for oil and gas in offshore areas.
			60101020 Oil Refining and Marketing	Companies primarily engaged in the refining and marketing of petroleum products (downstream).
			60101030 Oil Equipment and Services	Suppliers of equipment and services to oil fields and offshore platforms, such as drilling, exploration, seismic-information services and platform construction.
			60101035 Pipelines	Operators of pipelines carrying oil, gas or other forms of fuel. Excludes pipeline operators that derive the majority of their revenues from direct sales to end users, which are classified under Gas Distribution Subsector.
			60101040 Coal	Companies that mine, process and market coal.
		601020 Alternative Energy	60102010 Alternative Fuels	Companies that produce alternative fuels such as ethanol, methanol, hydrogen and bio-fuels that are mainly used to power vehicles, and companies that are involved in the production of vehicle fuel cells and/or the development of alternative fueling infrastructure.
			60102020 Renewable Energy Equipment	Companies that develop or manufacture renewable energy equipment utilizing sources such as solar, wind, tidal, geothermal, hydro and waves.

6.11 Utilities

Contains companies that distributes electric, gas, and water. Most companies in this industry are heavily affected by government regulation. Also includes companies that provide waste, recycle, and related environmental services.

Industry	Supersector	Sector	Subsector	Definition
65 Utilities		651010 Electricity	65101010 Alternative Electricity	Companies generating and distributing electricity from a renewable source. Includes companies that produce solar, water, wind and geothermal electricity.
			65101015 Conventional Electricity	Companies generating and distributing electricity through the burning of fossil fuels such as coal, petroleum and natural gas, and through nuclear energy.
		651020 Gas, Water and Multi-utilities	65102000 Multi- Utilities	Companies that engage in multiple utilities that have no particular dominance over one another.
			65102020 Gas Distribution	Distributors of gas to end users. Excludes providers of natural gas as a commodity, which are classified under the Oil and Gas industry.
			65102030 Water	Companies providing water to end users, including water treatment plants.
		651030 Waste and Disposal Services	65103035 Waste and Disposal Services	Providers of pollution control and environmental services for the management, recovery and disposal of solid and hazardous waste materials, such as landfills and recycling centers. Excludes manufacturers of industrial air and water filtration equipment, which are classified under Electronic Equipment: Pollution Control Subsector.



Appendix A: Further Information

A Glossary of Terms used in FTSE Russell's Ground Rule documents can be found using the following link:

Glossary.pdf

Further information on the Industry Classification Benchmark is available from FTSE Russell.

For contact details please visit the FTSE Russell website or contact FTSE Russell client services at info@ftserussell.com.

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