Insights

Industry Classification Benchmark:
Structural enhancements to the industry categorization framework

An industry classification system allows investors and other market participants to segment and evaluate the global economy in a systematic and holistic way. It provides a standardized framework to research individual areas of the economy, conduct peer group analysis and classify companies on both a top-down and bottom-up basis. An industry classification system allows users to assign individual companies to both aggregate industry groupings and, with increasing levels of detail, to sectors and subsectors that reflect companies' specialist areas of business.

A well-constructed classification system can also be used to track the performance and evolution of industries, supersectors, sectors, subsectors and companies over time. Therefore, as industries evolve and new forms of economic activity rise to prominence, a classification scheme needs to adapt to reflect those changes.

In 2019, the Industry Classification Benchmark (ICB[®]) will be enhanced to ensure that its company categorization structure meets the needs of today's investment professionals.

- Following the completion of the "FTSE Russell Client Consultation for Integrating Industry Classification Structures" and based on additional research and client feedback, effective January 1, 2019, the ICB structure will be improved and expanded to include:

  - 11 Industries
  - 20 Supersectors
  - 45 Sectors
  - 171 Subsectors

- Also effective January 1, 2019, the Russell Global Sectors (RGS) classification scheme will be discontinued and its clients will be transitioned to the updated ICB scheme.

In this FTSE Russell Insights we describe the enhancements to the ICB framework, outline the rationale for key changes to its structure and summarize the impact of the proposed changes.

What is ICB?

ICB is a globally recognized standard for categorizing companies and securities, operated and managed by FTSE Russell. ICB is widely used both by the world's stock exchanges and as the underlying framework for over US$250B in benchmarked assets in sector-based fund products.[1]

ICB provides four levels of classification, from Industry to Supersector, Sector and Subsector. Each company in the ICB Universe is allocated to the Subsector that most closely represents the nature of its business. This allocation is determined by the company's primary source of revenue and other publicly available information. Where revenue information is unavailable or insufficient, a company will be allocated to that Subsector whose definition most closely coincides with the description of the company's business as stated in its annual report, listing prospectus or regulatory filings.[2]

Approximately 100,000 securities worldwide are classified by the ICB system, providing a comprehensive data source for investment research, portfolio management and asset allocation. Funds are constructed based on ICB Industries and Supersectors, and the global scope of the classification framework also allows for comparative analysis between sectors and industries worldwide as an investment decision-support tool.

FTSE Russell leadership in company classification

FTSE Russell is a pioneer in company classification. When the FT-Actuaries All-Share Index (now the FTSE All-Share® Index) of UK equities was launched in 1962, its index committee carried out the first comprehensive and logical classification of companies by industry that the investment world had seen. The constituents of the All-Share Index were allocated to one of eight industry groups (capital goods, consumer durables, consumer non-durables, chemicals, oil, shipping, financials and miscellaneous), with companies then allocated to homogeneous sub-groups within four of these industry groups.[3]

The FT-Actuaries All-Share Index classification structure was reviewed and modified in 1970 and again in 1994 to reflect a more codified approach and changes in the structure of the UK equity market. In 1999-2000 the system was expanded and adapted for use in the classification of the global equity markets, in particular as the underlying sector classification framework for the FTSE Eurotop and the FT/S&P Actuaries World Indices, both predecessors of the current FTSE Global Equity Index Series.

ICB, a comprehensive classification framework for the global equity markets, was launched by FTSE and Dow Jones in 2005 and has remained largely unchanged in structure since then (in 2011, FTSE became the sole owner of ICB).

As part of the FTSE and Russell Indexes integration effort following the 2014 acquisition of Russell Investments by the London Stock Exchange Group, the taxonomies and methodologies of both the ICB and RGS systems were reviewed. In March 2017, FTSE Russell consulted the market on the unified classification structure that would combine the best of both systems, as well as reflect changes in the way investors view the structure of the global equity markets.

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[1] Source: FTSE Russell and Morningstar Direct, latest data available as of July 31, 2017.

[2] For a detailed description of the ICB classification guidelines, see ICB Ground Rules, Section 4. For the pro forma ground rules with the updated structure, numeric coding system and Subsector descriptions effective January 1, 2019, see ICB Ground Rules (Effective January 1 2019)

[3] See Haycocks and Plymen, "The Design, Application and Future Development of the FT-Actuaries Index", Journal of the Institute of Actuaries, 1964.

What is changing at the headline level?

At the headline level, the enhancements to the ICB structure mean that from January 1, 2019 ICB will include 11 Industries, 20 Supersectors, 45 Sectors and 171 Subsectors (Figure 1).

Compared with the current ICB structure, the number of Industries and Supersectors increases by one, the number of Sectors by four and the number of Subsectors by 57. For RGS users, nine Sectors become 11 Industries, the intermediate Subsector level maps to two ICB tiers (the Supersector and Sector levels) and 157 RGS Industries become 171 ICB Subsectors.

Figure 1. The ICB structure effective January 1, 2019

Classification Scheme	Level 1	Level 2	Level 3	Level 4
ICB *(Effective January 1, 2019)*	11 Industries	20 Supersectors	45 Sectors	171 Subsectors
ICB	10 Industries	19 Supersectors	41 Sectors	114 Subsectors
RGS	9 Sectors	33 Subsectors		157 Industries

Source: FTSE Russell.

Both ICB and RGS users will benefit from the added granularity under the new system, particularly at the Subsector level. Users of the current RGS scheme will also gain from the addition of a classification level within ICB's four-tiered system.

The ICB numeric code system has also been redesigned to better accommodate possible future additions and changes, paving the way for future expansion beyond the current coverage as FTSE Russell continues to expand its product offering to provide more data solutions and investment tools across asset classes worldwide.

What are the key changes?

In addition to the enhanced Subsector granularity, key changes to the ICB at the broadest headline level include the addition of Real Estate as an ICB Industry, the expansion of the Telecommunications Industry and the adoption of Consumer Discretionary and Consumer Staples (Figure 2). The ICB Oil and Gas Industry is renamed Energy.

Figure 2. Comparison of ICB and RGS schemes at the headline level

| ICB (11 Industries) - *effective January 1, 2019*	ICB (10 Industries) - *current*	RGS (9 Sectors) - *to be discontinued December 31, 2018*
Technology	Technology	Technology
Telecommunications	Telecommunications	
Health Care	Health Care	Health Care
Financials	Financials	Financial Services
Real Estate		
Consumer Discretionary	Consumer Services	Consumer Discretionary
Consumer Staples	Consumer Goods	Consumer Staples
Industrials	Industrials	Producer Durables
Basic Materials	Basic Materials	Materials and Processing
Energy	Oil and Gas	Energy
Utilities	Utilities	Utilities

Addition of Real Estate as the 11th ICB Industry

The real estate segment has reached critical mass in global equity markets. As of July 31, 2017, real estate stocks − including real estate investment trusts (REITs) − comprised 4.1% of the FTSE Global All Cap Index, representing nearly US$2 trillion of investable market capitalization.

Listed real estate companies provide access to commercial real estate investments with the added liquidity, transparency and regulation associated with investing in publicly traded stocks. Additionally, real estate equity generally provides the potential of competitive long-term rates of return supported by regular dividend payments.

The correlation of real estate stocks to banks, financial services and insurance companies has declined over the past decade, supporting the case for real estate to be treated as a distinct activity from that of other companies in the financials sector (Figure 3). The lower correlation of listed real estate equity compared to other equities in the medium to long run may help diversify investment portfolios relative to other asset classes.

Figure 3. Rolling 3-year correlation to the FTSE EPRA/NAREIT Global Index
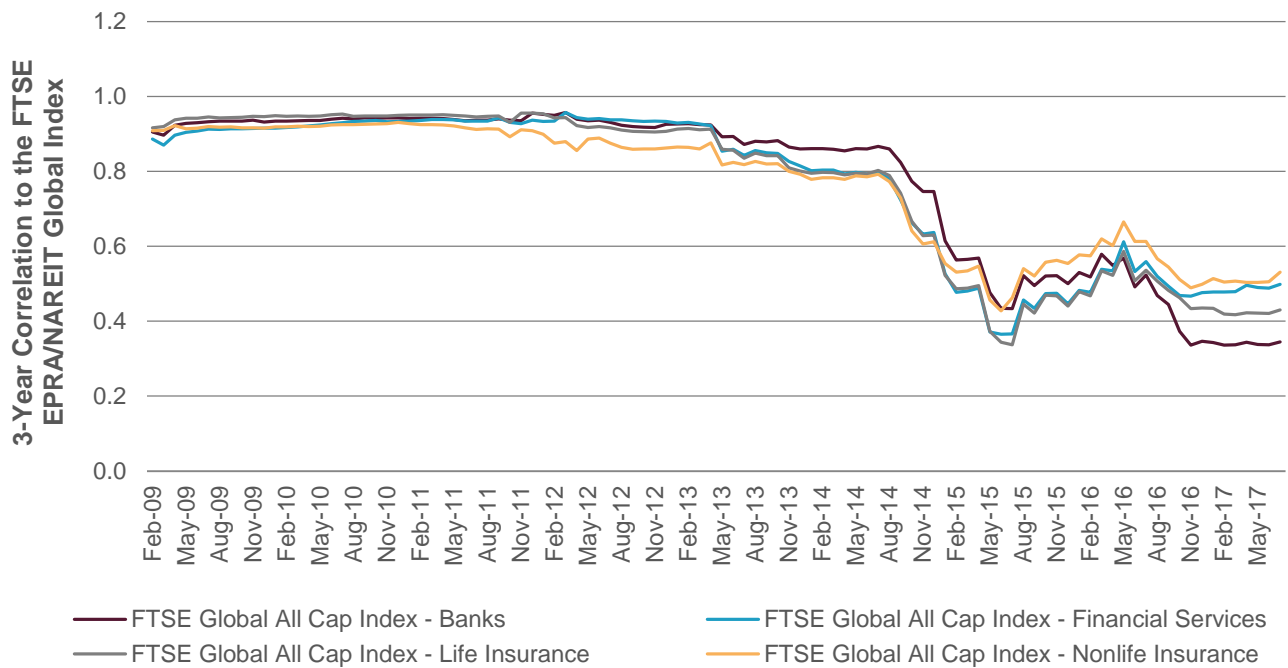
Source: FTSE Russell, data as of July 31, 2017.

The FTSE Russell consultation proposed the addition of Real Estate as the 11th ICB Industry and subsequent market feedback strongly supported this proposal.

In its response to the FTSE Russell market consultation, real estate industry expert National Association of Real Estate Investment Trusts (NAREIT) said that:

"These proposed changes [to ICB] would appropriately recognize, clarify and illuminate the growing presence, significance and specialization of stock exchange-listed real estate companies, including listed Equity REITs and other listed real estate companies engaged in the acquisition, development, ownership, leasing and management of real estate."

- Michael Grupe, Executive Vice President, Research & Investor Outreach at the National Association of Real Estate Investment Trusts (NAREIT)

The European Public Real Estate Association (EPRA) also expressed support for the new ICB Real Estate Industry segment:

"ICB's elevation of Real Estate as its 11th Industry reflects the growth of listed real estate, which is driven by the introduction of REITs globally and long-term returns. The reclassification confirms the merits of listed real estate as a standalone asset class."

- Ali Zaidi, Director of Research & Indices at the European Public Real Estate Association (EPRA)

Given the growth of REITs globally, the new ICB structure will maintain REITs as a distinct Sector (separate from the Real Estate Investment & Services Sector within the Real Estate Industry and Supersector), with added granularity at the Subsector level (Figure 4).

However, because Mortgage REITs derive revenue from real estate financing rather than from real estate itself, they will remain in the Financials Industry within the Financial Services Supersector, albeit with additional granularity at the Subsector level (Diversified, Commercial, Residential).

Although the weight of the ICB Financials Industry will be reduced in proportion to the weight of real estate companies assigned to the new Real Estate Industry, the ICB Financials Industry is projected to retain the largest Industry weight in the FTSE Global All Cap Index based on June 2017 market capitalization weights.

Figure 4. The new ICB Real Estate Industry

Industry	Supersector	Sector	Subsector	Preliminary company examples
Real Estate	Real Estate	Real Estate Investment & Services	Real Estate Holding and Development	Mitsui Fudosan, Mitsubishi Estate
			Real Estate Services	CBRE, Lend Lease Group
		Real Estate Investment Trusts (REITs)	Diversified REITs	Goodman Group, VEREIT
			Health Care REITs	Welltower, Ventas
			Hotel & Lodging REITs	Host Hotels & Resorts, Hospitality Properties Trust
			Industrial REITs	Prologis, Digital Realty Trust
			Infrastructure REITs	American Tower Corp, Crown Castle Intl Corp
			Office REITs	Boston Properties, Vornado Realty
			Residential REITs	Avalonbay Communities, Equity Residential
			Retail REITs	Simon Property Group, Unibail-Rodamco
			Storage REITs	Public Storage, CubeSmart
			Timber REITs	Weyerhaeuser, Rayonier
			Other Specialty REITs	Equinix Inc, SBA Communications

Source: FTSE Russell, based on preliminary analysis of FTSE Global All Cap Index constituents of June 30, 2017.

Expansion of the Telecommunications Industry

Globally, the Telecommunications Industry continues to evolve and gain in significance. The new ICB structure reflects this trend by expanding the Industry via the addition of companies from the technology (Telecommunications Equipment) and media (Cable Television Services) segments to align with the Telecommunications-Media-Technology (TMT) grouping commonly referenced by investment professionals (Figure 5).

RGS users will also gain a 10th Industry via the segmentation of Telecommunications companies from Utilities, where they are currently located in the RGS framework.

Other changes include the creation of the Telecommunications Services Subsector − combining Fixed Line Telecommunications and Mobile Telecommunications companies as these business lines continue to converge − and the Cable Television Services Subsector, which are grouped at the Sector level as Telecommunications Service Providers. All Telecommunications companies including Telecommunications Equipment are grouped at the Industry and Supersector levels.

Figure 5. The new ICB Telecommunications Industry

Industry	Supersector	Sector	Subsector	Preliminary company examples
Telecommunications	Telecommunications	Telecommunications Equipment	Telecommunications Equipment	Cisco Systems, Qualcomm
		Telecommunications Service Providers	Cable Television Services	Comcast, Naspers
			Telecommunications Services	AT&T, Verizon Communications

Source: FTSE Russell, based on preliminary analysis of FTSE Global All Cap Index constituents of June 30, 2017.

Adoption of Consumer Discretionary and Consumer Staples Industries

The segmentation of companies involved in the provision of consumer goods and services into Consumer Staples and Consumer Discretionary segments has become a standard approach among investment professionals. This preference reflects the tendency of stocks within the two segments to exhibit distinct risk/return characteristics during different phases of the economic cycle. As such, the ICB Consumer Services and Consumer Goods Industries will transition to the new ICB Consumer Discretionary and Consumer Staples Industries (Figures 6 and 7).

As their name suggests, Consumer Staples companies tend to continue to generate profits during periods of recession, while Consumer Discretionary companies tend to suffer more during recessions but have increased sensitivity to economic upswings.

The new ICB Consumer Discretionary and Consumer Staples Industries are a blend of the existing ICB Consumer Goods and Consumer Services Industries. A preliminary analysis undertaken by FTSE Russell based on the FTSE Global All Cap Index shows that a majority of the weight in the existing ICB Consumer Goods Industry shifts to the new ICB Consumer Staples Industry, while a majority of the weight in the existing Consumer Services Industry shifts to the new ICB Consumer Discretionary Industry.

For existing ICB users, several Subsectors are further segmented to add granularity: for example, the existing Specialized Consumer Services Subsector will be divided into seven new Subsectors. Additional granularity is also provided in the Food Products and Personal Products ICB Subsectors.

For existing RGS users, the Airlines Subsector and the Electronic Entertainment Subsector move from Industrials and Technology, respectively, to Consumer Discretionary within the new ICB framework.

Figure 6. The new ICB Consumer Staples Industry

Industry	Supersector	Sector	Subsector	Preliminary company examples
Consumer Staples	Food, Beverage & Tobacco	Beverages	Brewers	Anheuser-Busch InBev, Ambev SA
			Distillers & Vintners	Diageo, Constellation Brands
			Soft Drinks	Coca-Cola, Pepsico
		Food Producers	Farming, Fishing, Ranching & Plantations	Marine Harvest, IOI
			Food Products	Nestle, Mondelez International
			Fruit & Grain Processing	Archer Daniels Midland, Bunge
			Sugar	Suedzucker, Tongaat Hulett
		Tobacco	Tobacco	Philip Morris, Altria Group
	Personal Care, Drug & Grocery Stores	Personal Care, Drug & Grocery Stores	Food Retailers & Wholesalers	Seven & I Holdings, Woolworths
			Drug Retailers	CVS Health Corporation, Walgreens Boots Alliance
			Personal Products	Procter & Gamble, Unilever
			Nondurable Household Products	Reckitt Benckiser Group, Henkel KG
			Miscellaneous Consumer Staple Goods	Spectrum Brands Holdings, Cosmax BTI

Source: FTSE Russell, based on preliminary analysis of FTSE Global All Cap Index constituents of June 30, 2017.

Figure 7. The new ICB Consumer Discretionary Industry

Industry	Supersector	Sector	Subsector	Preliminary company examples
Consumer Discretionary	Automobiles & Parts	Automobiles & Parts	Auto Services	AA
			Tires	Bridgestone Corp, Michelin
			Automobiles	Toyota Motor, Daimler AG
			Auto Parts	Delphi Automotive PLC, Denso Corporation
	Consumer Products & Services	Consumer Services	Education Services	Kroton Educacional S/A, Bright Horizons Family Solutions
			Funeral Parlors & Cemetery	Service Corp Intl, Matthews Intl
			Printing and Copying Services	Cimpress NV
			Rental & Leasing Services: Consumer	Localiza Rent a Car S.A., Avis Budget Group
			Storage Facilities	--
			Vending & Catering Service	--
			Consumer Services: Misc	Ebay, MercadoLibre
		Household Goods & Home Construction	Home Construction	Daiwa House Industry, D.R. Horton
			Furnishings	Mohawk Industries, Steinhoff International Holdings N.V.
			Household Appliance	Whirlpool Corp, Electrolux
			Household Equipment & Products	Newell Brands, Makita Corp
		Leisure Goods	Consumer Electronics;	Sony Corp, Panasonic Corp
			Electronic Entertainment	Activision Blizzard, Nintendo
			Toys	Hasbro, Mattel
			Recreational Products	Shimano, Yamaha
			Recreational Vehicles & Boats	Harley-Davidson
			Photography	Largan Precision, Nikon Corp
		Personal Goods	Clothing & Accessories	LVMH, VF Corp
			Footwear	Nike Inc, Adidas
			Luxury Items	Richemont, Swatch Group
			Cosmetics	L'Oreal, Lauder (Estee)
	Media	Media	Entertainment	Disney (Walt) Company, Time Warner
			Media Agencies	WPP, Omnicom

Industry	Supersector	Sector	Subsector	Preliminary company examples
			Publishing	RELX, Wolters Kluwer
			Radio & TV Broadcasters	Vivendi, CBS
	Retail	Retailers	Diversified Retailers;	Amazon.com, Wal-Mart Stores
			Apparel Retailers	TJX Companies, Inditex
			Home Improvement Retailers	Home Depot, Lowes Cos Inc
			Specialty Retailers	O'Reilly Auto, Ulta Beauty
	Travel & Leisure	Travel & Leisure	Airlines	Delta Air Lines, Southwest Airlines
			Travel & Tourism	Priceline Group, Carnival Corp
			Casinos & Gambling	Las Vegas Sands, MGM Resorts International
			Hotels & Motels	Marriott International, Hilton Worldwide
			Recreational Services	Oriental Land, Pool
			Restaurants & Bars	McDonalds Corp, Starbucks

Source: FTSE Russell, based on preliminary analysis of FTSE Global All Cap Index constituents of June 30, 2017.

Other highlights

Other notable changes for existing ICB or RGS users include:

- **Energy**: The renaming of the existing ICB Oil and Gas Industry as the Energy Industry to align with current market practice, the creation of new Renewable and Non-Renewable Energy Sectors and the shift of the ICB Coal Subsector from Basic Materials to Energy to group together energy segments (oil, gas and coal).

- **Airlines:** Given the consumer-sensitive nature of much air travel, ICB will maintain the distinction between passenger airlines and freight air transport (this will be a change to RGS users). Passenger airlines will continue to be assigned to the Airlines Subsector placed within the new ICB Consumer Discretionary Industry, while freight air transport will remain within the Delivery Services Subsector within the ICB Industrials Industry. Airlines demonstrated similar levels of correlation to companies classified as Industrials and with companies classified as Consumer Discretionary over the long-term, despite slightly higher near-term correlation with Industrials companies.

- **Consumer Digital Services:** ICB's existing Internet segment will be renamed and redefined as Consumer Digital Services within the Technology Industry, which include companies involved in digital platforms that generate revenues from advertising, content delivery and other virtual products related to consumers. Although companies within this Subsector may serve consumers, revenues are derived primarily from providing technology services.

What is the projected turnover impact of the structural changes to ICB?

The effect of the changes at the ICB Industry level is shown in Figure 8. The table reflects the number and percentage weight of constituents within each of the eleven new ICB Industries, as well as an analysis of changes based upon the FTSE Global All Cap Index. The number of additions and deletions with reference to the existing ICB structure is shown, as well as the additions and deletions as a percentage of the overall index.

Figure 8. Impact analysis of ICB changes for the FTSE Global All Cap Index at the Industry level

New ICB Industry name	New ICB Code	Current ICB Code	Total %	Total #	Add %	Add #	Delete %	Delete #
Technology	10	9000	**12.8**	**704**	1.6	205	1.1	117
Telecommunications	15	6000	**4.8**	**254**	1.9	122	0.002	2
Health Care	20	4000	**11.2**	**564**	0.7	47	0.02	7
Financials	30	8000	**19.6**	**1,043**	0.7	54	4.1	619
Real Estate (NEW)	35	n/a	**4.0**	**594**	n/a	n/a	n/a	n/a
Consumer Discretionary	40	5000	**12.9**	**1,318**	5.3	574	2.9	243
Consumer Staples	45	3000	**8.2**	**514**	1.3	130	6.0	612
Industrials	50	2000	**12.4**	**1,437**	0.8	146	2.4	344
Basic Materials	55	1000	**4.6**	**622**	0.4	75	0.6	68
Energy	60	0001	**6.0**	**368**	0.3	49	0.1	15
Utilities	65	7000	**3.4**	**315**	0.3	40	0.1	9
Total			**100**	**7,733**				

Source: FTSE Russell, based on preliminary analysis of FTSE Global All Cap Index constituents of June 30, 2017.

A single standard for classifying companies

ICB provides a comprehensive, single classification standard, enabling investment professionals, financial analysts and other market participants to categorize companies on both a top-down and bottom-up basis. The enhancements effective in January 2019 to ICB will ensure that it continues to meet the needs of those investing across an evolving global equity market and accommodate future enhancements as FTSE Russell expands its capabilities beyond the current coverage.

For more information about our indexes, please visit ftserussell.com.

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