

INDUSTRY BETAS

LEVERED AND UNLEVERED

65 INDUSTRIES

144 SUB-INDUSTRIES

10 GEOGRAPHICAL AREAS (USA + 9)

IV QUARTER 2018



INDUSTRY BETAS LEVERED AND UNLEVERED

- 65 INDUSTRIES
- 144 SUB INDUSTRIES
- 10 GEOGRAPHICAL AREAS

This quarterly research on industry and sub-industry betas
has been prepared by



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I – DESCRIPTION OF METHOD USED

1. About industry and sub-industry betas reported in this publication

Tables in Sections III and IV of this research list, *levered* and *unlevered industry* and *sub-industry* betas¹, are estimated on the basis of individual betas of shares issued by thousands of companies quoted on stock exchanges worldwide². Industry betas have been calculated as arithmetic averages of individual betas. They have been aggregated by industry or by sub-industry, as well as by different geographical areas³.

Industry betas can be useful when estimating the cost of capital because they tend to be less sensitive to errors that may affect the calculation of individual betas:

- as a consequence of special market situations or of other extraordinary events involving underlying companies, the results of individual beta calculation may be sometimes over- or underestimated;
- since industry betas are determined as averages of individual stock betas, over- and underestimations tend to compensate each other.

An average (industry or sub-industry) beta can, therefore, be generally considered to be more meaningful for the purpose of cost of capital calculation than its underlying single stock betas, considered individually.

2. Selection of individual betas

In order to estimate industry betas, we have averaged individual betas of listed companies:

- having a minimum market capitalization of 50 million Euros in the last five years;

¹ For a more plain reading on this note, we will, hereinafter recall both industry and sub-industry betas collectively as “industry betas”, unless a distinct reference to sub-industry betas is required for a better understanding of methodology and content of this research.

² Our estimates are based on industry, stock market and financial data provided by Standard & Poor’s Capital IQ

³ We have calculated an average “global” value of each industry and each sub-industry of the individual betas. In addition, the tables in Section III feature also specific “regional” average values for the following areas: a) International edition of this booklet: *European Union and Western Europe, Russia and Eastern Europe, Southern and Eastern Mediterranean Countries, States of the Persian Gulf, Sub-Saharan Africa, Central and South Asia, East Asia, Pacific States, South America, North America*; b) USA edition of this booklet: *United States of America, Canada, Central and South America, European Union and other Western European countries, Russia and other Eastern European countries, Southern and Eastern Mediterranean and Gulf countries, Sub-Saharan Africa Central and South Asia, East Asia. Oceania and Pacific.*

- whose shares daily traded value was never less than one hundredth of their average market capitalization in the last five years.

In our opinion, the requirements above constitute a reasonable compromise between:

- the need to collect a vast number of individual betas to be able to calculate as many industry and sub-industry betas as possible;
- the necessity to avoid companies that are too small and/or whose shares may be thinly traded, since their individual betas may be not meaningful.

3. Estimating individual *levered* betas

For each company selected we have estimated a set of two *levered* betas:

- *calculation technique*: regression of return of company shares to market return, applied over two distinctive periods of five and of two years considering, respectively, monthly and weekly returns;
- *market return*: we have assumed as a proxy the return of the local stock market index of reference for the underlying company.

Individual *levered* betas calculated over a regression period of five years appear, generally, to be less dispersed around the market beta than those of a regression period of two years. The latter, due to the shorter regression period, may show results that are more affected by the volatility of the underlying shares return against the index return, but also better reflect the underlying company's recent operating financial risk profiles.

4. Estimating individual *unlevered* betas

Based on their *levered* betas, we have calculated *unlevered* betas of all companies different than those belonging to financial industries (banks and insurances).

We have estimated *unlevered* betas using two different techniques, depending on whether the underlying company's gross debt less "cash⁴ and equivalents" is greater than (net debt) or lower than (net liquidity) zero.

⁴ Amount of liquidity has been adjusted to properly reflect s.c. "working cash". See T. Coller, M. Goedhart, D.Wessels *Valuation*, Wiley, 2010, pag. 143

4.1. Unlevered Beta – Net debt

In the case of existing net debt (gross debt being higher than cash and equivalents), we have used a simplified version⁵ of Hamada’s formula to extract *unlevered* beta from one stock’s *levered* five years and two years regression betas:

$$\beta_{unlevered} = \frac{\beta_{levered}}{1 + (1 - t) \times \frac{D}{E}}$$

where:

- “D”: gross debt (adjusted for pension liabilities and similar provisions) less cash and equivalents;
- “E”: market capitalization adjusted for minority interests;
- “t”: effective tax rate.

“D”, “E” and “t” used in the above formula are, respectively, 5 year or 2 year average values, depending on regression period of *levered* betas.

4.2. Unlevered Beta – Net liquidity

In case of existing net liquidity (gross debt lower than cash and equivalents), a company’s market capitalization “E” can be assumed to be the sum of two components, the first consisting in the market value of its business “ E_b ” and the second being its net liquidity “ E_{liq} ”:

$$E = E_b + E_{liq}$$

The equation above can also be rewritten as follows:

$$E = (E - E_{liq}) + E_{liq}$$

The company’s *levered* beta should be equal to the weighted average of the beta of its net liquidity and beta of its business. The latter should therefore correspond to the “true” *unlevered* beta:

⁵ The implied assumption is that the debt beta may not be meaningful. To be consistent with this assumption, we have discarded the betas of companies with an excessive level of indebtedness (see below)

$$\beta_{levered} = \beta_{Eb} \frac{(E - E_{liq})}{E} + \beta_{E_{liq}} \frac{E_{liq}}{E}$$

Assuming that net liquidity's beta is equal to zero, β_{Eb} can be calculated as follows⁶:

$$\beta_{Eb} = \frac{\beta_{levered}}{\frac{(E - E_{liq})}{E}}$$

In the end, for D equal to E_{liq} , the formula can be rewritten as:

$$\beta_{unlevered} = \frac{\beta_{levered}}{\frac{(E - D)}{E}}$$

5. From individual betas to industry betas

5.1. Filtering out outliers and meaningless values

Before calculating industry *levered* and *unlevered* betas as averages of individual *levered* and *unlevered* betas respectively, we have screened out outliers and/or otherwise, at least in our opinion, meaningless or possibly distorted individual beta values:

- we have filtered out individual betas when the five years average debt to equity ratio ($\frac{D}{E}$) of the underlying company exceeds a threshold of 1.5⁷. We believe that if the value of debt is too high with respect to that of equity, then one cannot assume that the debt beta is irrelevant⁸. As a consequence, it is not possible to use the simplified Hamada-formula to extract unlevered betas from levered ones;
- we also have filtered out individual betas in case the five-year average effective tax rate of the underlying company is negative or exceeds 70%. If the effective tax rate is negative, the company may be benefiting from some peculiar tax exemptions or from a huge tax loss carry-forward. On the other side, an effective taxation in excess of 70% is also quite unusual and may be related to other exceptional events in a company's life. In both cases, we feel that it is better not to include companies with such taxation profiles in our industry beta calculation,

⁶ M. Massari, G. Gianfrate, L. Zanetti *Corporate Valuation*, Wiley, 2016, pag. 216-218

⁷ I.e. when value of D is 1.5 times the value of E or higher. Where: a) "D" is calculated as gross debt (adjusted for pension liabilities and similar provisions) less cash and equivalents, b) "E" as the market capitalization adjusted for minority interests

⁸ Please see footnote 5 above.

since the result may be distorted by situations that are not common among businesses;

- finally, we have filtered out individual betas that are lower than 0.25 or higher than 2.5. We have set these thresholds on the basis of our behaviour as valuers: when we select comparable companies to estimate which beta value to apply in estimating the cost of capital to be used in the valuation of an unquoted business, we tend to eliminate betas that are either too low or too high. Values below 0.25 or higher than 2.5 we would always discard, because we feel they may be the consequence of events or errors that distort underlying company or stock trading data.

5.2. More about the unlevering of individual betas

The *unlevering* techniques illustrated in paragraph 4 imply that the risk of the operating activity of a company is not influenced by net liquidity and that, therefore, one can calculate the *unlevered* beta as shown before. In our opinion, however, this assumption may not correspond to reality, since decisions taken by management, all other circumstances being equal, may be different in case the company's gross debt is being higher or lower than cash and equivalents. We therefore have computed industry and sub-industry betas (both for five and for two year individual betas regression periods) from two different perspectives, as outlined below.

5.2.1. Industry betas "net liquidity included"

We have calculated industry and sub-industry betas, both *levered* and *unlevered*, by averaging individual *levered* and *unlevered* betas, considering companies having net liquidity.

5.2.2. Industry betas "net liquidity excluded"

We have calculated industry and sub-industry betas, both *levered* and *unlevered*, by averaging individual *levered* and *unlevered* betas, screening out companies having net liquidity.

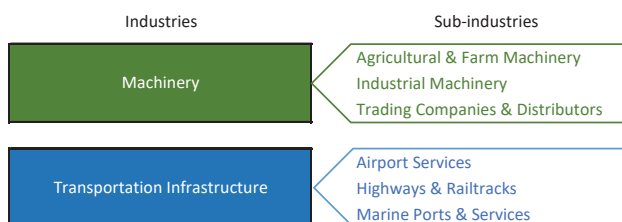
6. Definitions and data tables

6.1. Differences between editions of this research

The first edition of our quarterly beta book started in the spring of 2017 and featured one-hundred and thirty-four sub-industries. Issues of the first edition covered all quarters of 2017 and the first three quarters of 2018.

The second edition has started with a 4th Quarter 2018 issue. Research has been extended:

- we have added ten more sub-industries. The total number of sub-industries now covered are one-hundred and forty-four;
- “on top” of the sub-industries we have added the average beta calculation for sixty-five industries. One industry includes one or more sub-industries, as suggested by the following visual sample scheme:



While sub-industry betas, being more “granular”, allow us to make a more targeted selection when estimating the cost of capital for valuing unquoted businesses, they may sometimes be based on too limited a set of underlying individual company betas. In such cases, industry betas, although less granular and therefore also less specific-to-target, may offer a better alternative to sub-industry ones.

6.2. Content of Sections II, III and IV

In estimating individual company betas and for their subsequent aggregation by industry and by sub-industry, as well as by geographical zone, we rely mainly on individual company financials and on market and industry classification data provided by Standard & Poor’s⁹ Capital IQ® database.

Such classification data is quite similar to sub-industry structure and definitions of the Global Industry Classification Standard (GICS®)¹⁰ which are disclosed online by MSCI and by Standard & Poor’s. We therefore “associate” the

⁹ Standard & Poor’s Capital IQ is a financial data online distribution database and platform that is owned by S&P Global Inc.. S&P Global Inc. is an American publicly traded corporation headquartered in Manhattan, New York City. Its primary areas of business are financial information and analytics.

¹⁰The Global Industry Classification Standard (GICS) was developed by and is the exclusive property of Standard & Poor’s Financial Services LLC (S&P) and MSCI. “GICS” is the trademark of Standard & Poor’s Financial Services LLC (S&P) and MSCI. “Global Industry Classification Standard (GICS)” and “GICS Direct” are service marks of Standard & Poor’s Financial Services LLC (S&P) and MSCI. GICS Direct is a joint product of Standard & Poor’s Financial Services LLC (S&P) and MSCI, which provides the current, company-level GICS classification codes for over 40,000 companies.

publicly available GICS®¹¹ industry and sub-industry definitions to the average industry and sub-industry betas estimated on the basis of data obtained from Standard & Poor's Capital IQ® database.

In order to avoid dissemination of underlying data, our research features our calculation results only (average betas). We do not disclose individual company financial and stock prices data. We will, however, disclose, upon request and subject to certain limits and conditions, the names of companies that are constituents of our industry and sub-industry average beta values¹².

Section II (see below) lists industry and sub-industry definitions and indicates the reference number of tables that report average beta values.

Tables with sixty-five industry betas are displayed in Section III, while those with one-hundred and forty-four sub-industry betas are in Section IV.

The following is a brief explanation of the content of the tables.

6.3. Summary table

The first table in Section III and in Section IV, shows a summary of *levered* and *unlevered* industry betas or sub-industry betas respectively.

The first table reports their lowest, their highest and their average values, rounded to the second decimal place.

Industry betas are grouped by length of regression time period (2Y or 5Y), and sorted also by said inclusion or exclusion of net liquidity companies.

¹¹ We refer to the current GICS® structure and definitions that their sole legitimate owners, MSCI and S&P, periodically disclose through their websites. Such classification and definitions are disclosed in English together with official translations in many other languages. While classification structure and definitions are disclosed, access to GICS® classification codes for individual companies is offered by MSCI and by S&P or by distributors they authorize on a subscription basis.

¹² Restricted disclosure of company names aims to prevent the possibility to rely on our quarterly publications to attempt to build up a company classification database that is regularly updated. Even if it would still never reach the extent and completeness of the GICS® database, we believe such an attempt would be unfair vis-à-vis GISC® rightful owners and their authorized distributors. By preventing full and unrestricted disclosure of company names, we therefore avoid any possibility to exploit our publications in what we think may be unfair use. Business valuers and other financial experts interested in industry and sub-industry constituent company names may submit a request at www.salvidio.com/support and follow instructions to obtain information. Access to company names is limited per registered user and by quarterly issue to not more than twenty industries and/or sub-industries. Massive data downloads are not allowed and we retain the right to suspend at anytime the disclosure of company names in case of unusual high access requests coming from the same "unique visitors", same individual and/or firm, etc. or in case GICS® rightful owners asks to do so.

6.4. Industry and sub-industry betas tables

Single industry beta and sub-industry beta tables show *levered* and *unlevered* betas rounded to the second decimal place. They are aggregated:

- *by column*: on the basis of the length of regression period (5Y or 2Y) and by inclusion or exclusion of net liquidity companies;
- *by row*: on geographical basis (ten different regional values and one global value).

Tables also show the number of individual betas underlying their average (industry and sub-industry) values, as shown by the following example, taken from the US edition of this research covering the fourth quarter of 2018

B	Oil & Gas Drilling	D		E		F			
		β	n.	β_U	n.	β_U	n.		
A	31/12/2018	5Y net liq. incl.				5Y net liq. excl.			
	United States of America	1,48	3	1,26	3	1,27	2	0,93	2
	Canada	1,57	1	1,13	1	1,57	1	1,13	1
	Central and South America	-	-	-	-	-	-	-	-
	European Union and other Western European countries	1,69	3	0,86	3	1,69	3	0,86	3
	Russia and other Eastern European countries	-	-	-	-	-	-	-	-
	Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-
	Sub-Saharan Africa	-	-	-	-	-	-	-	-
	Central and South Asia	-	-	-	-	-	-	-	-
C	East Asia	1,16	2	1,06	2	1,16	2	1,06	2
	Oceania and Pacific	-	-	-	-	-	-	-	-
	Global	1,49	9	1,07	9	1,44	8	0,96	8

How to read the industry and sub industry beta tables¹³:

- A = reference date of the industry or sub-industry beta calculation;
- B = industry or sub-industry;

¹³ The sample picture is taken from the US edition of our industry and sub-industry beta research, issue covering the 4th Quarter of 2018. The table features the Oil & Gas Drilling sub-industry only. However, the content-structure of all other industry and sub-industry tables of all editions is the same.

- C = rows of industry or sub-industry beta values aggregated by geographical area;
- D = columns displaying values of levered (β_L) and unlevered (β_U) industry or sub-industry betas;
- E = regression period, 5Y or 2Y: betas are aggregated in different columns depending on whether companies with net liquidity were or were not included in the industry and sub-industry betas calculation;
- F = columns displaying the number of individual betas underlying the values of industry and sub-industry betas;
- G = sample values of levered and unlevered industry and sub-industry betas;
- H = sample quantity of individual betas underlying corresponding industry and sub-industry betas values

When the number of individual betas for a specific geographical area is too small, it may be better to refer to the global value of industry beta or sub-industry beta. As an alternative, one could adjust average values resulting from a too limited underlying set of individual betas using the Blume's technique¹⁴.

6.5. Beta distribution by geographical zone

The last table in Section III and in Section IV, shows how individual company betas are distributed among the different geographical zones.

Disclaimer

We have estimated industry and sub-industry betas by relying upon third party industry, stock market, financial and classification data of thousands of listed companies. We have not verified such data.

All information contained in this publication is presented without any claim of accuracy, completeness and absence of errors. Computational mistakes can occur frequently when, like in this case, complex calculations are made by using a huge amount of information data.

We may, in future, modify at our discretion the criteria for calculating industry and sub-industry betas as well as change any content of this publication.

¹⁴ Beta adjusted = Beta x 2/3 + 1/3

All information contained in this publication is provided *as is*. It is to be used at the user's own risk only.

We do not undertake any responsibility in case of negative consequences that may result to anybody, directly or indirectly, from using industry and sub-industry betas and/or any other information contained in this publication.

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II –INDUSTRIES AND SUB-INDUSTRIES DEFINITIONS

Industry	Tab.	Sub-industry	Definitions	Tab.
A.1		General summary		B.1
Fossil fuel industry				
Energy Equipment & Services	A.2	Oil & Gas Drilling	Drilling contractors or owners of drilling rigs that contract their services for drilling wells	B.2
Energy Equipment & Services	A.2	Oil & Gas Equipment & Services	Manufacturers of equipment, including drilling rigs and equipment, and providers of supplies and services to companies involved in the drilling, evaluation and completion of oil and gas wells.	B.2
Oil, Gas & Consumable Fuels	A.2	Integrated Oil & Gas	Integrated oil companies engaged in the exploration & production of oil and gas, as well as at least one other significant activity in either refining, marketing and transportation, or chemicals.	B.3
Oil, Gas & Consumable Fuels	A.2	Oil & Gas Exploration & Production	Companies engaged in the exploration and production of oil and gas not classified elsewhere.	B.3
Oil, Gas & Consumable Fuels	A.2	Oil & Gas Refining & Marketing	Companies engaged in the refining and marketing of oil, gas and/or refined products not classified in the Integrated Oil & Gas or Independent Power Producers & Energy Traders Sub-Industries.	B.4
Oil, Gas & Consumable Fuels	A.2	Oil & Gas Storage & Transportation	Companies engaged in the storage and/or transportation of oil, gas and/or refined products. Includes diversified midstream natural gas companies, oil and refined product pipelines, coal slurry pipelines and oil & gas shipping companies.	B.4
Oil, Gas & Consumable Fuels	A.2	Coal & Consumable Fuels	Companies primarily involved in the production and mining of coal, related products and other consumable fuels related to the generation of energy. Excludes companies primarily producing gases classified in the Industrial Gases sub-industry and companies primarily mining for metallurgical (coking) coal used for steel production.	B.5
Basic materials				
Chemicals	A.3	Commodity Chemicals	Companies that primarily produce industrial chemicals and basic chemicals. Including but not limited to plastics, synthetic fibers, films, commodity-based paints & pigments, explosives and petrochemicals. Excludes chemical companies classified in the Diversified Chemicals, Fertilizers & Agricultural Chemicals, Industrial Gases, or Specialty Chemicals Sub-Industries.	B.5
Chemicals	A.3	Diversified Chemicals	Manufacturers of a diversified range of chemical products not classified in the Industrial Gases, Commodity Chemicals, Specialty Chemicals or Fertilizers & Agricultural Chemicals Sub-Industries.	B.6
Chemicals	A.3	Fertilizers & Agricultural Chemicals	Producers of fertilizers, pesticides, potash or other agriculture-related chemicals not classified elsewhere.	B.6
Chemicals	A.3	Industrial Gases	Manufacturers of industrial gases.	B.7
Chemicals	A.3	Specialty Chemicals	Companies that primarily produce high value-added chemicals used in the manufacture of a wide variety of products, including but not limited to fine chemicals, additives, advanced polymers, adhesives, sealants and specialty paints, pigments and coatings.	B.7
Construction Materials	A.3	Construction Materials	Manufacturers of construction materials including sand, clay, gypsum, lime, aggregates, cement, concrete and bricks. Other finished or semi-finished building materials are classified in the Building Products Sub-Industry.	B.8
Containers & Packaging	A.4	Metal & Glass Containers	Manufacturers of metal, glass or plastic containers. Includes corks and caps.	B.8
Containers & Packaging	A.4	Paper Packaging	Manufacturers of paper and cardboard containers and packaging.	B.9

Industry	Tab.	Sub-industry	Definitions	Tab.
Metals & Mining	A.4	Aluminum	Producers of aluminum and related products, including companies that mine or process bauxite and companies that recycle aluminum to produce finished or semi-finished products. Excludes companies that primarily produce aluminum building materials classified in the Building Products Sub-Industry.	B.9
Metals & Mining	A.4	Diversified Metals & Mining	Companies engaged in the diversified production or extraction of metals and minerals not classified elsewhere. Including, but not limited to, nonferrous metal mining (except bauxite), salt and borate mining, phosphate rock mining, and diversified mining operations. Excludes iron ore mining, classified in the Steel Sub-Industry, bauxite mining, classified in the Aluminum Sub-Industry, and coal mining, classified in either the Steel or Coal & Consumable Fuels Sub-Industries.	B.10
Metals & Mining	A.4	Copper	Companies involved primarily in copper ore mining.	B.10
Metals & Mining	A.4	Gold	Producers of gold and related products, including companies that mine or process gold and the South African finance houses which primarily invest in, but do not operate, gold mines.	B.11
Metals & Mining	A.4	Precious Metals & Minerals	Companies mining precious metals and minerals not classified in the Gold Sub-Industry. Includes companies primarily mining platinum.	B.11
Metals & Mining	A.4	Silver	Companies primarily mining silver. Excludes companies classified in the Gold or Precious Metals & Minerals Sub-Industries.	B.12
Metals & Mining	A.4	Steel	Producers of iron and steel and related products, including metallurgical (coking) coal mining used for steel production.	B.12
Paper & Forest Products	A.5	Forest Products	Manufacturers of timber and related wood products. Includes lumber for the building industry.	B.13
Paper & Forest Products	A.5	Paper Products	Manufacturers of all grades of paper. Excludes companies specializing in paper packaging classified in the Paper Packaging Sub-Industry.	B.13
Heavy Industries				
Aerospace & Defense	A.5	Aerospace & Defense	Manufacturers of civil or military aerospace and defense equipment, parts or products. Includes defense electronics and space equipment.	B.14
Building Products	A.6	Building Products	Manufacturers of building components and home improvement products and equipment. Excludes lumber and plywood classified under Forest Products and cement and other materials classified in the Construction Materials Sub-Industry.	B.14
Construction & Engineering	A.6	Construction & Engineering	Companies engaged in primarily non-residential construction. Includes civil engineering companies and large-scale contractors. Excludes companies classified in the Homebuilding Sub-Industry.	B.15
Electrical Equipment	A.7	Electrical Components & Equipment	Companies that produce electric cables and wires, electrical components or equipment not classified in the Heavy Electrical Equipment Sub-Industry.	B.15
Electrical Equipment	A.7	Heavy Electrical Equipment	Manufacturers of power-generating equipment and other heavy electrical equipment, including power turbines, heavy electrical machinery intended for fixed-use and large electrical systems. Excludes cables and wires, classified in the Electrical Components & Equipment Sub-Industry.	B.16
Machinery	A.7	Construction Machinery & Heavy Trucks	Manufacturers of heavy duty trucks, rolling machinery, earth-moving and construction equipment, and manufacturers of related parts. Includes non-military shipbuilding.	B.16

Industry	Tab.	Sub-industry	Definitions	Tab.
Machinery	A.7	Agricultural & Farm Machinery	Companies manufacturing agricultural machinery, farm machinery, and their related parts. Includes machinery used for the production of crops and agricultural livestock, agricultural tractors, planting and fertilizing machinery, fertilizer and chemical application equipment, and grain dryers and blowers.	B.17
Machinery	A.7	Industrial Machinery	Manufacturers of industrial machinery and industrial components. Includes companies that manufacture presses, machine tools, compressors, pollution control equipment, elevators, escalators, insulators, pumps, roller bearings and other metal fabrications.	B.17
Machinery	A.7	Trading Companies & Distributors	Trading companies and other distributors of industrial equipment and products.	B.18
Commercial services				
Trading Companies & Distributors	A.8	Commercial Printing	Companies providing commercial printing services. Includes printers primarily serving the media industry.	B.18
Commercial Services & Supplies	A.8	Environmental & Facilities Services	Companies providing environmental and facilities maintenance services. Includes waste management, facilities management and pollution control services. Excludes large-scale water treatment systems classified in the Water Utilities Sub-Industry.	B.19
Commercial Services & Supplies	A.8	Office Services & Supplies	Providers of office services and manufacturers of office supplies and equipment not classified elsewhere.	B.19
Commercial Services & Supplies	A.8	Diversified Support Services	Companies primarily providing labor oriented support services to businesses and governments. Includes commercial cleaning services, dining & catering services, equipment repair services, industrial maintenance services, industrial auctioneers, storage & warehousing, transaction services, uniform rental services, and other business support services.	B.20
Commercial Services & Supplies	A.8	Security & Alarm Services	Companies providing security and protection services to business and governments. Includes companies providing services such as correctional facilities, security & alarm services, armored transportation & guarding. Excludes companies providing security software classified under the Systems Software Sub-Industry and home security services classified under the Specialized Consumer Services Sub-Industry. Also excludes companies manufacturing security system equipment classified under the Electronic Equipment & Instruments Sub-Industry.	B.20
Professional Services	A.9	Human Resource & Employment Services	Companies providing business support services relating to human capital management. Includes employment agencies, employee training, payroll & benefit support services, retirement support services and temporary agencies.	B.21
Professional Services	A.9	Research & Consulting Services	Companies primarily providing research and consulting services to businesses and governments not classified elsewhere. Includes companies involved in management consulting services, architectural design, business information or scientific research, marketing, and testing & certification services. Excludes companies providing information technology consulting services classified in the IT Consulting & Other Services Sub-Industry.	B.21
Transportation and infrastructure				
Air Freight & Logistics	A.9	Air Freight & Logistics	Companies providing air freight transportation, courier and logistics services, including package and mail delivery and customs agents. Excludes those companies classified in the Airlines, Marine or Trucking Sub-Industries.	B.22

Industry	Tab.	Sub-industry	Definitions	Tab.
Airlines	A.10	Airlines	Companies providing primarily passenger air transportation.	B.22
Marine	A.10	Marine	Companies providing goods or passenger maritime transportation. Excludes cruise-ships classified in the Hotels, Resorts & Cruise Lines Sub-Industry.	B.23
Road & Rail	A.11	Railroads	Companies providing primarily goods and passenger rail transportation.	B.23
Road & Rail	A.11	Trucking	Companies providing primarily goods and passenger land transportation. Includes vehicle rental and taxi companies.	B.24
Transportation Infrastructure	A.11	Airport Services	Operators of airports and companies providing related services.	B.24
Transportation Infrastructure	A.11	Highways & Railtracks	Owners and operators of roads, tunnels and railtracks.	B.25
Transportation Infrastructure	A.11	Marine Ports & Services	Owners and operators of marine ports and related services.	B.25
Automotive and components				
Auto Components	A.12	Auto Parts & Equipment	Manufacturers of parts and accessories for automobiles and motorcycles. Excludes companies classified in the Tires & Rubber Sub-Industry.	B.26
Auto Components	A.12	Tires & Rubber	Manufacturers of tires and rubber.	B.26
Automobiles	A.12	Automobile Manufacturers	Companies that produce mainly passenger automobiles and light trucks. Excludes companies producing mainly motorcycles and three-wheelers classified in the Motorcycle Manufacturers Sub-Industry and heavy duty trucks classified in the Construction Machinery & Heavy Trucks Sub-Industry.	B.27
Automobiles	A.12	Motorcycle Manufacturers	Companies that produce motorcycles, scooters or three-wheelers. Excludes bicycles classified in the Leisure Products Sub-Industry.	B.27
Durables, apparel, accessories				
Household Durables	A.13	Consumer Electronics	Manufacturers of consumer electronics products including TVs, home audio equipment, game consoles, digital cameras, and related products. Excludes personal home computer manufacturers classified in the Technology Hardware, Storage & Peripherals Sub-Industry, and electric household appliances classified in the Household Appliances Sub-Industry.	B.28
Household Durables	A.13	Home Furnishings	Manufacturers of soft home furnishings or furniture, including upholstery, carpets and wall-coverings.	B.28
Household Durables	A.13	Homebuilding	Residential construction companies. Includes manufacturers of prefabricated houses and semi-fixed manufactured homes.	B.29
Household Durables	A.13	Household Appliances	Manufacturers of electric household appliances and related products. Includes manufacturers of power and hand tools, including garden improvement tools. Excludes TVs and other audio and video products classified in the Consumer Electronics Sub-Industry and personal computers classified in the Technology Hardware, Storage & Peripherals Sub-Industry.	B.29
Household Durables	A.13	Housewares & Specialties	Manufacturers of durable household products, including cutlery, cookware, glassware, crystal, silverware, utensils, kitchenware and consumer specialties not classified elsewhere.	B.30
Leisure Products	A.13	Leisure Products	Manufacturers of leisure products and equipment including sports equipment, bicycles and toys.	B.30
Textiles, Apparel & Luxury Goods	A.14	Apparel, Accessories & Luxury Goods	Manufacturers of apparel, accessories & luxury goods. Includes companies primarily producing designer handbags, wallets, luggage, jewelry and watches. Excludes shoes classified in the Footwear Sub-Industry.	B.31
Textiles, Apparel & Luxury Goods	A.14	Footwear	Manufacturers of footwear. Includes sport and leather shoes.	B.31

Industry	Tab.	Sub-industry	Definitions	Tab.
Textiles, Apparel & Luxury Goods	A.14	Textiles	Manufacturers of textile and related products not classified in the Apparel, Accessories & Luxury Goods, Footwear or Home Furnishings Sub-Industries.	B.32
Consumer services				
Hotels, Restaurants & Leisure	A.14	Casinos & Gaming	Owners and operators of casinos and gaming facilities. Includes companies providing lottery and betting services.	B.32
Hotels, Restaurants & Leisure	A.14	Hotels, Resorts & Cruise Lines	Owners and operators of hotels, resorts and cruise-ships. Includes travel agencies, tour operators and related services not classified elsewhere. Excludes casino-hotels classified in the Casinos & Gaming Sub-Industry.	B.33
Hotels, Restaurants & Leisure	A.14	Leisure Facilities	Owners and operators of leisure facilities, including sport and fitness centers, stadiums, golf courses and amusement parks not classified in the Movies & Entertainment Sub-Industry.	B.33
Hotels, Restaurants & Leisure	A.14	Restaurants	Owners and operators of restaurants, bars, pubs, fast-food or take-out facilities. Includes companies that provide food catering services.	B.34
Distribution business				
Distributors	A.15	Distributors	Distributors and wholesalers of general merchandise not classified elsewhere. Includes vehicle distributors.	B.34
Internet & Direct Marketing Retail	A.15	Internet & Direct Marketing Retail	Companies providing retail services primarily on the Internet, through mail order, and TV home shopping retailers. Also includes companies providing online marketplaces for consumer products and services.	B.35
Multiline Retail	A.16	Department Stores	Owners and operators of department stores.	B.35
Multiline Retail	A.16	General Merchandise Stores	Owners and operators of stores offering diversified general merchandise. Excludes hypermarkets and large-scale super centers classified in the Hypermarkets & Super Centers Sub-Industry.	B.36
Specialty Retail	A.16	Apparel Retail	Retailers specialized mainly in apparel and accessories.	B.36
Specialty Retail	A.16	Computer & Electronics Retail	Owners and operators of consumer electronics, computers, video and related products retail stores.	B.37
Specialty Retail	A.16	Home Improvement Retail	Owners and operators of home and garden improvement retail stores. Includes stores offering building materials and supplies.	B.37
Specialty Retail	A.16	Specialty Stores	Owners and operators of specialty retail stores not classified elsewhere. Includes jewelry stores, toy stores, office supply stores, health & vision care stores, and book & entertainment stores.	B.38
Specialty Retail	A.16	Automotive Retail	Owners and operators of stores specializing in automotive retail. Includes auto dealers, gas stations, and retailers of auto accessories, motorcycles & parts, automotive glass, and automotive equipment & parts.	B.38
Specialty Retail	A.16	Homefurnishing Retail	Owners and operators of furniture and home furnishings retail stores. Includes residential furniture, homefurnishings, housewares, and interior design. Excludes home and garden improvement stores, classified in the Home Improvement Retail Sub-Industry.	B.39
Primary goods and services for consumers				
Food & Staples Retailing	A.17	Drug Retail	Owners and operators of primarily drug retail stores and pharmacies.	B.39
Food & Staples Retailing	A.17	Food Distributors	Distributors of food products to other companies and not directly to the consumer.	B.40
Food & Staples Retailing	A.17	Food Retail	Owners and operators of primarily food retail stores.	B.40
Food & Staples Retailing	A.17	Hypermarkets & Super Centers	Owners and operators of hypermarkets and super centers selling food and a wide-range of consumer staple products. Excludes Food and Drug Retailers classified in the Food Retail and Drug Retail Sub-Industries, respectively.	B.41
Beverages	A.17	Brewers	Producers of beer and malt liquors. Includes breweries not classified in the Restaurants Sub-Industry.	B.41

Industry	Tab.	Sub-industry	Definitions	Tab.
Beverages	A.17	Distillers & Vintners	Distillers, vintners and producers of alcoholic beverages not classified in the Brewers Sub-Industry.	B.42
Beverages	A.17	Soft Drinks	Producers of non-alcoholic beverages including mineral waters. Excludes producers of milk classified in the Packaged Foods Sub-Industry.	B.42
Food Products	A.18	Agricultural Products	Producers of agricultural products. Includes crop growers, owners of plantations and companies that produce and process foods but do not package and market them. Excludes companies classified in the Forest Products Sub-Industry and those that package and market the food products classified in the Packaged Foods Sub-Industry.	B.43
Food Products	A.18	Packaged Foods & Meats	Producers of packaged foods including dairy products, fruit juices, meats, poultry, fish and pet foods.	B.43
Tobacco	A.18	Tobacco	Manufacturers of cigarettes and other tobacco products.	B.44
Household Products	A.19	Household Products	Producers of non-durable household products, including detergents, soaps, diapers and other tissue and household paper products not classified in the Paper Products Sub-Industry.	B.44
Personal Products	A.19	Personal Products	Manufacturers of personal and beauty care products, including cosmetics and perfumes.	B.45
Healthcare products and services				
Health Care Equipment & Supplies	A.20	Health Care Equipment	Manufacturers of health care equipment and devices. Includes medical instruments, drug delivery systems, cardiovascular & orthopedic devices, and diagnostic equipment.	B.45
Health Care Equipment & Supplies	A.20	Health Care Supplies	Manufacturers of health care supplies and medical products not classified elsewhere. Includes eye care products, hospital supplies, and safety needle & syringe devices.	B.46
Health Care Providers & Services	A.20	Health Care Distributors	Distributors and wholesalers of health care products not classified elsewhere.	B.46
Health Care Providers & Services	A.20	Health Care Services	Providers of patient health care services not classified elsewhere. Includes dialysis centers, lab testing services, and pharmacy management services. Also includes companies providing business support services to health care providers, such as clerical support services, collection agency services, staffing services and outsourced sales & marketing services	B.47
Health Care Providers & Services	A.20	Health Care Facilities	Owners and operators of health care facilities, including hospitals, nursing homes, rehabilitation centers and animal hospitals.	B.47
Health Care Providers & Services	A.20	Managed Health Care	Owners and operators of Health Maintenance Organizations (HMOs) and other managed plans.	B.48
Health Care Technology	A.21	Health Care Technology	Companies providing information technology services primarily to health care providers. Includes companies providing application, systems and/or data processing software, internet-based tools, and IT consulting services to doctors, hospitals or businesses operating primarily in the Health Care Sector	B.48
Biotechnology	A.21	Biotechnology	Companies primarily engaged in the research, development, manufacturing and/or marketing of products based on genetic analysis and genetic engineering. Includes companies specializing in protein-based therapeutics to treat human diseases. Excludes companies manufacturing products using biotechnology but without a health care application.	B.49
Pharmaceuticals	A.22	Pharmaceuticals	Companies engaged in the research, development or production of pharmaceuticals. Includes veterinary drugs.	B.49

Industry	Tab.	Sub-industry	Definitions	Tab.
Life Sciences Tools & Services	A.22	Life Sciences Tools & Services	Companies enabling the drug discovery, development and production continuum by providing analytical tools, instruments, consumables & supplies, clinical trial services and contract research services. Includes firms primarily servicing the pharmaceutical and biotechnology industries.	B.50
Finance				
Banks	A.23	Diversified Banks	Large, geographically diverse banks with a national footprint whose revenues are derived primarily from conventional banking operations, have significant business activity in retail banking and small and medium corporate lending, and provide a diverse range of financial services. Excludes banks classified in the Regional Banks and Thrifts & Mortgage Finance Sub-Industries. Also excludes investment banks classified in the Investment Banking & Brokerage Sub-Industry.	B.50
Banks	A.23	Regional Banks	Commercial banks whose businesses are derived primarily from conventional banking operations and have significant business activity in retail banking and small and medium corporate lending. Regional banks tend to operate in limited geographic regions. Excludes companies classified in the Diversified Banks and Thrifts & Mortgage Banks sub-industries. Also excludes investment banks classified in the Investment Banking & Brokerage Sub-Industry.	B.51
Thrifts & Mortgage Finance	A.23	Thrifts & Mortgage Finance	Financial institutions providing mortgage and mortgage related services. These include financial institutions whose assets are primarily mortgage related, savings & loans, mortgage lending institutions, building societies and companies providing insurance to mortgage banks.	B.51
Diversified Financial Services	A.24	Other Diversified Financial Services	Providers of a diverse range of financial services and/or with some interest in a wide range of financial services including banking, insurance and capital markets, but with no dominant business line. Excludes companies classified in the Regional Banks and Diversified Banks Sub-Industries.	B.52
Diversified Financial Services	A.24	Specialized Finance	Providers of specialized financial services not classified elsewhere. Companies in this sub-industry derive a majority of revenue from one specialized line of business. Includes, but not limited to, commercial financing companies, central banks, leasing institutions, factoring services, and specialty boutiques. Excludes companies classified in the Financial Exchanges & Data sub-industry.	B.52
Consumer Finance	A.24	Consumer Finance	Providers of consumer finance services, including personal credit, credit cards, lease financing, travel-related money services and pawn shops. Excludes mortgage lenders classified in the Thrifts & Mortgage Finance Sub-Industry.	B.53
Capital Markets	A.25	Asset Management & Custody Banks	Financial institutions primarily engaged in investment management and/or related custody and securities fee-based services. Includes companies operating mutual funds, closed-end funds and unit investment trusts. Excludes banks and other financial institutions primarily involved in commercial lending, investment banking, brokerage and other specialized financial activities.	B.53

Industry	Tab.	Sub-industry	Definitions	Tab.
Capital Markets	A.25	Investment Banking & Brokerage	Financial institutions primarily engaged in investment banking & brokerage services, including equity and debt underwriting, mergers and acquisitions, securities lending and advisory services. Excludes banks and other financial institutions primarily involved in commercial lending, asset management and specialized financial activities.	B.54
Capital Markets	A.25	Financial Exchanges & Data	Financial exchanges for securities, commodities, derivatives and other financial instruments, and providers of financial decision support tools and products including ratings agencies	B.54
Insurance	A.25	Insurance Brokers	Insurance and reinsurance brokerage firms.	B.55
Insurance	A.25	Life & Health Insurance	Companies providing primarily life, disability, indemnity or supplemental health insurance. Excludes managed care companies classified in the Managed Health Care Sub-Industry.	B.55
Insurance	A.25	Multi-line Insurance	Insurance companies with diversified interests in life, health and property and casualty insurance.	B.56
Insurance	A.25	Property & Casualty Insurance	Companies providing primarily property and casualty insurance.	B.56
Insurance	A.25	Reinsurance	Companies providing primarily reinsurance.	B.57
Information and communication technology products and services				
IT Services	A.26	IT Consulting & Other Services	Providers of information technology and systems integration services not classified in the Data Processing & Outsourced Services Sub-Industry. Includes information technology consulting and information management services.	B.57
IT Services	A.26	Data Processing & Outsourced Services	Providers of commercial electronic data processing and/or business process outsourcing services. Includes companies that provide services for back-office automation.	B.58
IT Services	A.26	Internet Services & Infrastructure	Companies providing services and infrastructure for the internet industry including data centers and cloud networking and storage infrastructure. Also includes companies providing web hosting services. Excludes companies classified in the Software Industry.	B.58
Software	A.26	Application Software	Companies engaged in developing and producing software designed for specialized applications for the business or consumer market. Includes enterprise and technical software, as well as cloud-based software. Excludes companies classified in the Interactive Home Entertainment Sub-Industry. Also excludes companies producing systems or database management software classified in the Systems Software Sub-Industry.	B.59
Software	A.26	Systems Software	Companies engaged in developing and producing systems and database management software.	B.59
Communications Equipment	A.27	Communications Equipment	Manufacturers of communication equipment and products, including LANs, WANs, routers, telephones, switchboards and exchanges. Excludes cellular phone manufacturers classified in the Technology Hardware, Storage & Peripherals Sub-Industry.	B.60
Technology Hardware, Storage & Peripherals	A.27	Technology Hardware, Storage & Peripherals	Manufacturers of cellular phones, personal computers, servers, electronic computer components and peripherals. Includes data storage components, motherboards, audio and video cards, monitors, keyboards, printers, and other peripherals. Excludes semiconductors classified in the Semiconductors Sub-Industry.	B.60

Industry	Tab.	Sub-industry	Definitions	Tab.
Electronic Equipment, Instruments & Components	A.28	Electronic Equipment & Instruments	Manufacturers of electronic equipment and instruments including analytical, electronic test and measurement instruments, scanner/barcode products, lasers, display screens, point-of-sales machines, and security system equipment.	B.61
Electronic Equipment, Instruments & Components	A.28	Electronic Components	Manufacturers of electronic components. Includes electronic components, connection devices, electron tubes, electronic capacitors and resistors, electronic coil, printed circuit board, transformer and other inductors, signal processing technology/components.	B.61
Electronic Equipment, Instruments & Components	A.28	Electronic Manufacturing Services	Producers of electronic equipment mainly for the OEM (Original Equipment Manufacturers) markets.	B.62
Electronic Equipment, Instruments & Components	A.28	Technology Distributors	Distributors of technology hardware and equipment. Includes distributors of communications equipment, computers & peripherals, semiconductors, and electronic equipment and components.	B.62
Semiconductors & Semiconductor Equipment	A.28	Semiconductor Equipment	Manufacturers of semiconductor equipment, including manufacturers of the raw material and equipment used in the solar power industry.	B.63
Semiconductors & Semiconductor Equipment	A.28	Semiconductors	Manufacturers of semiconductors and related products, including manufacturers of solar modules and cells.	B.63
Telecommunication services				
Diversified Telecommunication Services	A.29	Alternative Carriers	Providers of communications and high-density data transmission services primarily through a high bandwidth/fiber-optic cable network.	B.64
Diversified Telecommunication Services	A.29	Integrated Telecommunication Services	Operators of primarily fixed-line telecommunications networks and companies providing both wireless and fixed-line telecommunications services not classified elsewhere. Also includes internet service providers offering internet access to end users.	B.64
Wireless Telecommunication Services	A.29	Wireless Telecommunication Services	Providers of primarily cellular or wireless telecommunication services.	B.65
Media and Entertainment				
Media	A.30	Advertising	Companies providing advertising, marketing or public relations services.	B.65
Media	A.30	Broadcasting	Owners and operators of television or radio broadcasting systems, including programming. Includes radio and television broadcasting, radio networks, and radio stations.	B.66
Media	A.30	Cable & Satellite	Providers of cable or satellite television services. Includes cable networks and program distribution.	B.66
Media	A.30	Publishing	Publishers of newspapers, magazines and books in print or electronic formats.	B.67
Entertainment	A.30	Movies & Entertainment	Companies that engage in producing and selling entertainment products and services, including companies engaged in the production, distribution and screening of movies and television shows, producers and distributors of music, entertainment theaters and sports teams. Also includes companies offering and/or producing entertainment content streamed online.	B.67
Entertainment	A.30	Interactive Home Entertainment	Producers of interactive gaming products, including mobile gaming applications. Also includes educational software used primarily in the home. Excludes online gambling companies classified in the Casinos & Gaming Sub-Industry.	B.68

Industry	Tab.	Sub-industry	Definitions	Tab.
Interactive Media & Services	A.31	Interactive Media & Services	Companies engaging in content and information creation or distribution through proprietary platforms, where revenues are derived primarily through pay-per-click advertisements. Includes search engines, social media and networking platforms, online classifieds, and online review companies. Excludes companies operating online marketplaces classified in Internet & Direct Marketing Retail.	B.68
Water, gas and electricity				
Electric Utilities	A.31	Electric Utilities	Companies that produce or distribute electricity. Includes both nuclear and non-nuclear facilities.	B.69
Gas Utilities	A.32	Gas Utilities	Companies whose main charter is to distribute and transmit natural and manufactured gas. Excludes companies primarily involved in gas exploration or production classified in the Oil & Gas Exploration & Production Sub-Industry. Also excludes companies engaged in the storage and/or transportation of oil, gas, and/or refined products classified in the Oil & Gas Storage & Transportation Sub-Industry.	B.69
Multi-Utilities	A.32	Multi-Utilities	Utility companies with significantly diversified activities in addition to core Electric Utility, Gas Utility and/or Water Utility operations.	B.70
Water Utilities	A.33	Water Utilities	Companies that purchase and redistribute water to the end-consumer. Includes large-scale water treatment systems.	B.70
Independent Power and Renewable Electricity Producers	A.33	Independent Power Producers & Energy Traders	Companies that operate as Independent Power Producers (IPPs), Gas & Power Marketing & Trading Specialists and/or Integrated Energy Merchants. Excludes producers of electricity using renewable sources, such as solar power, hydropower, and wind power. Also excludes electric transmission companies and utility distribution companies classified in the Electric Utilities Sub-Industry.	B.71
Independent Power and Renewable Electricity Producers	A.33	Renewable Electricity	Companies that engage in the generation and distribution of electricity using renewable sources, including, but not limited to, companies that produce electricity using biomass, geothermal energy, solar energy, hydropower, and wind power. Excludes companies manufacturing capital equipment used to generate electricity using renewable sources, such as manufacturers of solar power systems, installers of photovoltaic cells, and companies involved in the provision of technology, components, and services mainly to this market.	B.71
Real estate services				
Real Estate Management & Development	A.34	Diversified Real Estate Activities	Companies engaged in a diverse spectrum of real estate activities including real estate development & sales, real estate management, or real estate services, but with no dominant business line.	B.72
Real Estate Management & Development	A.34	Real Estate Operating Companies	Companies engaged in operating real estate properties for the purpose of leasing & management.	B.72
Real Estate Management & Development	A.34	Real Estate Development	Companies that develop real estate and sell the properties after development. Excludes companies classified in the Homebuilding Sub-Industry.	B.73
Real Estate Management & Development	A.34	Real Estate Services	Real estate service providers such as real estate agents, brokers & real estate appraisers.	B.73
A.35 Summary of individual betas by geographical zone				B.74

III – INDUSTRY BETAS

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Betas 5Y / Summary	Net liquidity included												Net liquidity excluded											
	Individual betas				Industry betas				Individual betas				Industry betas											
	n.	%	Average		Min	Max	Average	n.	%	Average		Min	Max	Average	n.	%	Average		Min	Max	Average	n.	%	
31/12/2018																								
Levered All sectors	8'559	100%	0.99	0.63	1.21	0.95	65	100%	1.00	1.23	0.97	0.64	1.23	0.97	65	100%	1.00	0.64	1.23	0.97	65	100%		
- Financial sectors	846	10%	0.97	0.88	1.13	0.98	4	6%	0.97	1.13	0.98	0.88	1.13	0.98	4	6%	0.97	0.88	1.13	0.98	4	6%		
- Sectors other than financial sectors	7'713	90%	1.00	0.63	1.21	0.95	61	94%	1.01	1.23	0.97	0.64	1.23	0.97	61	94%	1.01	0.64	1.23	0.97	61	94%		
Unlevered All sectors	7'511	100%	0.95	0.48	1.25	0.90	61	100%	0.85	1.07	0.82	0.48	1.07	0.82	61	100%	0.85	0.48	1.07	0.82	61	100%		
- Financial sectors	0	0%	-	-	-	-	0	0%	-	-	-	-	-	-	0	0%	-	-	-	-	0	0%		
- Sectors other than financial sectors	7'511	100%	0.95	0.48	1.25	0.90	61	100%	0.85	1.07	0.82	0.48	1.07	0.82	61	100%	0.85	0.48	1.07	0.82	61	100%		
Betas 2Y / Summary																								
31/12/2018																								
Levered All sectors	8'639	100%	0.94	0.60	1.27	0.91	65	100%	0.94	1.34	0.92	0.59	1.34	0.92	65	100%	0.94	0.59	1.34	0.92	65	100%		
- Financial sectors	859	10%	0.92	0.76	1.11	0.95	4	6%	0.92	1.11	0.95	0.76	1.11	0.95	4	6%	0.92	0.76	1.11	0.95	4	6%		
- Sectors other than financial sectors	7'780	90%	0.95	0.60	1.27	0.90	61	94%	0.95	1.34	0.92	0.59	1.34	0.92	61	94%	0.95	0.59	1.34	0.92	61	94%		
Unlevered All sectors	7'590	100%	0.92	0.50	1.33	0.86	61	100%	0.79	1.08	0.77	0.48	1.08	0.77	61	100%	0.79	0.48	1.08	0.77	61	100%		
- Financial sectors	0	0%	-	-	-	-	0	0%	-	-	-	-	-	-	0	0%	-	-	-	-	0	0%		
- Sectors other than financial sectors	7'590	100%	0.92	0.50	1.33	0.86	61	100%	0.79	1.08	0.77	0.48	1.08	0.77	61	100%	0.79	0.48	1.08	0.77	61	100%		

Energy Equipment & Services															
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
1.47	16	1.42	16	1.51	11	1.34	11	1.44	23	1.22	23	1.49	19	1.17	19
1.40	10	1.28	10	1.41	7	1.19	7	1.04	11	0.82	11	1.10	8	0.77	8
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.13	15	0.85	14	1.19	10	0.79	10	1.06	15	0.86	14	1.13	9	0.76	9
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.43	1	0.44	1	-	-	-	-	-	-	-	-	-	-	-	-
0.98	29	0.94	29	0.99	19	0.80	19	1.28	29	1.09	28	1.38	20	1.04	20
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.17	71	1.07	70	1.22	47	0.98	47	1.25	78	1.05	76	1.34	56	1.00	56
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
1.32	70	1.01	70	1.35	65	1.00	65	1.12	81	0.82	81	1.13	76	0.80	76
1.51	21	1.29	21	1.48	20	1.24	20	1.42	30	1.13	30	1.42	29	1.11	29
0.75	7	0.80	5	0.74	6	0.60	4	0.58	9	0.93	4	0.58	8	0.73	3
1.00	26	0.88	24	1.02	23	0.86	21	0.97	27	0.87	24	0.97	25	0.86	22
0.65	5	0.62	5	0.87	3	0.66	3	0.65	6	0.58	5	0.71	4	0.57	4
1.06	12	0.88	12	0.96	8	0.64	8	0.77	10	0.58	10	0.84	7	0.55	7
1.13	1	1.08	1	1.13	1	1.08	1	1.07	1	1.02	1	1.07	1	1.02	1
0.82	12	0.76	11	0.93	8	0.81	7	0.92	10	0.79	10	1.09	7	0.87	7
0.85	69	0.73	68	0.86	58	0.68	57	0.86	67	0.77	65	0.86	54	0.70	52
1.40	10	1.15	8	1.37	8	1.15	8	1.34	9	1.22	9	1.28	8	1.09	8
1.10	233	0.91	225	1.12	200	0.89	194	1.02	250	0.85	239	1.05	219	0.82	209

Chemicals	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018																
United States of America	1.34	42	1.11	40	1.33	41	1.11	40	1.24	45	0.99	45	1.25	43	0.98	43
Canada	2.11	1	1.72	1	2.11	1	1.72	1	1.54	1	1.27	1	1.54	1	1.27	1
Central and South America	0.68	3	0.69	2	0.68	3	0.69	2	0.62	3	0.43	3	0.62	3	0.43	3
European Union and other Western European countries	1.00	35	0.86	35	0.99	33	0.84	33	1.04	36	0.90	36	1.04	33	0.89	33
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	0.95	16	0.77	16	1.06	11	0.76	11	0.89	14	0.72	14	0.99	10	0.72	10
Sub-Saharan Africa	1.01	3	0.92	3	1.01	3	0.92	3	0.70	3	0.60	3	0.70	3	0.60	3
Central and South Asia	1.28	12	1.11	12	1.40	9	1.15	9	1.10	12	0.98	12	1.26	8	1.06	8
East Asia	1.04	376	0.98	369	1.06	240	0.89	239	0.98	365	0.96	357	0.99	222	0.84	217
Oceania and Pacific	0.98	4	0.83	4	0.98	4	0.83	4	0.99	4	0.88	4	0.99	4	0.88	4
Global	1.07	492	0.98	482	1.09	345	0.91	342	1.01	483	0.95	475	1.03	327	0.86	322
Construction Materials																
31/12/2018																
United States of America	0.98	6	0.88	6	1.04	5	0.90	5	0.84	6	0.73	6	0.94	5	0.80	5
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	1.40	1	0.78	1	1.40	1	0.78	1	1.49	1	0.84	1	1.49	1	0.84	1
European Union and other Western European countries	1.09	8	0.86	8	1.09	8	0.86	8	0.96	9	0.77	9	0.96	9	0.77	9
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	0.88	14	0.83	14	0.89	9	0.76	9	0.64	13	0.57	13	0.64	10	0.53	10
Sub-Saharan Africa	0.59	1	0.46	1	0.59	1	0.46	1	0.81	1	0.76	1	0.81	1	0.76	1
Central and South Asia	1.23	7	1.11	7	1.30	5	1.10	5	1.38	8	1.20	8	1.45	6	1.17	6
East Asia	0.97	60	0.86	60	0.98	45	0.78	45	0.98	61	0.88	60	0.99	47	0.82	46
Oceania and Pacific	1.20	5	1.06	5	1.20	5	1.06	5	1.03	5	0.89	5	1.03	5	0.89	5
Global	1.00	102	0.88	102	1.02	79	0.83	79	0.96	104	0.85	103	0.98	84	0.81	83

Containers & Packaging															
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
1.30	15	0.94	15	1.30	15	0.94	15	1.11	16	0.83	16	1.15	15	0.85	15
0.68	2	0.57	2	0.68	2	0.57	2	0.88	2	0.71	2	0.88	2	0.71	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.92	7	0.73	7	0.92	7	0.73	7	0.95	7	0.74	7	0.95	7	0.74	7
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.25	3	0.99	3	1.25	3	0.99	3	0.51	3	0.38	3	0.51	3	0.38	3
0.61	1	0.43	1	0.61	1	0.43	1	0.89	1	0.56	1	0.89	1	0.56	1
1.69	1	0.81	1	1.69	1	0.81	1	1.82	1	1.05	1	1.82	1	1.05	1
0.81	35	0.72	35	0.85	22	0.67	22	0.74	35	0.70	35	0.70	21	0.55	21
0.60	2	0.50	2	0.60	2	0.50	2	0.87	3	0.71	3	0.87	3	0.71	3
0.95	66	0.77	66	1.01	53	0.76	53	0.86	68	0.72	68	0.89	53	0.67	53
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
1.19	20	1.01	19	1.20	18	0.98	17	1.20	23	0.97	23	1.24	21	0.99	21
1.51	21	1.45	19	1.35	8	1.24	8	0.90	16	0.89	16	1.03	8	0.90	8
1.17	7	0.95	7	1.25	6	0.99	6	0.90	10	0.77	10	0.98	8	0.81	8
1.23	26	0.96	26	1.26	25	0.98	25	1.14	26	0.97	25	1.14	26	0.97	25
0.67	4	0.52	4	0.67	4	0.52	4	0.76	7	0.68	7	0.74	6	0.64	6
1.31	6	1.05	6	1.30	5	0.93	5	0.80	6	0.61	6	0.83	5	0.55	5
1.39	6	1.23	6	1.48	5	1.28	5	1.14	5	0.99	5	1.17	4	0.95	4
1.21	10	1.23	9	1.20	6	0.90	6	1.36	9	1.55	8	1.46	4	1.25	3
1.01	199	0.92	191	1.00	148	0.81	142	0.89	188	0.82	183	0.89	138	0.72	134
1.14	15	1.22	14	1.30	6	1.19	6	1.28	12	1.26	10	1.18	5	1.12	5
1.10	314	0.99	301	1.09	231	0.88	224	0.97	302	0.88	293	0.98	225	0.80	219

Paper & Forest Products	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018																
<i>United States of America</i>	1.58	7	1.29	7	1.63	6	1.28	6	1.17	7	0.94	7	1.19	6	0.90	6
<i>Canada</i>	1.21	8	0.99	8	1.21	8	0.99	8	1.06	8	1.00	7	1.06	8	1.00	7
<i>Central and South America</i>	1.15	1	0.91	1	1.15	1	0.91	1	1.00	1	0.81	1	1.00	1	0.81	1
<i>European Union and other Western European countries</i>	1.21	10	0.97	10	1.21	10	0.97	10	1.16	10	0.98	10	1.16	10	0.98	10
<i>Russia and other Eastern European countries</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Southern and Eastern Mediterranean and Gulf countries</i>	1.61	1	0.80	1	1.61	1	0.80	1	0.52	1	-	-	0.52	1	-	-
<i>Sub-Saharan Africa</i>	0.93	2	0.69	2	0.93	2	0.69	2	0.61	2	0.48	2	0.61	2	0.48	2
<i>Central and South Asia</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>East Asia</i>	0.98	43	0.82	42	0.97	34	0.73	33	0.84	42	0.71	41	0.82	34	0.63	33
<i>Oceania and Pacific</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Global</i>	1.11	72	0.90	71	1.11	62	0.86	61	0.93	71	0.80	68	0.93	62	0.76	59
Aerospace & Defense	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018																
<i>United States of America</i>	1.12	29	0.95	29	1.16	26	0.95	26	1.14	29	0.97	29	1.17	26	0.97	26
<i>Canada</i>	0.84	3	0.67	2	0.84	3	0.67	2	0.93	3	0.67	3	0.93	3	0.67	3
<i>Central and South America</i>	-	-	-	-	-	-	-	-	0.34	1	0.28	1	0.34	1	0.28	1
<i>European Union and other Western European countries</i>	0.89	13	0.80	13	0.91	11	0.78	11	0.99	13	0.89	13	1.12	9	0.96	9
<i>Russia and other Eastern European countries</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Southern and Eastern Mediterranean and Gulf countries</i>	0.71	1	0.61	1	0.71	1	0.61	1	0.95	1	0.81	1	0.95	1	0.81	1
<i>Sub-Saharan Africa</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Central and South Asia</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>East Asia</i>	1.04	25	1.04	25	1.01	10	0.86	10	0.78	23	0.77	22	0.75	11	0.67	10
<i>Oceania and Pacific</i>	-	-	-	-	-	-	-	-	0.50	1	0.47	1	0.50	1	0.47	1
<i>Global</i>	1.03	71	0.94	70	1.05	51	0.88	50	0.96	71	0.86	70	1.03	52	0.86	51

Building Products	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018																
United States of America	1.39	20	1.21	20	1.38	15	1.13	15	0.99	20	0.86	20	0.99	14	0.79	14
Canada	1.82	1	2.08	1	-	-	-	-	1.40	1	1.57	1	-	-	-	-
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	0.85	15	0.76	15	0.93	12	0.81	12	0.97	15	0.88	15	0.98	11	0.84	11
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	1.21	4	1.10	4	1.28	2	0.97	2	0.63	4	0.56	4	0.60	2	0.39	2
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East Asia	0.95	66	0.95	66	1.03	37	0.90	37	0.94	66	0.98	65	0.97	35	0.86	34
Oceania and Pacific	0.51	1	0.46	1	0.51	1	0.46	1	1.39	1	1.28	1	1.39	1	1.28	1
Global	1.03	107	0.98	107	1.09	67	0.93	67	0.95	107	0.94	106	0.97	63	0.83	62
Construction & Engineering																
31/12/2018																
United States of America	1.32	16	1.28	15	1.29	13	1.14	12	1.24	16	1.13	16	1.27	14	1.06	14
Canada	1.05	6	0.98	6	1.04	5	0.88	5	0.80	6	0.81	5	0.79	5	0.76	4
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	0.99	24	0.85	24	0.99	22	0.81	22	1.00	27	0.89	27	1.01	22	0.82	22
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	0.93	3	0.76	2	0.93	3	0.76	2	0.91	5	0.59	5	0.91	5	0.59	5
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	1.32	13	1.25	13	1.22	8	0.95	8	1.20	11	1.12	11	1.23	6	0.92	6
East Asia	0.97	180	0.97	175	1.06	97	0.85	96	0.94	183	1.04	177	1.00	90	0.82	87
Oceania and Pacific	1.52	2	1.70	2	-	-	-	-	1.27	2	1.41	2	-	-	-	-
Global	1.02	244	1.00	237	1.08	148	0.88	145	0.97	250	1.02	243	1.03	142	0.84	138

Trading Companies & Distributors															
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.
1.17	15	0.98	15	1.20	14	0.98	14	1.04	16	0.89	16	0.99	15	0.79	15
1.23	6	1.05	6	1.30	5	1.09	5	1.08	6	0.91	6	1.08	6	0.91	6
1.60	1	1.36	1	1.60	1	1.36	1	1.18	1	0.92	1	1.18	1	0.92	1
0.99	19	0.82	19	1.02	17	0.83	17	1.06	19	0.89	19	1.09	17	0.89	17
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.67	1	0.51	1	0.67	1	0.51	1	1.05	1	0.88	1	1.05	1	0.88	1
1.91	1	1.76	1	1.91	1	1.76	1	1.97	1	1.83	1	1.97	1	1.83	1
0.97	83	0.95	83	1.00	51	0.78	51	0.85	81	0.88	80	0.86	48	0.68	47
1.50	1	1.13	1	1.50	1	1.13	1	2.20	1	1.80	1	2.20	1	1.80	1
1.03	127	0.95	127	1.07	91	0.86	91	0.94	126	0.90	125	0.97	90	0.78	89
β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.
Commercial Services & Supplies															
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
0.98	36	0.80	36	1.03	32	0.82	32	0.96	37	0.79	37	1.01	28	0.76	28
0.81	4	0.76	4	0.77	3	0.67	3	0.92	6	0.75	6	0.93	5	0.70	5
0.56	1	0.47	1	0.56	1	0.47	1	0.63	1	0.51	1	0.63	1	0.51	1
0.91	23	0.76	23	0.93	21	0.76	21	0.96	23	0.80	23	0.97	22	0.80	22
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.45	1	0.88	1	1.45	1	0.88	1	0.98	1	0.54	1	0.98	1	0.54	1
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.83	79	0.87	78	0.95	41	0.84	41	0.90	76	0.97	74	0.96	41	0.84	40
0.81	3	0.72	3	0.81	3	0.72	3	0.85	3	0.74	3	0.85	3	0.74	3
0.88	147	0.83	146	0.96	102	0.81	102	0.92	147	0.88	145	0.97	101	0.79	100

Professional Services		5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.						
		β_L	n	β_U	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n		
31/12/2018																	
United States of America		0.94	28	0.96	27	1.02	17	0.93	16	0.94	29	0.98	29	0.91	18	0.80	18
Canada		0.66	3	0.73	2	0.66	3	0.73	2	0.55	3	0.49	3	0.55	3	0.49	3
Central and South America		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries		0.87	21	0.81	21	0.88	17	0.79	17	0.89	21	0.83	21	0.87	15	0.75	15
Russia and other Eastern European countries		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East Asia		0.82	36	0.90	35	0.88	10	0.85	9	1.04	37	1.11	37	1.17	9	1.04	9
Oceania and Pacific		1.23	3	1.11	3	1.23	3	1.11	3	1.05	3	0.95	3	1.05	3	0.95	3
Global		0.88	91	0.90	88	0.93	50	0.86	47	0.96	93	0.98	93	0.93	48	0.82	48
Air Freight & Logistics		β_L	n	β_U	n	β_U	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018																	
United States of America		0.95	9	0.83	9	1.00	8	0.86	8	1.02	10	0.87	10	1.05	9	0.87	9
Canada		1.33	1	0.82	1	1.33	1	0.82	1	0.96	1	0.66	1	0.96	1	0.66	1
Central and South America		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries		0.95	8	0.92	8	0.99	5	0.85	5	0.91	8	0.97	8	0.96	6	0.85	6
Russia and other Eastern European countries		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa		1.57	1	1.15	1	1.57	1	1.15	1	1.29	1	1.02	1	1.29	1	1.02	1
Central and South Asia		-	-	-	-	-	-	-	-	1.52	1	1.21	1	1.52	1	1.21	1
East Asia		0.93	26	0.87	26	0.98	18	0.84	18	0.84	26	0.76	26	0.89	20	0.73	20
Oceania and Pacific		0.57	2	0.51	2	0.57	2	0.51	2	0.74	2	0.68	2	0.74	2	0.68	2
Global		0.94	47	0.86	47	0.99	35	0.84	35	0.91	49	0.83	49	0.95	40	0.79	40

Airlines	31/12/2018				5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
United States of America	0.92	10	0.72	10	0.92	10	0.69	10	0.89	10	0.69	10	0.89	10	0.69	10	0.89	10	0.69	10
Canada	0.86	4	0.57	4	0.86	4	0.57	4	1.02	4	0.67	4	1.02	4	0.67	4	1.02	4	0.67	4
Central and South America	0.62	2	0.63	2	0.66	2	0.60	1	0.65	2	0.69	2	0.40	1	0.37	1	0.40	1	0.37	1
European Union and other Western European countries	0.73	5	0.75	5	0.83	3	0.74	3	0.91	6	0.97	6	0.98	3	0.92	3	0.98	3	0.92	3
Russia and other Eastern European countries	0.67	1	0.39	1	0.67	1	0.39	1	0.44	1	0.35	1	0.44	1	0.35	1	0.44	1	0.35	1
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East Asia	0.92	10	0.65	10	1.03	8	0.67	8	0.86	11	0.68	10	0.92	9	0.70	8	0.92	9	0.70	8
Oceania and Pacific	1.02	2	0.78	2	1.02	2	0.78	2	1.11	2	0.87	2	1.11	2	0.87	2	1.11	2	0.87	2
Global	0.87	34	0.67	34	0.92	29	0.68	29	0.88	36	0.73	35	0.91	30	0.70	29	0.91	30	0.70	29
Mainline	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.							
United States of America	1.31	2	1.05	2	1.31	2	1.05	2	1.24	2	0.93	2	1.24	2	0.93	2	1.24	2	0.93	2
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	0.87	3	0.79	3	0.82	2	0.70	2	0.89	3	0.78	3	0.89	3	0.78	3	0.89	3	0.78	3
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East Asia	0.97	26	0.74	25	0.96	23	0.68	22	0.83	26	0.63	25	0.80	21	0.54	20	0.80	21	0.54	20
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global	0.98	31	0.76	30	0.97	27	0.71	26	0.86	31	0.66	30	0.85	26	0.60	25	0.85	26	0.60	25

Road & Rail	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.
31/12/2018																
United States of America	1.07	17	0.92	17	1.11	16	0.95	16	0.89	17	0.77	17	0.92	13	0.75	13
Canada	1.13	3	0.89	3	1.13	3	0.89	3	1.17	3	0.94	3	1.17	3	0.94	3
Central and South America	0.96	1	0.78	1	0.96	1	0.78	1	0.91	1	0.72	1	0.91	1	0.72	1
European Union and other Western European countries	0.82	9	0.59	9	0.92	7	0.61	7	0.78	9	0.59	9	0.78	8	0.55	8
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	1.17	3	1.14	3	1.22	2	1.15	2	0.52	3	0.49	3	0.52	3	0.49	3
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	0.98	1	1.05	1	-	-	-	-	0.93	1	0.98	1	-	-	-	-
East Asia	0.80	44	0.70	42	0.78	39	0.65	37	0.72	45	0.60	44	0.71	39	0.56	38
Oceania and Pacific	0.50	1	0.41	1	0.50	1	0.41	1	0.77	1	0.62	1	0.77	1	0.62	1
Global	0.89	79	0.76	77	0.90	69	0.74	67	0.78	80	0.65	79	0.77	68	0.61	67
Transportation Infrastructure	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.
31/12/2018																
United States of America	1.57	1	1.19	1	1.57	1	1.19	1	1.01	1	0.78	1	1.01	1	0.78	1
Canada	1.74	1	1.73	1	1.74	1	1.73	1	0.83	1	0.82	1	0.83	1	0.82	1
Central and South America	0.77	3	0.72	3	0.82	2	0.72	2	0.88	3	0.83	3	1.08	2	0.96	2
European Union and other Western European countries	0.78	9	0.60	8	0.78	9	0.60	8	0.89	9	0.73	8	0.89	9	0.73	8
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	0.95	1	0.63	1	0.95	1	0.63	1	0.68	1	0.46	1	0.68	1	0.46	1
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	1.48	5	1.22	5	1.51	4	1.16	4	1.26	5	1.05	5	1.38	4	1.11	4
East Asia	0.88	54	0.77	53	0.91	43	0.76	42	0.74	53	0.67	52	0.76	41	0.64	40
Oceania and Pacific	0.81	4	0.68	4	0.81	4	0.68	4	0.71	4	0.56	4	0.71	4	0.56	4
Global	0.92	78	0.79	76	0.94	65	0.78	63	0.80	77	0.70	75	0.83	63	0.69	61

Auto Components	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018	1.30	20	1.11	20	1.36	17	1.13	17	0.99	20	0.85	20	1.03	17	0.87	17
United States of America																
Canada	1.31	3	1.01	3	1.31	3	1.01	3	0.92	3	0.71	3	0.92	3	0.71	3
Central and South America	0.35	1	0.41	1	-	-	-	-	0.43	2	0.47	2	0.36	1	0.35	1
European Union and other Western European countries	1.25	14	1.07	14	1.26	13	1.06	13	1.03	14	0.88	14	1.08	13	0.92	13
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	1.14	8	1.10	8	1.24	6	1.14	6	1.10	8	1.07	8	1.21	5	1.11	5
East Asia	1.06	175	1.02	174	1.11	106	0.92	106	0.90	174	0.88	169	0.92	112	0.76	108
Oceania and Pacific	1.20	2	1.14	2	1.42	1	1.30	1	1.03	2	0.99	2	1.02	1	0.93	1
Global	1.10	223	1.03	222	1.17	146	0.97	146	0.92	223	0.88	218	0.95	152	0.80	148
Automobiles	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018																
United States of America	1.53	3	1.35	3	1.43	2	1.16	2	1.14	3	0.93	3	1.08	2	0.76	2
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	1.44	4	1.01	4	1.44	4	1.01	4	1.06	4	0.82	4	1.05	3	0.64	3
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	0.76	1	1.04	1	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	1.01	6	0.93	6	0.89	3	0.71	3	1.02	6	0.91	6	1.11	4	0.93	4
East Asia	0.98	38	0.98	38	1.07	20	0.87	20	0.84	38	0.90	38	0.90	19	0.75	19
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global	1.04	52	1.00	52	1.13	29	0.89	29	0.89	51	0.89	51	0.96	28	0.76	28

Household Durables	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018																
<i>United States of America</i>	1.18	24	0.99	24	1.22	18	0.93	18	0.80	25	0.72	24	0.77	19	0.63	18
<i>Canada</i>	0.47	1	0.33	1	0.47	1	0.33	1	0.94	1	0.65	1	0.94	1	0.65	1
<i>Central and South America</i>	1.05	6	0.82	6	1.05	5	0.76	5	0.99	7	0.84	7	1.00	5	0.76	5
<i>European Union and other Western European countries</i>	0.88	20	0.77	19	0.86	11	0.76	11	0.91	20	0.90	20	0.92	11	0.82	11
<i>Russia and other Eastern European countries</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Southern and Eastern Mediterranean and Gulf countries</i>	1.23	2	1.22	2	1.12	1	1.02	1	0.82	2	0.84	2	0.62	1	0.60	1
<i>Sub-Saharan Africa</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Central and South Asia</i>	1.25	1	1.10	1	1.25	1	1.10	1	1.50	1	1.33	1	1.50	1	1.33	1
<i>East Asia</i>	0.97	104	0.99	100	1.04	49	0.88	49	0.96	101	0.99	98	0.96	49	0.79	49
<i>Oceania and Pacific</i>	1.23	1	1.26	1	-	-	-	-	1.14	1	1.17	1	-	-	-	-
<i>Global</i>	1.00	159	0.96	154	1.05	86	0.87	86	0.93	158	0.93	154	0.92	87	0.76	86
Leisure Products																
31/12/2018																
<i>United States of America</i>	1.03	8	1.02	8	1.00	6	0.94	6	0.78	10	0.75	10	0.84	7	0.76	7
<i>Canada</i>	1.69	1	1.43	1	1.69	1	1.43	1	0.94	1	0.81	1	0.94	1	0.81	1
<i>Central and South America</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>European Union and other Western European countries</i>	0.74	2	0.61	2	0.74	2	0.61	2	0.44	1	0.39	1	0.44	1	0.39	1
<i>Russia and other Eastern European countries</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Southern and Eastern Mediterranean and Gulf countries</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Sub-Saharan Africa</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Central and South Asia</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>East Asia</i>	0.93	38	1.04	36	0.87	17	0.78	16	0.81	38	0.87	37	0.85	19	0.68	19
<i>Oceania and Pacific</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Global</i>	0.96	49	1.03	47	0.92	26	0.83	25	0.80	50	0.84	49	0.84	28	0.70	28

Textiles, Apparel & Luxury Goods																
31/12/2018																
	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.
United States of America	0.61	21	0.62	20	0.75	9	0.71	8	0.77	24	0.76	24	0.91	12	0.82	12
Canada	0.43	2	0.43	2	0.39	1	0.36	1	0.93	2	0.93	2	0.78	1	0.72	1
Central and South America	0.74	5	0.81	4	0.45	1	0.43	1	0.83	4	0.83	4	1.01	1	0.99	1
European Union and other Western European countries	0.89	21	0.85	21	0.96	13	0.87	13	0.84	21	0.81	21	0.89	13	0.81	13
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	0.63	5	0.61	4	0.52	4	0.45	3	0.63	3	0.58	3	0.68	2	0.58	2
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	1.22	8	0.98	8	1.29	5	0.87	5	1.21	5	1.14	5	1.10	2	0.87	2
East Asia	0.92	134	0.94	130	0.99	76	0.87	74	0.80	130	0.81	128	0.83	71	0.70	70
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global	0.88	196	0.88	189	0.95	109	0.84	105	0.81	189	0.81	187	0.85	102	0.73	101
Hotels, Restaurants & Leisure	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.
31/12/2018																
	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
United States of America	0.90	44	0.71	43	0.90	42	0.70	41	0.82	51	0.67	49	0.82	46	0.65	44
Canada	0.78	7	0.72	7	0.82	6	0.75	6	0.71	7	0.60	7	0.71	7	0.60	7
Central and South America	0.72	3	0.64	3	0.72	3	0.64	3	0.72	3	0.61	3	0.72	3	0.61	3
European Union and other Western European countries	0.86	26	0.81	25	0.86	21	0.77	20	0.76	27	0.73	26	0.76	23	0.66	22
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	0.97	5	0.96	5	0.97	2	0.89	2	0.73	5	0.70	5	0.70	4	0.64	4
Sub-Saharan Africa	0.36	2	0.31	1	0.36	2	0.31	1	0.57	2	0.43	2	0.57	2	0.43	2
Central and South Asia	1.61	4	1.51	4	1.54	3	1.40	3	1.19	4	1.13	4	1.04	2	0.89	2
East Asia	0.78	110	0.79	106	0.77	64	0.68	61	0.74	117	0.74	115	0.79	64	0.69	62
Oceania and Pacific	1.16	7	1.09	7	1.16	5	1.04	5	0.77	8	0.72	8	0.80	6	0.73	6
Global	0.84	208	0.80	201	0.85	148	0.73	142	0.76	224	0.72	219	0.79	157	0.67	152

Distributors	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018																
United States of America	0.73	5	0.64	5	0.73	5	0.64	5	0.69	5	0.59	5	0.69	5	0.59	5
Canada	0.70	1	0.56	1	0.70	1	0.56	1	1.06	1	0.77	1	1.06	1	0.77	1
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	0.75	3	0.63	3	0.75	3	0.63	3	0.91	2	0.84	2	1.20	1	0.91	1
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	1.26	1	0.88	1	1.26	1	0.88	1	0.68	1	0.36	1	0.68	1	0.36	1
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East Asia	0.79	32	0.82	29	0.83	15	0.75	13	0.67	30	0.68	28	0.64	14	0.51	13
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global	0.79	42	0.78	39	0.81	25	0.71	23	0.69	39	0.67	37	0.69	22	0.55	21
Internet & Direct Marketing Retail	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018																
United States of America	0.99	11	1.09	11	0.99	6	0.95	6	0.97	10	1.02	10	1.08	4	1.02	4
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	0.28	1	0.29	1	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	1.20	6	1.14	6	1.07	3	0.92	3	1.24	6	1.16	6	1.12	4	1.00	4
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	1.57	1	1.57	1	1.57	1	1.57	1	1.88	1	1.93	1	-	-	-	-
Central and South Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East Asia	0.88	21	1.00	21	0.85	9	0.78	9	0.88	20	0.96	20	0.92	7	0.82	7
Oceania and Pacific	1.70	1	1.85	1	-	-	-	-	1.17	1	1.25	1	-	-	-	-
Global	0.98	41	1.06	41	0.97	19	0.90	19	0.99	38	1.04	38	1.02	15	0.92	15

Multiline Retail	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018																
<i>United States of America</i>	0.82	8	0.72	8	0.82	8	0.72	8	0.90	9	0.79	8	0.90	9	0.79	8
<i>Canada</i>	0.82	3	0.55	3	0.82	3	0.55	3	1.07	3	0.66	3	1.07	3	0.66	3
<i>Central and South America</i>	0.78	3	0.73	3	0.78	3	0.73	3	1.07	3	0.97	3	1.07	3	0.97	3
<i>European Union and other Western European countries</i>	1.03	2	0.89	2	1.03	2	0.89	2	0.50	2	0.42	2	0.50	2	0.42	2
<i>Russia and other Eastern European countries</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Southern and Eastern Mediterranean and Gulf countries</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Sub-Saharan Africa</i>	0.75	1	0.66	1	0.75	1	0.66	1	0.56	1	0.47	1	0.56	1	0.47	1
<i>Central and South Asia</i>	0.80	1	0.77	1	0.80	1	0.77	1	0.56	2	0.81	1	0.34	1	-	-
<i>East Asia</i>	0.94	58	0.96	57	0.97	32	0.81	32	0.73	63	0.78	63	0.78	30	0.65	30
<i>Oceania and Pacific</i>	1.13	3	0.99	3	1.13	3	0.99	3	1.18	3	1.07	3	1.18	3	1.07	3
<i>Global</i>	0.92	79	0.90	78	0.93	53	0.79	53	0.78	86	0.78	84	0.83	52	0.70	50
Specialty Retail	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018																
<i>United States of America</i>	0.94	61	0.85	61	1.10	38	0.89	38	0.85	59	0.76	58	0.88	38	0.68	37
<i>Canada</i>	-	-	-	-	-	-	-	-	0.75	1	0.32	1	0.75	1	0.32	1
<i>Central and South America</i>	0.61	1	0.55	1	0.61	1	0.55	1	0.66	1	0.54	1	0.66	1	0.54	1
<i>European Union and other Western European countries</i>	0.84	21	0.78	21	0.84	15	0.70	15	0.88	21	0.78	21	0.94	16	0.76	16
<i>Russia and other Eastern European countries</i>	0.59	1	0.65	1	-	-	-	-	-	-	-	-	-	-	-	-
<i>Southern and Eastern Mediterranean and Gulf countries</i>	0.96	4	0.80	4	0.96	4	0.80	4	0.71	4	0.53	4	0.71	4	0.53	4
<i>Sub-Saharan Africa</i>	0.51	4	0.48	4	0.47	3	0.43	3	0.73	4	0.68	4	0.72	3	0.64	3
<i>Central and South Asia</i>	1.20	1	1.13	1	1.20	1	1.13	1	-	-	-	-	-	-	-	-
<i>East Asia</i>	0.79	72	0.77	70	0.80	44	0.69	42	0.78	77	0.75	75	0.81	45	0.67	43
<i>Oceania and Pacific</i>	1.02	5	0.88	5	0.97	4	0.77	4	1.08	5	0.90	5	1.08	5	0.90	5
<i>Global</i>	0.86	170	0.79	168	0.92	110	0.76	108	0.82	172	0.75	169	0.86	113	0.68	110

Food & Staples Retailing	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018	0.80	15	0.67	14	0.80	15	0.67	14	0.75	15	0.72	12	0.77	14	0.75	11
United States of America																
Canada	0.74	3	0.60	3	0.74	3	0.60	3	0.67	7	0.58	7	0.67	7	0.58	7
Central and South America	0.73	3	0.73	3	0.62	2	0.60	2	0.65	3	0.63	3	0.65	2	0.62	2
European Union and other Western European countries	0.90	16	0.72	16	0.92	15	0.72	15	0.68	19	0.61	17	0.69	18	0.62	16
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	0.37	1	0.32	1	0.37	1	0.32	1
Southern and Eastern Mediterranean and Gulf countries	0.57	3	0.49	3	0.61	2	0.48	2	0.76	3	0.73	3	0.76	2	0.67	2
Sub-Saharan Africa	0.70	5	0.65	5	0.72	4	0.67	4	0.74	5	0.69	5	0.73	4	0.66	4
Central and South Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East Asia	0.67	72	0.67	72	0.70	40	0.59	40	0.68	69	0.69	66	0.71	40	0.63	37
Oceania and Pacific	1.02	2	0.88	2	1.02	2	0.88	2	0.93	2	0.86	2	0.93	2	0.86	2
Global	0.72	119	0.67	118	0.76	83	0.64	82	0.69	124	0.67	116	0.71	90	0.64	82
Beverages	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018																
United States of America	0.66	11	0.66	10	0.57	8	0.54	7	0.72	11	0.62	11	0.73	8	0.59	8
Canada	0.78	1	0.88	1	-	-	-	-	0.68	1	0.75	1	-	-	-	-
Central and South America	0.89	3	0.84	3	0.89	3	0.84	3	0.61	4	0.59	4	0.62	3	0.59	3
European Union and other Western European countries	0.71	12	0.59	12	0.71	12	0.59	12	0.70	13	0.60	13	0.70	13	0.60	13
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	1.02	2	0.88	2	1.02	2	0.88	2	1.92	2	1.74	2	1.92	2	1.74	2
East Asia	0.81	44	0.89	43	0.64	13	0.60	12	0.80	42	0.89	42	0.66	12	0.58	12
Oceania and Pacific	0.85	2	0.78	2	0.85	2	0.78	2	1.05	2	0.96	2	1.05	2	0.96	2
Global	0.78	75	0.80	73	0.70	40	0.63	38	0.80	75	0.80	75	0.77	40	0.67	40

Food Products	5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.		
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018												
United States of America	0.56	29	0.48	26	0.60	25	0.51	22	0.59	30	0.48	24
Canada	0.76	7	0.60	7	0.76	7	0.60	7	0.56	7	0.44	6
Central and South America	0.54	7	0.55	5	0.54	7	0.55	5	0.67	8	0.67	8
European Union and other Western European countries	0.74	24	0.64	23	0.76	23	0.65	22	0.65	27	0.60	22
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	0.87	11	0.80	11	0.82	7	0.68	7	0.75	10	0.67	10
Sub-Saharan Africa	0.73	5	0.68	5	0.73	5	0.68	5	0.59	5	0.55	4
Central and South Asia	0.85	11	0.78	11	0.85	8	0.73	8	1.11	10	1.06	7
East Asia	0.78	206	0.74	199	0.81	136	0.71	129	0.73	199	0.70	195
Oceania and Pacific	0.91	5	0.79	5	0.91	5	0.79	5	0.93	5	0.81	5
Global	0.76	305	0.71	292	0.77	223	0.67	210	0.72	301	0.67	222
Tobacco	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018												
United States of America	0.75	4	0.65	4	0.75	4	0.65	4	0.72	4	0.75	3
Canada	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	1.02	3	0.81	3	1.02	3	0.81	3	0.79	3	0.62	3
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	0.70	1	0.72	1	-	-	-	-	0.79	2	0.77	2
East Asia	0.50	2	0.50	2	0.64	1	0.60	1	0.59	3	0.59	2
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Global	0.77	10	0.68	10	0.84	8	0.71	8	0.72	12	0.67	11

	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
Household Products																
31/12/2018																
<i>United States of America</i>	0.56	6	0.57	5	0.56	6	0.57	5	0.66	8	0.60	8	0.66	8	0.60	8
<i>Canada</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Central and South America</i>	0.64	1	0.59	1	0.64	1	0.59	1	0.70	1	0.62	1	0.70	1	0.62	1
<i>European Union and other Western European countries</i>	0.99	3	0.91	3	0.99	3	0.91	3	0.84	3	0.75	3	0.84	3	0.75	3
<i>Russia and other Eastern European countries</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Southern and Eastern Mediterranean and Gulf countries</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Sub-Saharan Africa</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Central and South Asia</i>	-	-	-	-	-	-	-	-	0.38	1	0.38	1	0.38	1	0.38	1
<i>East Asia</i>	0.95	12	0.81	12	1.09	8	0.83	8	0.85	12	0.85	11	0.82	8	0.75	7
<i>Oceania and Pacific</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Global</i>	0.84	22	0.76	21	0.87	18	0.76	17	0.76	25	0.72	24	0.74	21	0.67	20
Personal Products																
31/12/2018																
<i>United States of America</i>	0.62	7	0.63	7	0.61	4	0.57	4	0.71	7	0.71	7	0.78	4	0.72	4
<i>Canada</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Central and South America</i>	0.74	1	0.62	1	0.74	1	0.62	1	0.94	1	0.71	1	0.94	1	0.71	1
<i>European Union and other Western European countries</i>	0.82	5	0.82	5	0.86	3	0.79	3	0.83	5	0.83	5	0.78	2	0.68	2
<i>Russia and other Eastern European countries</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Southern and Eastern Mediterranean and Gulf countries</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Sub-Saharan Africa</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Central and South Asia</i>	0.87	2	0.85	2	0.87	2	0.85	2	0.73	2	0.71	2	0.73	2	0.71	2
<i>East Asia</i>	0.92	36	0.97	36	1.20	13	1.11	13	0.95	38	1.03	38	0.97	12	0.86	12
<i>Oceania and Pacific</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Global</i>	0.86	51	0.90	51	1.01	23	0.93	23	0.90	53	0.95	53	0.89	21	0.80	21

Health Care Equipment & Supplies																
31/12/2018																
	5Y net liq. incl.				5Y net liq. excd				2Y net liq. incl				2Y net liq. excd.			
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
United States of America	0.95	42	0.93	42	0.92	25	0.82	25	1.01	44	0.97	44	0.98	26	0.87	26
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	-	-	-	-	-	-	-	-	0.73	1	0.64	1	0.73	1	0.64	1
European Union and other Western European countries	0.94	19	0.89	19	0.86	12	0.77	12	1.05	20	1.00	20	1.05	16	0.98	16
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	0.82	1	0.89	1	-	-	-	-	0.60	1	0.65	1	-	-	-	-
East Asia	0.94	61	1.01	61	0.81	20	0.73	20	0.92	64	0.96	62	0.88	24	0.76	24
Oceania and Pacific	1.33	4	1.32	4	1.21	3	1.17	3	1.35	4	1.35	4	1.30	3	1.27	3
Global	0.95	127	0.98	127	0.89	60	0.79	60	0.98	134	0.98	132	0.97	70	0.87	70
Health Care Providers & Services																
31/12/2018																
	5Y net liq. incl.				5Y net liq. excd				2Y net liq. incl				2Y net liq. excd.			
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
United States of America	0.98	36	0.88	36	0.98	30	0.82	30	0.92	39	0.80	39	0.99	31	0.81	31
Canada	0.47	3	0.45	2	0.47	3	0.45	2	0.47	3	0.68	1	0.47	3	0.68	1
Central and South America	0.73	2	0.71	2	0.73	2	0.71	2	0.76	3	0.75	3	0.76	3	0.75	3
European Union and other Western European countries	0.73	9	0.57	9	0.73	9	0.57	9	0.86	10	0.68	10	0.86	10	0.68	10
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	0.80	3	0.71	3	0.80	3	0.71	3	0.62	3	0.55	3	0.62	3	0.55	3
Sub-Saharan Africa	0.69	2	0.61	2	0.69	2	0.61	2	0.68	2	0.58	2	0.68	2	0.58	2
Central and South Asia	0.50	1	0.46	1	0.50	1	0.46	1	0.74	1	0.68	1	0.74	1	0.68	1
East Asia	0.78	48	0.81	47	0.79	23	0.71	22	0.79	49	0.81	49	0.71	26	0.61	26
Oceania and Pacific	1.04	10	0.91	10	1.04	10	0.91	10	1.01	10	0.88	10	1.01	10	0.88	10
Global	0.85	114	0.80	112	0.86	83	0.75	81	0.84	120	0.79	118	0.85	89	0.73	87

Health Care Technology															
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
1.08	7	1.12	7	1.12	2	1.09	2	1.01	9	1.01	9	0.95	4	0.87	4
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.20	4	1.21	4	0.55	2	0.55	2	0.97	4	0.98	4	0.91	2	0.89	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.06	9	1.20	9	-	-	-	-	1.03	9	1.18	9	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.10	20	1.17	20	0.84	4	0.82	4	1.01	22	1.08	22	0.93	6	0.88	6
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
1.25	28	1.24	26	1.14	10	1.09	10	1.09	28	1.18	27	1.18	7	1.07	7
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.13	15	1.17	14	0.95	4	0.83	4	1.10	15	1.31	13	0.83	4	0.89	3
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	0.51	1	0.63	1	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.42	1	0.42	1	0.42	1	0.42	1	1.00	1	0.99	1	1.00	1	0.99	1
1.01	34	1.03	34	0.94	11	0.89	11	0.93	36	0.98	35	0.86	13	0.87	12
0.99	1	0.94	1	0.99	1	0.94	1	1.24	1	1.17	1	1.24	1	1.17	1
1.11	79	1.12	76	1.00	27	0.94	27	1.01	82	1.10	78	0.96	26	0.95	24

Pharmaceuticals	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018																
United States of America	1.35	19	1.21	18	1.25	14	1.08	14	1.13	19	1.09	19	1.08	14	0.95	14
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	0.42	2	0.39	2	0.42	2	0.39	2	0.51	2	0.49	2	0.51	1	0.45	1
European Union and other Western European countries	0.89	24	0.84	24	0.88	17	0.80	17	0.95	26	0.92	25	0.90	18	0.83	17
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	0.85	3	0.72	3	1.13	2	0.89	2	1.46	2	0.98	2	2.38	1	1.18	1
Sub-Saharan Africa	0.83	2	0.72	2	0.83	2	0.72	2	0.74	2	0.61	2	1.10	1	0.85	1
Central and South Asia	1.10	15	1.09	15	1.06	9	0.96	9	1.21	18	1.20	18	1.20	10	1.05	10
East Asia	0.96	203	0.97	203	1.00	92	0.91	92	0.86	210	0.89	209	0.85	93	0.77	92
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global	0.98	268	0.97	267	1.00	138	0.90	138	0.91	279	0.92	277	0.91	138	0.82	136
Life Sciences Tools & Services																
31/12/2018																
United States of America	1.03	14	0.98	14	1.00	9	0.89	9	1.16	15	1.10	15	1.11	10	0.99	10
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	0.78	9	0.73	9	0.78	7	0.70	7	1.17	8	1.12	8	1.26	6	1.17	6
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	-	-	-	-	-	-	-	-	1.35	1	1.44	1	-	-	-	-
East Asia	1.05	6	1.11	6	1.25	2	1.23	2	1.31	6	1.41	6	1.32	2	1.28	2
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global	0.95	29	0.93	29	0.94	18	0.86	18	1.20	30	1.18	30	1.18	18	1.08	18

Banks	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018																
United States of America	0.78	176	-	-	0.78	176	-	-	0.76	179	-	-	0.76	179	-	-
Canada	1.15	8	-	-	1.15	8	-	-	1.01	8	-	-	1.01	8	-	-
Central and South America	1.31	10	-	-	1.31	10	-	-	1.21	10	-	-	1.21	10	-	-
European Union and other Western European countries	1.05	52	-	-	1.05	52	-	-	1.03	56	-	-	1.03	56	-	-
Russia and other Eastern European countries	1.02	1	-	-	1.02	1	-	-	1.14	1	-	-	1.14	1	-	-
Southern and Eastern Mediterranean and Gulf countries	0.73	10	-	-	0.73	10	-	-	0.73	9	-	-	0.73	9	-	-
Sub-Saharan Africa	0.68	4	-	-	0.68	4	-	-	0.90	4	-	-	0.90	4	-	-
Central and South Asia	1.47	22	-	-	1.47	22	-	-	1.51	23	-	-	1.51	23	-	-
East Asia	0.94	136	-	-	0.94	136	-	-	0.88	135	-	-	0.88	135	-	-
Oceania and Pacific	1.19	7	-	-	1.19	7	-	-	1.13	7	-	-	1.13	7	-	-
Global	0.92	426	-	-	0.92	426	-	-	0.89	432	-	-	0.89	432	-	-
Thrifts & Mortgage Finance																
31/12/2018																
United States of America	0.74	33	-	-	0.74	33	-	-	0.65	37	-	-	0.65	37	-	-
Canada	1.16	5	-	-	1.16	5	-	-	1.01	5	-	-	1.01	5	-	-
Central and South America	0.25	1	-	-	0.25	1	-	-	0.39	1	-	-	0.39	1	-	-
European Union and other Western European countries	1.08	2	-	-	1.08	2	-	-	0.91	2	-	-	0.91	2	-	-
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	1.51	4	-	-	1.51	4	-	-	1.42	4	-	-	1.42	4	-	-
East Asia	1.14	3	-	-	1.14	3	-	-	0.99	3	-	-	0.99	3	-	-
Oceania and Pacific	0.90	2	-	-	0.90	2	-	-	0.60	2	-	-	0.60	2	-	-
Global	0.88	50	-	-	0.88	50	-	-	0.76	54	-	-	0.76	54	-	-

Diversified Financial Services																
31/12/2018																
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.				
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	
	2	-	-	1.18	2	-	-	1.00	2	-	-	1.00	2	-	-	
United States of America																
Canada	2	-	-	0.87	2	-	-	1.39	2	-	-	1.39	2	-	-	
Central and South America																
European Union and other Western European countries																
Russia and other Eastern European countries	2	-	-	1.21	2	-	-	1.56	2	-	-	1.56	2	-	-	
Southern and Eastern Mediterranean and Gulf countries																
Sub-Saharan Africa																
Central and South Asia	3	-	-	0.76	3	-	-	0.95	3	-	-	0.95	3	-	-	
East Asia	7	-	-	1.82	7	-	-	1.74	5	-	-	1.74	5	-	-	
Oceania and Pacific	20	-	-	0.95	20	-	-	0.90	20	-	-	0.90	20	-	-	
Global	2	-	-	1.21	2	-	-	1.15	3	-	-	1.15	3	-	-	
	38	-	-	1.13	38	-	-	1.11	37	-	-	1.11	37	-	-	
Consumer Finance																
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018																
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.				
	14	-	-	1.21	14	-	-	1.07	14	-	-	1.07	14	-	-	
United States of America																
Canada	1	-	-	1.50	1	-	-	1.91	1	-	-	1.91	1	-	-	
Central and South America																
European Union and other Western European countries	1	-	-	1.07	1	-	-	0.94	1	-	-	0.94	1	-	-	
Russia and other Eastern European countries	5	-	-	0.61	5	-	-	0.83	5	-	-	0.83	5	-	-	
Southern and Eastern Mediterranean and Gulf countries																
Sub-Saharan Africa	1	-	-	1.12	1	-	-	0.77	1	-	-	0.77	1	-	-	
Central and South Asia																
East Asia	5	-	-	1.08	5	-	-	1.59	5	-	-	1.59	5	-	-	
Oceania and Pacific	19	-	-	0.88	19	-	-	0.88	19	-	-	0.88	19	-	-	
Global	3	-	-	1.17	3	-	-	0.91	3	-	-	0.91	3	-	-	
	49	-	-	1.01	49	-	-	1.02	49	-	-	1.02	49	-	-	

Capital Markets		5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.					
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	
31/12/2018																
	1.06	29	0.69	7	1.07	28	0.69	6	1.04	31	0.73	9	1.08	29	0.79	7
United States of America																
Canada	1.22	3	1.01	1	1.22	3	1.01	1	0.95	3	0.65	1	0.95	3	0.65	1
Central and South America	0.80	4	1.40	3	0.43	1	-	-	0.74	3	0.99	2	0.36	1	-	-
European Union and other Western European countries	0.87	20	0.74	4	0.89	18	0.65	2	0.86	18	0.52	4	0.92	16	0.62	2
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	1.26	2	-	-	1.26	2	-	-	1.09	2	-	-	1.09	2	-	-
Sub-Saharan Africa	0.52	1	0.63	1	-	-	-	-	0.26	1	0.32	1	-	-	-	-
Central and South Asia	1.50	4	1.12	2	2.04	2	-	-	1.50	4	1.17	2	1.99	2	-	-
East Asia	1.24	78	1.56	5	1.23	73	-	-	1.06	82	1.08	5	1.07	77	-	-
Oceania and Pacific	0.99	1	1.10	1	-	-	-	-	0.89	1	0.98	1	-	-	-	-
Global	1.14	142	1.03	24	1.15	127	0.72	9	1.03	145	0.81	25	1.06	130	0.74	10
Insurance																
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018																
	0.94	52	0.78	3	0.94	52	0.78	3	0.87	55	0.63	3	0.87	55	0.63	3
United States of America																
Canada	0.84	8	-	-	0.84	8	-	-	0.88	8	-	-	0.88	8	-	-
Central and South America	0.58	5	-	-	0.58	5	-	-	0.51	6	-	-	0.51	6	-	-
European Union and other Western European countries	0.83	38	0.38	2	0.83	38	0.38	2	0.78	38	0.56	2	0.78	38	0.56	2
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	1.06	13	-	-	1.06	13	-	-	0.93	13	-	-	0.93	13	-	-
Sub-Saharan Africa	0.79	5	-	-	0.79	5	-	-	0.87	5	-	-	0.87	5	-	-
Central and South Asia	0.99	3	-	-	0.99	3	-	-	1.13	2	-	-	1.13	2	-	-
East Asia	0.89	44	1.27	2	0.89	42	-	-	0.82	43	0.96	2	0.82	41	-	-
Oceania and Pacific	1.01	5	0.45	1	1.01	5	0.45	1	1.13	5	1.14	1	1.13	5	1.14	1
Global	0.90	173	0.76	8	0.90	171	0.59	6	0.84	175	0.76	8	0.84	173	0.69	6

IT Services	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018																
United States of America	0.96	46	0.85	44	1.05	29	0.89	28	0.98	46	0.88	46	1.03	31	0.86	31
Canada	1.03	2	0.97	2	1.03	2	0.97	2	0.87	2	0.81	2	0.87	2	0.81	2
Central and South America	0.55	1	0.51	1	0.55	1	0.51	1	0.41	2	0.53	1	0.41	2	0.53	1
European Union and other Western European countries	0.89	25	0.86	25	0.89	15	0.80	15	1.02	24	0.97	24	0.99	17	0.89	17
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	0.60	3	0.58	3	0.61	2	0.58	2	0.93	3	0.86	3	0.93	3	0.86	3
Sub-Saharan Africa	0.74	1	0.69	1	0.74	1	0.69	1	0.91	2	0.95	2	1.02	1	0.90	1
Central and South Asia	0.76	10	0.78	10	1.29	2	1.15	2	0.82	12	0.85	12	1.40	2	1.27	2
East Asia	1.03	101	1.10	99	1.01	29	0.93	29	1.08	100	1.19	98	1.07	31	0.98	31
Oceania and Pacific	1.30	2	1.26	2	1.08	1	0.94	1	1.46	2	1.44	2	1.16	1	1.03	1
Global	0.97	191	0.98	187	0.99	82	0.88	81	1.02	193	1.05	190	1.02	90	0.92	89
Software																
31/12/2018																
United States of America	1.03	37	1.07	37	1.11	11	1.01	11	1.04	37	1.08	37	1.02	14	0.95	14
Canada	0.78	6	0.87	6	0.70	2	0.63	2	1.08	6	1.19	6	0.80	1	0.69	1
Central and South America	0.36	2	0.37	2	0.28	1	0.27	1	0.69	2	0.67	2	0.69	2	0.67	2
European Union and other Western European countries	0.98	12	1.01	12	1.16	4	1.04	4	1.06	12	1.02	11	1.24	5	1.09	5
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	0.73	4	0.80	4	-	-	-	-	0.77	4	0.82	4	0.81	2	0.80	2
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	0.99	2	1.01	2	1.00	1	1.00	1	1.28	2	1.33	2	-	-	-	-
East Asia	1.15	74	1.31	73	1.34	6	1.26	6	1.07	76	1.23	75	1.11	8	1.02	8
Oceania and Pacific	0.87	4	0.88	4	0.87	1	0.81	1	0.88	4	0.89	4	0.85	1	0.80	1
Global	1.06	141	1.16	140	1.09	26	1.01	26	1.05	143	1.14	141	1.03	33	0.95	33

Communications Equipment														
31/12/2018														
β_L	5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.				
	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U
0.99	23	1.06	23	0.92	8	0.84	8	0.88	25	0.94	25	0.91	11	0.83
1.32	2	1.66	2	-	-	-	-	1.39	2	1.77	2	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.00	9	1.01	9	1.04	4	0.93	4	1.03	9	0.96	9	1.30	5	1.12
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.44	3	0.52	3	-	-	-	-	0.72	4	0.84	4	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.10	82	1.19	80	1.10	25	1.04	25	1.07	85	1.15	82	1.07	27	0.99
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.06	119	1.14	117	1.05	37	0.99	37	1.03	125	1.09	122	1.06	43	0.96
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U
31/12/2018														
5Y net liq. incl.														
1.29	11	1.24	11	1.34	7	1.09	7	1.18	12	1.06	12	1.41	7	1.06
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.71	5	0.61	5	0.78	4	0.64	4	1.02	4	0.92	4	0.86	3	0.69
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.12	84	1.23	78	1.08	23	0.94	23	1.07	84	1.20	78	0.99	24	0.89
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.12	100	1.19	94	1.10	34	0.93	34	1.08	100	1.17	94	1.06	34	0.90

Electronic Equipment, Instruments & Components															
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.
0.97	41	1.00	40	0.95	24	0.85	23	1.13	42	1.10	42	1.21	28	1.05	28
0.68	1	0.69	1	-	-	-	-	0.90	1	0.81	1	0.90	1	0.81	1
0.54	2	0.47	2	0.60	1	0.36	1	0.67	2	0.55	2	0.80	1	0.46	1
0.97	22	0.84	21	0.93	17	0.80	17	1.06	22	1.04	22	1.10	15	1.00	15
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.31	1	0.26	1	0.31	1	0.26	1	0.29	1	-	-	0.29	1	-	-
1.15	2	0.82	2	1.15	2	0.82	2	1.22	1	0.99	1	1.22	1	0.99	1
1.16	347	1.17	332	1.18	136	1.00	136	1.18	351	1.23	344	1.24	146	1.05	146
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.12	416	1.12	399	1.12	181	0.95	180	1.16	420	1.20	412	1.22	193	1.04	192
β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.
Semiconductors & Semiconductor Equipment															
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
1.09	45	1.15	45	1.17	13	1.04	13	1.21	45	1.27	45	1.24	15	1.10	15
1.34	1	0.67	1	1.34	1	0.67	1	1.10	1	0.45	1	1.10	1	0.45	1
0.28	2	0.36	2	-	-	-	-	0.66	3	0.75	3	-	-	-	-
1.15	16	1.16	16	1.45	5	1.26	5	1.39	16	1.45	16	1.16	3	0.94	3
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.04	3	1.28	3	-	-	-	-	1.17	3	1.45	3	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.26	179	1.29	166	1.23	69	1.07	67	1.29	181	1.34	174	1.20	67	0.99	67
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.21	246	1.25	233	1.23	88	1.07	86	1.27	249	1.33	242	1.20	86	1.01	86

Diversified Telecommunication Services															
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
<i>United States of America</i>															
0.67	8	0.55	8	0.75	6	0.55	6	0.79	8	0.60	8	0.92	6	0.65	6
<i>Canada</i>															
0.46	2	0.43	1	0.46	2	0.43	1	0.61	2	0.45	2	0.61	2	0.45	2
<i>Central and South America</i>															
0.58	1	0.55	1	0.58	1	0.55	1	0.46	1	0.44	1	0.46	1	0.44	1
<i>European Union and other Western European countries</i>															
0.71	18	0.59	17	0.66	16	0.51	15	0.71	20	0.56	20	0.69	18	0.51	18
<i>Russia and other Eastern European countries</i>															
0.33	1	-	-	0.33	1	-	-	0.28	1	-	-	0.28	1	-	-
<i>Southern and Eastern Mediterranean and Gulf countries</i>															
0.79	2	0.70	2	0.82	1	0.59	1	0.96	2	0.82	2	1.00	1	0.65	1
<i>Sub-Saharan Africa</i>															
0.74	1	0.65	1	0.74	1	0.65	1	0.36	1	0.31	1	0.36	1	0.31	1
<i>Central and South Asia</i>															
1.07	2	0.86	2	1.07	2	0.86	2	1.31	2	1.06	2	1.31	2	1.06	2
<i>East Asia</i>															
0.99	16	0.91	16	1.03	12	0.86	12	0.94	17	0.92	16	0.93	13	0.83	12
<i>Oceania and Pacific</i>															
0.79	5	0.59	5	0.79	5	0.59	5	0.86	5	0.66	5	0.86	5	0.66	5
<i>Global</i>															
0.79	56	0.69	53	0.79	47	0.64	44	0.81	59	0.69	57	0.80	50	0.64	48
Wireless Telecommunication Services															
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
<i>United States of America</i>															
0.57	3	0.53	2	0.57	3	0.53	2	0.77	4	0.57	4	0.77	4	0.57	4
<i>Canada</i>															
0.33	1	-	-	0.33	1	-	-	0.72	1	0.53	1	0.72	1	0.53	1
<i>Central and South America</i>															
0.65	1	0.60	1	0.65	1	0.60	1	0.59	1	0.54	1	0.59	1	0.54	1
<i>European Union and other Western European countries</i>															
0.42	2	0.48	1	0.42	2	0.48	1	0.53	2	0.43	2	0.53	2	0.43	2
<i>Russia and other Eastern European countries</i>															
1.25	1	0.95	1	1.25	1	0.95	1	1.02	1	0.75	1	1.02	1	0.75	1
<i>Southern and Eastern Mediterranean and Gulf countries</i>															
1.20	2	1.13	2	0.92	1	0.55	1	1.27	2	1.05	2	1.27	2	1.05	2
<i>Sub-Saharan Africa</i>															
0.48	2	0.46	2	0.48	2	0.46	2	0.71	2	0.64	2	0.71	2	0.64	2
<i>Central and South Asia</i>															
0.88	1	0.56	1	0.88	1	0.56	1	1.69	1	0.63	1	1.69	1	0.63	1
<i>East Asia</i>															
0.86	17	0.78	16	0.96	13	0.86	12	0.76	16	0.64	16	0.83	12	0.66	12
<i>Oceania and Pacific</i>															
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Global</i>															
0.79	30	0.74	26	0.80	25	0.73	21	0.81	30	0.64	30	0.85	26	0.65	26

Media	31/12/2018						5Y net liq. incl.						5Y net liq. excl.						2Y net liq. incl.						2Y net liq. excl.									
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n		
United States of America	0.98	25	0.82	25	1.02	20	0.79	20	0.87	25	0.69	25	0.94	19	0.67	19																		
Canada	0.78	5	0.92	3	0.78	5	0.92	3	0.64	5	0.47	5	0.60	4	0.37	4																		
Central and South America	0.64	1	0.33	1	0.64	1	0.33	1	-	-	-	-	-	-	-	-																		
European Union and other Western European countries	0.94	25	0.85	24	0.95	21	0.83	20	0.82	26	0.71	26	0.80	23	0.67	23																		
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																		
Southern and Eastern Mediterranean and Gulf countries	1.06	2	0.99	2	1.06	2	0.99	2	0.92	2	0.91	2	0.92	2	0.91	2																		
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																		
Central and South Asia	1.05	8	0.96	8	1.15	6	1.03	6	0.99	6	0.93	6	1.05	4	0.95	4																		
East Asia	0.94	68	1.03	64	0.91	24	0.85	23	0.82	67	0.95	66	0.85	26	0.74	26																		
Oceania and Pacific	1.34	4	1.08	4	1.34	4	1.08	4	1.48	4	1.24	4	1.48	4	1.24	4																		
Global	0.96	138	0.95	131	0.98	83	0.85	79	0.85	135	0.84	134	0.89	82	0.72	82																		
Entertainment	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n																		
31/12/2018	5Y net liq. incl.						5Y net liq. excl.						2Y net liq. incl.						2Y net liq. excl.															
United States of America	1.02	13	0.94	13	1.03	9	0.84	9	0.87	13	0.84	12	0.88	8	0.77	7																		
Canada	1.51	2	1.40	2	1.58	1	1.26	1	0.81	3	1.01	2	0.66	2	0.89	1																		
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																		
European Union and other Western European countries	0.91	8	0.81	8	1.10	5	0.90	5	1.01	8	0.91	8	1.04	5	0.82	5																		
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																		
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																		
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																		
Central and South Asia	1.60	2	1.41	2	1.60	2	1.41	2	1.71	2	1.40	2	1.71	2	1.40	2																		
East Asia	1.01	79	1.14	77	0.92	19	0.88	19	0.98	76	1.14	73	0.90	15	0.81	15																		
Oceania and Pacific	0.33	1	0.31	1	0.33	1	0.31	1	0.50	2	0.35	2	0.50	2	0.35	2																		
Global	1.02	105	1.09	103	1.01	37	0.89	37	0.97	104	1.07	99	0.93	34	0.81	32																		

Interactive Media & Services															
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
1.06	8	1.17	8	1.19	1	1.16	1	1.13	8	1.24	8	1.10	2	1.06	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.84	4	0.87	4	-	-	-	-	0.76	4	0.79	4	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.75	1	1.85	1	-	-	-	-	1.46	1	1.49	1	-	-	-	-
0.82	22	0.91	22	0.82	3	0.73	3	1.02	23	1.14	23	1.06	4	0.88	4
1.20	2	1.16	2	1.20	2	1.16	2	1.29	2	1.24	2	1.29	2	1.24	2
0.92	37	1.00	37	1.01	6	0.94	6	1.04	38	1.14	38	1.13	8	1.02	8
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
0.37	12	0.33	4	0.37	12	0.33	4	0.32	10	0.26	4	0.32	10	0.26	4
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.88	11	0.63	11	0.88	11	0.63	11	0.80	11	0.64	10	0.76	10	0.56	9
0.84	15	0.58	14	0.84	15	0.58	14	0.81	16	0.54	15	0.81	16	0.54	15
0.88	4	0.75	4	0.88	3	0.62	3	0.59	4	0.61	4	0.56	2	0.38	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.96	3	0.64	3	1.19	2	0.69	2	0.93	3	0.63	3	1.22	2	0.75	2
0.66	19	0.54	18	0.69	16	0.53	15	0.61	18	0.48	17	0.65	14	0.48	13
0.73	5	0.52	5	0.73	5	0.52	5	0.51	4	0.40	3	0.51	4	0.40	3
0.72	69	0.57	59	0.73	64	0.56	54	0.66	66	0.52	56	0.67	58	0.50	48

Gas Utilities	5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.						
	β_L	n.	β_U	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.		
31/12/2018																
United States of America	0.64	9	0.47	8	0.64	9	0.47	8	0.46	12	0.34	10	0.46	12	0.34	10
Canada	0.92	3	0.67	3	0.92	3	0.67	3	0.76	2	0.63	2	0.76	2	0.63	2
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	0.63	3	0.49	3	0.63	3	0.49	3	0.72	3	0.58	3	0.72	3	0.58	3
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	0.68	1	0.64	1	0.68	1	0.64	1	0.62	1	0.58	1	0.62	1	0.58	1
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	0.76	3	0.66	3	0.76	3	0.66	3	0.66	3	0.58	3	0.66	3	0.58	3
East Asia	0.80	21	0.69	21	0.75	19	0.62	19	0.61	21	0.54	21	0.59	18	0.49	18
Oceania and Pacific	1.04	1	0.64	1	1.04	1	0.64	1	0.87	1	0.55	1	0.87	1	0.55	1
Global	0.76	41	0.63	40	0.73	39	0.59	38	0.60	43	0.50	41	0.59	40	0.48	38
Multi-Utilities	β_L	n.	β_U	n.	β_U	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.
31/12/2018																
United States of America	0.44	9	0.36	6	0.44	9	0.36	6	0.33	5	0.27	2	0.33	5	0.27	2
Canada	0.49	4	0.34	3	0.49	4	0.34	3	0.67	1	0.45	1	0.67	1	0.45	1
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	0.75	8	0.49	8	0.75	8	0.49	8	0.69	8	0.46	8	0.69	8	0.46	8
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East Asia	0.97	4	0.75	4	1.15	3	0.81	3	0.91	4	0.67	4	1.04	3	0.70	3
Oceania and Pacific	0.66	1	0.55	1	0.66	1	0.55	1	0.79	1	0.68	1	0.79	1	0.68	1
Global	0.63	26	0.48	22	0.64	25	0.48	21	0.65	19	0.50	16	0.65	18	0.50	15

Water Utilities	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018																
United States of America	0.43	3	0.36	2	0.43	3	0.36	2	0.48	8	0.37	8	0.48	8	0.37	8
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	0.89	2	0.57	2	0.89	2	0.57	2	0.73	2	0.52	2	0.73	2	0.52	2
European Union and other Western European countries	0.76	3	0.40	3	0.76	3	0.40	3	0.73	3	0.36	3	0.73	3	0.36	3
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	1.99	1	1.97	1	1.99	1	1.97	1	1.15	1	1.09	1	1.15	1	1.09	1
East Asia	0.82	21	0.80	19	0.83	15	0.77	13	0.69	19	0.58	19	0.74	14	0.58	14
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global	0.82	30	0.75	27	0.83	24	0.72	21	0.66	33	0.52	33	0.68	28	0.51	28
Independent Power and Renewable Electricity Producers	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018																
United States of America	1.30	2	0.79	2	1.30	2	0.79	2	0.73	2	0.49	2	0.73	2	0.49	2
Canada	0.91	4	0.59	4	0.91	4	0.59	4	0.52	3	0.40	2	0.52	3	0.40	2
Central and South America	0.55	1	0.49	1	0.55	1	0.49	1	0.46	1	0.39	1	0.46	1	0.39	1
European Union and other Western European countries	0.82	5	0.57	5	0.82	5	0.57	5	0.74	5	0.54	4	0.74	5	0.54	4
Russia and other Eastern European countries	0.65	2	0.42	2	0.94	1	0.47	1	0.53	2	0.38	2	0.68	1	0.39	1
Southern and Eastern Mediterranean and Gulf countries	0.36	1	0.25	1	0.36	1	0.25	1	0.39	1	-	-	0.39	1	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	0.78	1	0.46	1	0.78	1	0.46	1	0.44	1	0.25	1	0.44	1	0.25	1
East Asia	0.92	44	0.69	43	0.91	42	0.67	41	0.79	39	0.66	32	0.79	37	0.65	30
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global	0.90	60	0.65	59	0.90	57	0.64	56	0.74	54	0.60	44	0.74	51	0.60	41

Real Estate Management & Development																
31/12/2018																
	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.
United States of America	1.15	13	1.06	12	1.15	12	1.01	11	0.88	12	0.77	12	0.89	10	0.72	10
Canada	0.89	4	0.77	4	0.89	4	0.77	4	0.92	4	0.78	4	0.92	4	0.78	4
Central and South America	0.88	5	0.72	4	0.88	5	0.72	4	1.05	4	0.72	4	1.05	4	0.72	4
European Union and other Western European countries	0.68	24	0.51	19	0.69	23	0.50	18	0.69	23	0.45	23	0.68	22	0.43	22
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	0.97	19	0.88	16	0.99	17	0.88	14	0.83	19	0.71	17	0.84	16	0.68	14
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	1.06	14	0.83	14	1.06	14	0.83	14	1.05	14	0.83	12	1.05	14	0.83	12
East Asia	1.01	226	0.83	222	1.01	190	0.76	186	0.91	226	0.78	217	0.93	185	0.71	176
Oceania and Pacific	1.09	2	0.93	2	1.09	2	0.93	2	0.84	2	0.69	2	0.84	2	0.69	2
Global	0.98	307	0.82	293	0.98	267	0.77	253	0.90	304	0.75	291	0.91	257	0.69	244

Individual betas by geographical zone		β_L	β_U	β_L	β_U	β_L	β_U	β_L	β_U	β_L	β_U
31/12/2018		5Y net liq. incl.		5Y net liq. excl.		2Y net liq. incl.		2Y net liq. excl.		2Y net liq. excl.	
United States of America		1'493	1'163	1'184	859	1'562	1'232	1'242	913		
Canada		195	159	163	129	203	170	177	144		
Central and South America		118	93	99	75	130	104	109	83		
European Union and other Western European countries		928	796	760	633	947	814	778	648		
Russia and other Eastern European countries		20	18	15	13	24	21	18	16		
Southern and Eastern Mediterranean and Gulf countries		172	141	127	96	165	136	129	100		
Sub-Saharan Africa		56	43	52	39	56	43	48	35		
Central and South Asia		231	185	170	126	225	180	156	111		
East Asia		5'201	4'789	2'920	2'581	5'182	4'767	2'885	2'522		
Oceania and Pacific		145	124	120	102	145	123	124	104		
Global		8'559	7'511	5'610	4'653	8'639	7'590	5'666	4'676		
		5Y net liq. incl.		5Y net liq. excl.		2Y net liq. incl.		2Y net liq. excl.		2Y net liq. excl.	
United States of America		17,4%	15,5%	21,1%	18,5%	18,1%	16,2%	21,9%	19,5%		
Canada		2,3%	2,1%	2,9%	2,8%	2,3%	2,2%	3,1%	3,1%		
Central and South America		1,4%	1,2%	1,8%	1,6%	1,5%	1,4%	1,9%	1,8%		
European Union and other Western European countries		10,8%	10,6%	13,5%	13,6%	11,0%	10,7%	13,7%	13,9%		
Russia and other Eastern European countries		0,2%	0,2%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%		
Southern and Eastern Mediterranean and Gulf countries		2,0%	1,9%	2,3%	2,1%	1,9%	1,8%	2,3%	2,1%		
Sub-Saharan Africa		0,7%	0,6%	0,9%	0,8%	0,6%	0,6%	0,8%	0,7%		
Central and South Asia		2,7%	2,5%	3,0%	2,7%	2,6%	2,4%	2,8%	2,4%		
East Asia		60,8%	63,8%	52,0%	55,5%	60,0%	62,8%	50,9%	53,9%		
Oceania and Pacific		1,7%	1,7%	2,1%	2,2%	1,7%	1,6%	2,2%	2,2%		
Global		100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%		

IV – SUB-INDUSTRY BETAS

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Betas 5Y / Summary		Net liquidity included						Net liquidity excluded						
31/12/2018		Individual betas			Industry betas			Individual betas			Industry betas			
	n.	%	Average	Min	Max	Average	n.	%	Average	Min	Max	Average	n.	%
Levered All sectors	8'559	100%	0.99	0.63	1.66	0.96	144	100%	1.00	0.61	1.46	0.98	144	100%
- Financial sectors	846	10%	0.97	0.78	1.19	0.99	12	8%	0.97	0.78	1.19	0.99	12	8%
- Sectors other than financial sectors	7'713	90%	1.00	0.63	1.66	0.96	132	92%	1.01	0.61	1.46	0.98	132	92%
Unlevered All sectors	7'511	100%	0.95	0.48	1.46	0.91	132	100%	0.85	0.48	1.29	0.83	132	100%
- Financial sectors	0	0%	-	-	-	-	0	0%	-	-	-	-	0	0%
- Sectors other than financial sectors	7'511	100%	0.95	0.48	1.46	0.91	132	100%	0.85	0.48	1.29	0.83	132	100%
Betas 2Y / Summary		Net liquidity included						Net liquidity excluded						
31/12/2018		Individual betas <td colspan="3">Industry betas <td colspan="3">Individual betas <td colspan="3">Industry betas </td></td></td>			Industry betas <td colspan="3">Individual betas <td colspan="3">Industry betas </td></td>			Individual betas <td colspan="3">Industry betas </td>			Industry betas			
	n.	%	Average	Min	Max	Average	n.	%	Average	Min	Max	Average	n.	%
Levered All sectors	8'639	100%	0.94	0.58	1.33	0.91	144	100%	0.94	0.58	1.35	0.93	144	100%
- Financial sectors	859	10%	0.92	0.65	1.15	0.94	12	8%	0.92	0.65	1.15	0.94	12	8%
- Sectors other than financial sectors	7'780	90%	0.95	0.58	1.33	0.91	132	92%	0.95	0.58	1.35	0.93	132	92%
Unlevered All sectors	7'590	100%	0.92	0.50	1.42	0.87	132	100%	0.79	0.48	1.16	0.78	132	100%
- Financial sectors	0	0%	-	-	-	-	0	0%	-	-	-	-	0	0%
- Sectors other than financial sectors	7'590	100%	0.92	0.50	1.42	0.87	132	100%	0.79	0.48	1.16	0.78	132	100%

Oil & Gas Drilling	5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.						
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018	1.48	3	1.26	3	1.27	2	0.93	2	1.31	3	1.01	3	1.31	3	1.01	3
United States of America																
Canada	1.57	1	1.13	1	1.57	1	1.13	1	1.24	1	0.61	1	1.24	1	0.61	1
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	1.69	3	0.86	3	1.69	3	0.86	3	1.27	3	0.55	3	1.27	3	0.55	3
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East Asia	1.16	2	1.06	2	1.16	2	1.06	2	1.45	2	1.37	2	1.45	2	1.37	2
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global	1.49	9	1.07	9	1.44	8	0.96	8	1.32	9	0.89	9	1.32	9	0.89	9
Oil & Gas Equipment & Services	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018	1.47	13	1.45	13	1.56	9	1.43	9	1.46	20	1.26	20	1.52	16	1.20	16
United States of America																
Canada	1.38	9	1.30	9	1.38	6	1.20	6	1.01	10	0.84	10	1.08	7	0.80	7
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	0.99	12	0.84	11	0.98	7	0.75	7	1.00	12	0.94	11	1.06	6	0.86	6
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	0.43	1	0.44	1	-	-	-	-	-	-	-	-	-	-	-	-
East Asia	0.97	27	0.93	27	0.97	17	0.77	17	1.27	27	1.07	26	1.37	18	1.01	18
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global	1.13	62	1.07	61	1.17	39	0.98	39	1.24	69	1.07	67	1.34	47	1.02	47

Integrated Oil & Gas															
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.
1.14	3	1.03	3	1.14	3	1.03	3	1.32	4	1.04	4	1.32	4	1.04	4
1.44	4	1.23	4	1.44	4	1.23	4	1.43	4	1.11	4	1.43	4	1.11	4
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.11	7	0.91	7	1.11	7	0.91	7	1.07	7	0.92	7	1.07	7	0.92	7
0.66	3	0.63	3	0.86	2	0.58	2	0.62	4	0.50	3	0.68	3	0.50	3
1.39	2	0.98	2	1.39	2	0.98	2	1.09	2	0.73	2	1.09	2	0.73	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.12	1	0.97	1	1.12	1	0.97	1	0.97	1	0.78	1	0.97	1	0.78	1
0.86	4	0.70	4	0.86	4	0.70	4	0.97	4	0.87	4	0.97	4	0.87	4
1.29	1	0.77	1	1.29	1	0.77	1	1.66	1	1.06	1	1.66	1	1.06	1
1.10	25	0.91	25	1.14	24	0.92	24	1.10	27	0.90	26	1.12	26	0.90	26
β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.
Oil & Gas Exploration & Production															
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
1.35	25	1.13	25	1.40	22	1.15	22	1.32	32	1.01	32	1.33	30	0.99	30
1.81	11	1.60	11	1.78	10	1.53	10	1.51	20	1.23	20	1.51	19	1.20	19
0.81	1	1.58	1	-	-	-	-	0.64	1	1.53	1	-	-	-	-
1.18	7	1.14	7	1.38	4	1.18	4	1.28	7	1.17	7	1.43	5	1.21	5
0.63	2	0.61	2	0.88	1	0.83	1	0.71	2	0.70	2	0.80	1	0.78	1
1.23	3	1.20	3	1.16	1	0.76	1	0.66	3	0.58	3	1.01	1	0.63	1
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.61	1	0.57	1	0.61	1	0.57	1	0.58	1	0.48	1	0.58	1	0.48	1
0.84	4	0.82	4	0.70	3	0.64	3	0.76	4	0.77	4	0.57	3	0.52	3
1.50	6	1.34	4	1.51	4	1.34	4	1.56	5	1.51	5	1.50	4	1.33	4
1.35	60	1.20	58	1.41	46	1.19	46	1.29	75	1.08	75	1.34	64	1.05	64

Oil & Gas Refining & Marketing															
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
1.20	14	1.01	14	1.25	12	0.97	12	1.07	14	0.88	14	1.12	12	0.84	12
United States of America															
0.38	1	0.28	1	0.38	1	0.28	1	0.84	1	0.59	1	0.84	1	0.59	1
Canada															
1.26	2	0.81	2	1.26	2	0.81	2	1.08	2	0.75	2	1.08	2	0.75	2
Central and South America															
1.05	4	0.88	4	1.05	4	0.88	4	0.92	4	0.84	4	0.92	4	0.84	4
European Union and other Western European countries															
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Russia and other Eastern European countries															
0.86	6	0.71	6	0.66	4	0.42	4	0.68	4	0.52	4	0.64	3	0.41	3
Southern and Eastern Mediterranean and Gulf countries															
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa															
1.20	4	0.88	4	1.20	4	0.88	4	1.44	4	1.14	4	1.44	4	1.14	4
Central and South Asia															
0.89	21	0.80	21	0.90	14	0.71	14	0.94	20	0.85	20	0.99	13	0.80	13
East Asia															
0.86	2	0.76	2	0.86	2	0.76	2	0.70	2	0.60	2	0.70	2	0.60	2
Oceania and Pacific															
1.01	54	0.85	54	1.02	43	0.79	43	0.98	51	0.83	51	1.03	41	0.80	41
Global															
Oil & Gas Storage & Transportation															
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
1.44	26	0.93	26	1.44	26	0.93	26	0.93	28	0.56	28	0.93	28	0.56	28
United States of America															
1.12	5	0.85	5	1.12	5	0.85	5	1.16	5	0.85	5	1.16	5	0.85	5
Canada															
0.48	4	0.39	2	0.48	4	0.39	2	0.41	6	0.68	1	0.41	6	0.68	1
Central and South America															
0.67	7	0.45	5	0.67	7	0.45	5	0.63	8	0.43	5	0.63	8	0.43	5
European Union and other Western European countries															
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Russia and other Eastern European countries															
1.12	1	0.73	1	1.12	1	0.73	1	0.80	1	0.50	1	0.80	1	0.50	1
Southern and Eastern Mediterranean and Gulf countries															
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa															
0.63	1	0.62	1	0.63	1	0.62	1	0.69	1	0.72	1	-	-	-	-
Central and South Asia															
0.94	11	0.69	11	0.94	11	0.69	11	0.86	12	0.65	11	0.86	12	0.65	11
East Asia															
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oceania and Pacific															
1.12	55	0.79	51	1.12	55	0.79	51	0.84	61	0.60	52	0.84	60	0.60	51
Global															

Coal & Consumable Fuels																		
31/12/2018																		
5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.									
β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.			
	0.44	2	0.34	2	0.44	2	0.34	2	0.65	3	0.55	3	0.60	2	0.41	2		
United States of America																		
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
European Union and other Western European countries	1.19	1	1.06	1	1.19	1	1.06	1	0.92	1	0.91	1	0.92	1	0.91	1		
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Sub-Saharan Africa	1.13	1	1.08	1	1.13	1	1.08	1	1.07	1	1.02	1	1.07	1	1.02	1		
Central and South Asia	0.53	5	0.68	4	0.26	1	-	0.39	3	0.45	3	0.45	3	0.31	1	0.30	1	
East Asia	0.80	29	0.68	28	0.82	26	0.66	25	0.80	27	0.75	26	0.81	22	0.66	21		
Oceania and Pacific	1.93	1	1.61	1	1.93	1	1.61	1	1.22	1	1.14	1	1.22	1	1.14	1		
Global	0.79	39	0.71	37	0.83	32	0.70	30	0.78	36	0.73	35	0.80	28	0.67	27		
Commodity Chemicals																		
31/12/2018																		
5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.									
β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_U	n.	
	1.48	8	1.19	8	1.48	8	1.19	8	1.25	9	0.97	9	1.25	9	0.97	9	0.97	9
United States of America																		
Canada	2.11	1	1.72	1	2.11	1	1.72	1	1.54	1	1.27	1	1.54	1	1.27	1	1.27	1
Central and South America	0.68	3	0.69	2	0.68	3	0.69	2	0.62	3	0.43	3	0.62	3	0.43	3	0.43	3
European Union and other Western European countries	0.83	6	0.71	6	0.83	6	0.71	6	0.77	6	0.66	6	0.77	6	0.66	6	0.66	6
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	1.05	8	0.84	8	1.21	6	0.92	6	0.93	8	0.79	8	1.09	5	0.83	5	0.83	5
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	0.99	3	0.86	3	1.10	2	0.90	2	0.85	3	0.79	3	0.94	2	0.83	2	0.83	2
East Asia	1.04	193	0.94	189	1.05	133	0.87	133	0.94	190	0.89	184	0.97	126	0.82	122	0.82	122
Oceania and Pacific	1.05	1	0.92	1	1.05	1	0.92	1	0.95	1	0.90	1	0.95	1	0.90	1	0.90	1
Global	1.05	223	0.94	218	1.07	160	0.88	159	0.95	221	0.88	215	0.98	153	0.82	149	0.82	149

Diversified Chemicals		β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n								
31/12/2018		5Y net liq. incl.						5Y net liq. excl.						2Y net liq. incl.						2Y net liq. excl.					
United States of America		1.35	1	0.88	1	1.35	1	0.88	1	1.70	3	1.05	3	1.70	3	1.05	3								
Canada		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
Central and South America		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
European Union and other Western European countries		1.13	5	0.87	5	1.13	5	0.87	5	1.02	5	0.81	5	1.02	5	0.81	5								
Russia and other Eastern European countries		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
Southern and Eastern Mediterranean and Gulf countries		0.99	3	0.99	3	1.24	1	0.78	1	0.75	3	0.60	3	0.84	2	0.55	2								
Sub-Saharan Africa		1.23	2	1.13	2	1.23	2	1.13	2	0.81	2	0.69	2	0.81	2	0.69	2								
Central and South Asia		1.97	1	1.58	1	1.97	1	1.58	1	1.17	1	0.97	1	1.17	1	0.97	1								
East Asia		1.20	21	1.05	21	1.31	15	1.03	15	1.13	22	1.07	22	1.19	13	0.97	13								
Oceania and Pacific		1.22	1	0.96	1	1.22	1	0.96	1	1.18	1	0.96	1	1.18	1	0.96	1								
Global		1.20	34	1.03	34	1.29	26	1.01	26	1.11	37	0.97	37	1.16	27	0.89	27								
Fertilizers & Agricultural Chemicals		β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n								
31/12/2018		5Y net liq. incl.						5Y net liq. excl.						2Y net liq. incl.						2Y net liq. excl.					
United States of America		1.29	6	1.06	6	1.29	6	1.06	6	1.25	6	1.01	6	1.25	6	1.01	6								
Canada		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
Central and South America		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
European Union and other Western European countries		1.05	3	0.77	3	1.05	3	0.77	3	1.19	3	0.88	3	1.19	3	0.88	3								
Russia and other Eastern European countries		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
Southern and Eastern Mediterranean and Gulf countries		0.76	5	0.54	5	0.80	4	0.53	4	0.91	3	0.65	3	0.91	3	0.65	3								
Sub-Saharan Africa		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
Central and South Asia		1.31	6	1.14	6	1.36	5	1.13	5	1.32	6	1.16	6	1.57	4	1.30	4								
East Asia		1.00	48	0.95	48	1.04	33	0.86	33	0.90	42	0.89	42	0.93	28	0.77	28								
Oceania and Pacific		1.06	1	0.91	1	1.06	1	0.91	1	0.98	1	0.93	1	0.98	1	0.93	1								
Global		1.04	69	0.94	69	1.08	52	0.88	52	0.99	61	0.92	61	1.05	45	0.85	45								

Industrial Gases	5Y net liq. incl.						5Y net liq. excl.						2Y net liq. incl.						2Y net liq. excl.							
	β_L	n	β_U	n	β_U	n	β_L	n	β_U	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_U	n
31/12/2018																										
United States of America	1.02	1	0.92	1	1.02	1	0.92	1	0.92	1	0.92	1	0.93	1	0.90	1	0.93	1	0.90	1	0.93	1	0.90	1	0.90	1
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	0.83	2	0.68	2	0.83	2	0.68	2	0.68	2	0.68	2	0.93	2	0.77	2	0.93	2	0.77	2	0.93	2	0.77	2	0.77	2
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East Asia	0.86	5	0.79	5	0.86	3	0.68	3	0.68	3	0.68	3	0.98	6	0.92	6	1.09	3	0.83	3	1.09	3	0.83	3	0.83	3
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global	0.87	8	0.78	8	0.88	6	0.72	6	0.72	6	0.72	6	0.96	9	0.89	9	1.01	6	0.82	6	1.01	6	0.82	6	0.82	6
Specialty Chemicals																										
31/12/2018																										
United States of America	1.32	26	1.11	24	1.30	25	1.11	24	1.11	24	1.11	24	1.19	26	1.00	26	1.21	24	0.97	24	1.21	24	0.97	24	0.97	24
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	1.03	19	0.94	19	1.02	17	0.91	17	0.91	17	0.91	17	1.11	20	1.01	20	1.13	17	1.01	17	1.13	17	1.01	17	1.01	17
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	0.56	1	0.50	1	0.56	1	0.50	1	0.50	1	0.50	1	0.49	1	0.42	1	0.49	1	0.42	1	0.49	1	0.42	1	0.42	1
Central and South Asia	1.28	2	1.15	2	1.60	2	1.33	1	1.33	1	1.33	1	0.78	2	0.72	2	0.79	1	0.68	1	0.79	1	0.68	1	0.68	1
East Asia	1.04	109	1.06	106	1.05	56	0.92	55	0.92	55	0.92	55	1.06	105	1.10	103	1.02	52	0.90	51	1.02	52	0.90	51	0.90	51
Oceania and Pacific	0.59	1	0.52	1	0.59	1	0.52	1	0.52	1	0.52	1	0.84	1	0.75	1	0.84	1	0.75	1	0.84	1	0.75	1	0.75	1
Global	1.09	158	1.04	153	1.10	101	0.96	99	0.96	99	0.96	99	1.08	155	1.06	153	1.08	96	0.93	95	1.08	96	0.93	95	0.93	95

Construction Materials																
31/12/2018																
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.				
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	
	0.98	6	0.88	6	1.04	5	0.90	5	0.84	6	0.73	6	0.94	5	0.80	5
United States of America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Canada	1.40	1	0.78	1	1.40	1	0.78	1	1.49	1	0.84	1	1.49	1	0.84	1
Central and South America	1.09	8	0.86	8	1.09	8	0.86	8	0.96	9	0.77	9	0.96	9	0.77	9
European Union and other Western European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Russia and other Eastern European countries	0.88	14	0.83	14	0.89	9	0.76	9	0.64	13	0.57	13	0.64	10	0.53	10
Southern and Eastern Mediterranean and Gulf countries	0.59	1	0.46	1	0.59	1	0.46	1	0.81	1	0.76	1	0.81	1	0.76	1
Sub-Saharan Africa	1.23	7	1.11	7	1.30	5	1.10	5	1.38	8	1.20	8	1.45	6	1.17	6
Central and South Asia	0.97	60	0.86	60	0.98	45	0.78	45	0.98	61	0.88	60	0.99	47	0.82	46
East Asia	1.20	5	1.06	5	1.20	5	1.06	5	1.03	5	0.89	5	1.03	5	0.89	5
Oceania and Pacific	1.00	102	0.88	102	1.02	79	0.83	79	0.96	104	0.85	103	0.98	84	0.81	83
Global	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
Metal & Glass Containers																
31/12/2018																
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.				
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	
	1.18	7	0.78	7	1.18	7	0.78	7	1.12	7	0.77	7	1.12	7	0.77	7
United States of America	0.68	2	0.57	2	0.68	2	0.57	2	0.88	2	0.71	2	0.88	2	0.71	2
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	0.65	2	0.52	2	0.65	2	0.52	2	0.68	2	0.52	2	0.68	2	0.52	2
European Union and other Western European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Russia and other Eastern European countries	1.34	2	0.95	2	1.34	2	0.95	2	0.50	2	0.31	2	0.50	2	0.31	2
Southern and Eastern Mediterranean and Gulf countries	0.61	1	0.43	1	0.61	1	0.43	1	0.89	1	0.56	1	0.89	1	0.56	1
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	0.72	16	0.61	16	0.77	13	0.62	13	0.64	16	0.56	16	0.64	12	0.51	12
East Asia	-	-	-	-	-	-	-	-	1.11	1	0.88	1	1.11	1	0.88	1
Oceania and Pacific	0.86	30	0.66	30	0.90	27	0.67	27	0.78	31	0.61	31	0.80	27	0.59	27
Global																

Paper Packaging															
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.
1.41	8	1.08	8	1.41	8	1.08	8	1.10	9	0.88	9	1.17	8	0.92	8
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.03	5	0.81	5	1.03	5	0.81	5	1.05	5	0.83	5	1.05	5	0.83	5
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.06	1	1.06	1	1.06	1	1.06	1	0.53	1	0.52	1	0.53	1	0.52	1
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.69	1	0.81	1	1.69	1	0.81	1	1.82	1	1.05	1	1.82	1	1.05	1
0.88	19	0.82	19	0.97	9	0.74	9	0.82	19	0.81	19	0.78	9	0.59	9
0.60	2	0.50	2	0.60	2	0.50	2	0.75	2	0.63	2	0.75	2	0.63	2
1.03	36	0.87	36	1.12	26	0.86	26	0.93	37	0.82	37	0.98	26	0.76	26
β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
0.84	2	0.70	2	0.84	2	0.70	2	1.25	2	1.06	2	1.25	2	1.06	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.91	1	0.88	1	0.91	1	0.88	1	0.58	1	0.56	1	0.58	1	0.56	1
0.82	2	0.74	2	0.82	2	0.74	2	0.83	2	0.76	2	0.83	2	0.76	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.47	1	2.28	1	-	-	-	-	1.31	1	1.71	1	-	-	-	-
1.06	23	0.94	23	1.02	16	0.78	16	0.87	23	0.72	23	0.91	16	0.64	16
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.04	29	0.95	29	0.98	21	0.78	21	0.90	29	0.77	29	0.92	21	0.69	21

Diversified Metals & Mining																	
31/12/2018																	
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.					
β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.		
<i>United States of America</i>																	
	1.33	2	1.13	2	1.33	2	1.13	2	1.20	2	0.99	2	1.20	2	0.99	2	
<i>Canada</i>																	
	1.39	2	1.27	2	1.39	2	1.27	2	1.56	4	1.32	4	1.56	4	1.32	4	
<i>Central and South America</i>																	
	1.18	1	1.04	1	1.18	1	1.04	1	1.34	1	1.18	1	1.34	1	1.18	1	
<i>European Union and other Western European countries</i>																	
	1.18	7	0.99	7	1.18	7	0.99	7	1.22	8	1.21	7	1.22	8	1.21	7	
<i>Russia and other Eastern European countries</i>																	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<i>Southern and Eastern Mediterranean and Gulf countries</i>																	
	1.33	1	0.77	1	1.33	1	0.77	1	1.33	1	0.83	1	1.33	1	0.83	1	
<i>Sub-Saharan Africa</i>																	
	1.15	1	1.10	1	1.15	1	1.10	1	1.30	1	1.27	1	1.30	1	1.27	1	
<i>Central and South Asia</i>																	
	0.82	4	0.73	4	0.76	3	0.62	3	0.81	3	1.01	2	0.77	2	1.07	1	
<i>East Asia</i>																	
	1.06	54	0.96	53	1.05	42	0.88	41	1.03	53	0.92	53	1.02	43	0.86	43	
<i>Oceania and Pacific</i>																	
	1.44	7	1.51	7	1.49	3	1.43	3	1.38	7	1.28	6	1.29	3	1.25	3	
<i>Global</i>																	
	1.12	79	1.01	78	1.10	62	0.93	61	1.11	80	1.01	77	1.10	65	0.97	63	
Copper																	
β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_U	n.
31/12/2018																	
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.					
0.90	1	0.82	1	0.90	1	0.82	1	1.19	2	1.03	2	1.19	2	1.03	2	-	-
<i>United States of America</i>																	
2.38	1	2.40	1	-	-	-	-	1.92	1	2.35	1	-	-	-	-	-	-
<i>Canada</i>																	
-	-	-	-	-	-	-	-	0.25	1	0.29	1	-	-	-	-	-	-
<i>Central and South America</i>																	
1.12	3	0.97	3	1.12	3	0.97	3	1.37	3	1.24	3	1.37	3	1.24	3	-	-
<i>European Union and other Western European countries</i>																	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Russia and other Eastern European countries</i>																	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Southern and Eastern Mediterranean and Gulf countries</i>																	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Sub-Saharan Africa</i>																	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Central and South Asia</i>																	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>East Asia</i>																	
0.90	7	0.80	7	0.93	6	0.80	6	0.95	7	0.80	7	1.01	6	0.84	6	-	-
<i>Oceania and Pacific</i>																	
0.85	2	1.04	2	-	-	-	-	1.26	2	1.55	2	-	-	-	-	-	-
<i>Global</i>																	
1.05	14	0.99	14	0.99	10	0.86	10	1.11	16	1.07	16	1.14	11	0.98	11	-	-

Gold	5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.						
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018																
United States of America	1.96	1	2.08	1	-	-	-	-	0.93	1	0.97	1	-	-	-	-
Canada	1.22	11	1.25	11	1.35	5	1.26	5	0.45	4	0.45	4	0.44	2	0.43	2
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	0.54	1	0.57	1	-	-	-	-	-	-	-	-	-	-	-	-
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	0.35	1	0.28	1	0.35	1	0.28	1
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	1.56	2	1.24	2	1.56	2	1.24	2	0.96	1	0.52	1	0.96	1	0.52	1
Central and South Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East Asia	0.73	8	0.70	7	0.70	7	0.65	6	0.70	4	0.66	3	0.70	4	0.66	3
Oceania and Pacific	0.71	3	0.74	3	0.69	1	0.66	1	-	-	-	-	-	-	-	-
Global	1.04	26	1.04	25	1.03	15	0.95	14	0.62	11	0.55	10	0.62	8	0.52	7
Precious Metals & Minerals	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018																
United States of America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Canada	1.91	1	2.11	1	-	-	-	-	0.97	1	1.01	1	-	-	-	-
Central and South America	1.01	1	0.97	1	1.01	1	0.97	1	0.77	2	0.73	2	0.77	2	0.73	2
European Union and other Western European countries	1.14	1	0.86	1	1.14	1	0.86	1	1.38	1	0.99	1	1.38	1	0.99	1
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	0.57	1	0.51	1	0.57	1	0.51	1
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	1.56	2	1.41	2	1.56	2	1.41	2	1.22	2	1.00	2	1.22	2	1.00	2
Central and South Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East Asia	0.97	4	0.97	4	0.76	3	0.68	3	0.79	4	0.78	4	0.77	3	0.70	3
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global	1.23	9	1.18	9	1.08	7	0.95	7	0.91	11	0.83	11	0.91	9	0.79	9

Silver	5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.						
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018																
United States of America	0.84	1	0.70	1	0.84	1	0.70	1	0.70	1	0.55	1	0.70	1	0.55	1
Canada	1.78	5	1.44	3	1.25	1	1.11	1	0.58	5	0.63	5	0.57	2	0.54	2
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	2.29	1	2.07	1	2.29	1	2.07	1	1.02	1	0.99	1	1.02	1	0.99	1
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East Asia	1.23	1	1.70	1	-	-	-	-	1.09	1	1.42	1	-	-	-	-
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global	1.66	8	1.46	6	1.46	3	1.29	3	0.71	8	0.76	8	0.71	4	0.66	4
Sfrussia and other Eastern European countries!	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018																
United States of America	1.22	13	0.99	12	1.29	12	1.05	11	1.25	15	0.98	15	1.30	14	1.01	14
Canada	2.26	1	2.33	1	-	-	-	-	0.57	1	0.60	1	-	-	-	-
Central and South America	1.26	4	0.94	4	1.47	3	1.01	3	1.06	5	0.85	5	1.10	4	0.82	4
European Union and other Western European countries	1.34	11	0.93	11	1.34	11	0.93	11	1.05	11	0.79	11	1.05	11	0.79	11
Russia and other Eastern European countries	0.67	4	0.52	4	0.67	4	0.52	4	0.89	5	0.80	5	0.88	4	0.76	4
Southern and Eastern Mediterranean and Gulf countries	1.31	5	1.11	5	1.29	4	0.98	4	0.70	5	0.57	5	0.70	4	0.49	4
Sub-Saharan Africa	0.93	1	0.97	1	-	-	-	-	0.99	1	1.14	1	-	-	-	-
Central and South Asia	1.47	5	1.46	4	1.65	3	1.17	3	1.70	5	1.73	5	2.14	2	1.34	2
East Asia	0.99	102	0.90	96	1.01	74	0.79	70	0.83	96	0.79	92	0.81	66	0.63	63
Oceania and Pacific	1.07	3	1.10	2	1.31	2	1.10	2	1.05	3	0.93	2	1.01	2	0.93	2
Global	1.07	149	0.94	140	1.10	113	0.85	108	0.93	147	0.84	142	0.94	107	0.72	104

Forest Products	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018																
United States of America	1.64	2	1.48	2	1.93	1	1.60	1	1.01	2	0.99	2	0.98	1	0.80	1
Canada	1.18	6	1.02	6	1.18	6	1.02	6	0.97	6	1.03	5	0.97	6	1.03	5
Central and South America	1.15	1	0.91	1	1.15	1	0.91	1	1.00	1	0.81	1	1.00	1	0.81	1
European Union and other Western European countries	1.10	1	0.95	1	1.10	1	0.95	1	1.28	1	1.19	1	1.28	1	1.19	1
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East Asia	1.02	13	0.87	13	1.02	11	0.83	11	0.85	13	0.73	13	0.84	11	0.69	11
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global	1.13	23	0.97	23	1.12	20	0.94	20	0.92	23	0.85	22	0.91	20	0.82	19
Paper Products	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018																
United States of America	1.56	5	1.22	5	1.56	5	1.22	5	1.23	5	0.92	5	1.23	5	0.92	5
Canada	1.31	2	0.92	2	1.31	2	0.92	2	1.33	2	0.93	2	1.33	2	0.93	2
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	1.22	9	0.97	9	1.22	9	0.97	9	1.14	9	0.96	9	1.14	9	0.96	9
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	1.61	1	0.80	1	1.61	1	0.80	1	0.52	1	-	-	0.52	1	-	-
Sub-Saharan Africa	0.93	2	0.69	2	0.93	2	0.69	2	0.61	2	0.48	2	0.61	2	0.48	2
Central and South Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East Asia	0.96	30	0.79	29	0.94	23	0.68	22	0.84	29	0.70	28	0.81	23	0.60	22
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global	1.10	49	0.87	48	1.11	42	0.83	41	0.94	48	0.77	46	0.94	42	0.73	40

	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
Aerospace & Defense																
31/12/2018																
<i>United States of America</i>	1.12	29	0.95	29	1.16	26	0.95	26	1.14	29	0.97	29	1.17	26	0.97	26
<i>Canada</i>	0.84	3	0.67	2	0.84	3	0.67	2	0.93	3	0.67	3	0.93	3	0.67	3
<i>Central and South America</i>	-	-	-	-	-	-	-	-	0.34	1	0.28	1	0.34	1	0.28	1
<i>European Union and other Western European countries</i>	0.89	13	0.80	13	0.91	11	0.78	11	0.99	13	0.89	13	1.12	9	0.96	9
<i>Russia and other Eastern European countries</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Southern and Eastern Mediterranean and Gulf countries</i>	0.71	1	0.61	1	0.71	1	0.61	1	0.95	1	0.81	1	0.95	1	0.81	1
<i>Sub-Saharan Africa</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Central and South Asia</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>East Asia</i>	1.04	25	1.04	25	1.01	10	0.86	10	0.78	23	0.77	22	0.75	11	0.67	10
<i>Oceania and Pacific</i>	-	-	-	-	-	-	-	-	0.50	1	0.47	1	0.50	1	0.47	1
<i>Global</i>	1.03	71	0.94	70	1.05	51	0.88	50	0.96	71	0.86	70	1.03	52	0.86	51
Building Products																
31/12/2018																
<i>United States of America</i>	1.39	20	1.21	20	1.38	15	1.13	15	0.99	20	0.86	20	0.99	14	0.79	14
<i>Canada</i>	1.82	1	2.08	1	-	-	-	-	1.40	1	1.57	1	-	-	-	-
<i>Central and South America</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>European Union and other Western European countries</i>	0.85	15	0.76	15	0.93	12	0.81	12	0.97	15	0.88	15	0.98	11	0.84	11
<i>Russia and other Eastern European countries</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Southern and Eastern Mediterranean and Gulf countries</i>	1.21	4	1.10	4	1.28	2	0.97	2	0.63	4	0.56	4	0.60	2	0.39	2
<i>Sub-Saharan Africa</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Central and South Asia</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>East Asia</i>	0.95	66	0.95	66	1.03	37	0.90	37	0.94	66	0.98	65	0.97	35	0.86	34
<i>Oceania and Pacific</i>	0.51	1	0.46	1	0.51	1	0.46	1	1.39	1	1.28	1	1.39	1	1.28	1
<i>Global</i>	1.03	107	0.98	107	1.09	67	0.93	67	0.95	107	0.94	106	0.97	63	0.83	62

Construction & Equip/Russia and other Eastern European countries/															
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
1.32	16	1.28	15	1.29	13	1.14	12	1.24	16	1.13	16	1.27	14	1.06	14
1.05	6	0.98	6	1.04	5	0.88	5	0.80	6	0.81	5	0.79	5	0.76	4
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.99	24	0.85	24	0.99	22	0.81	22	1.00	27	0.89	27	1.01	22	0.82	22
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.93	3	0.76	2	0.93	3	0.76	2	0.91	5	0.59	5	0.91	5	0.59	5
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.32	13	1.25	13	1.22	8	0.95	8	1.20	11	1.12	11	1.23	6	0.92	6
0.97	180	0.97	175	1.06	97	0.85	96	0.94	183	1.04	177	1.00	90	0.82	87
1.52	2	1.70	2	-	-	-	-	1.27	2	1.41	2	-	-	-	-
1.02	244	1.00	237	1.08	148	0.88	145	0.97	250	1.02	243	1.03	142	0.84	138
Electrical Components & Equipment															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
1.28	15	1.20	15	1.37	12	1.25	12	1.21	15	1.14	15	1.22	12	1.10	12
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	0.87	2	0.86	2	0.87	2	0.86	2
0.93	12	0.81	12	0.99	10	0.84	10	1.09	12	0.95	12	1.11	11	0.95	11
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.92	1	0.62	1	0.92	1	0.62	1	0.85	1	0.71	1	0.85	1	0.71	1
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.04	4	1.06	4	1.12	1	1.03	1	1.08	4	1.06	4	1.50	1	1.25	1
1.08	150	1.12	149	1.10	73	0.97	73	0.97	148	1.00	145	0.99	78	0.86	76
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.08	182	1.10	181	1.12	97	0.99	97	1.00	182	1.01	179	1.03	105	0.90	103

Heavy Electrical Equipment															
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
1.53	1	1.31	1	1.53	1	1.31	1	1.33	1	1.15	1	1.33	1	1.15	1
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.19	4	1.18	4	1.23	2	1.05	2	1.11	4	1.02	4	1.21	3	1.02	3
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.41	1	-	-	-	-	-	-	1.53	1	2.11	1	-	-	-	-
1.11	40	1.13	39	1.18	19	1.03	19	0.99	38	0.98	38	1.03	18	0.85	18
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.16	46	1.14	44	1.20	22	1.04	22	1.02	44	1.01	44	1.07	22	0.88	22
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
1.50	21	1.27	21	1.58	18	1.29	18	1.13	20	0.99	20	1.15	18	0.97	18
0.64	1	0.50	1	0.64	1	0.50	1	0.57	1	0.46	1	0.57	1	0.46	1
0.90	2	0.59	2	0.90	2	0.59	2	1.10	2	0.80	2	1.10	2	0.80	2
1.07	10	0.92	10	1.07	10	0.92	10	1.21	10	1.08	10	1.18	9	1.03	9
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.91	3	1.72	3	2.03	2	1.72	2	1.26	2	1.14	2	1.26	2	1.14	2
1.05	70	1.02	69	1.08	41	0.91	41	0.95	70	0.92	68	1.04	36	0.84	35
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.16	107	1.07	106	1.21	74	1.01	74	1.01	105	0.95	103	1.09	68	0.90	67

Agricultural & Farm Machinery															
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
1.06	5	0.82	5	1.20	4	0.90	4	1.35	5	1.09	5	1.41	4	1.08	4
1.31	1	1.02	1	1.31	1	1.02	1	0.84	1	0.59	1	0.84	1	0.59	1
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.88	1	0.84	1	0.88	1	0.84	1	0.92	1	0.89	1	0.92	1	0.89	1
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.59	2	1.19	2	1.59	2	1.19	2	2.09	2	1.69	2	2.21	1	1.37	1
1.44	4	1.26	4	1.44	4	1.26	4	1.16	4	1.03	4	1.24	3	1.07	3
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.26	13	1.03	13	1.33	12	1.07	12	1.33	13	1.11	13	1.33	10	1.04	10
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
Industrial Machinery															
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
1.34	55	1.17	55	1.38	48	1.18	48	1.18	56	1.03	56	1.20	49	1.01	49
0.93	2	0.88	2	0.93	2	0.88	2	1.05	2	1.01	2	1.05	2	1.01	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.95	40	0.88	39	0.98	31	0.87	31	1.15	40	1.11	40	1.15	31	1.04	31
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.84	2	0.55	2	0.84	2	0.55	2	0.62	2	0.38	2	0.62	2	0.38	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.11	278	1.14	274	1.19	112	1.03	112	1.05	278	1.10	273	1.07	115	0.92	113
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.12	377	1.12	372	1.20	195	1.04	195	1.08	378	1.09	373	1.11	199	0.96	197

Trading Companies & Distributors															
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
1.17	15	0.98	15	1.20	14	0.98	14	1.04	16	0.89	16	0.99	15	0.79	15
1.23	6	1.05	6	1.30	5	1.09	5	1.08	6	0.91	6	1.08	6	0.91	6
1.60	1	1.36	1	1.60	1	1.36	1	1.18	1	1.18	1	1.18	1	0.92	1
0.99	19	0.82	19	1.02	17	0.83	17	1.06	19	0.89	19	1.09	17	0.89	17
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.67	1	0.51	1	0.67	1	0.51	1	1.05	1	0.88	1	1.05	1	0.88	1
1.91	1	1.76	1	1.91	1	1.76	1	1.97	1	1.83	1	1.97	1	1.83	1
0.97	83	0.95	83	1.00	51	0.78	51	0.85	81	0.88	80	0.86	48	0.68	47
1.50	1	1.13	1	1.50	1	1.13	1	2.20	1	1.80	1	2.20	1	1.80	1
1.03	127	0.95	127	1.07	91	0.86	91	0.94	126	0.90	125	0.97	90	0.78	89
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
1.05	5	0.81	5	1.05	5	0.81	5	1.06	5	0.82	5	1.32	3	0.89	3
0.97	1	0.75	1	0.97	1	0.75	1	0.52	1	0.40	1	0.52	1	0.40	1
0.56	1	0.47	1	0.56	1	0.47	1	0.63	1	0.51	1	0.63	1	0.51	1
0.94	1	0.66	1	0.94	1	0.66	1	0.72	2	0.56	2	0.72	2	0.56	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.45	1	0.88	1	1.45	1	0.88	1	0.98	1	0.54	1	0.98	1	0.54	1
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.81	14	0.86	14	0.83	7	0.73	7	0.93	14	1.07	14	0.85	6	0.71	6
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.89	23	0.82	23	0.93	16	0.74	16	0.92	24	0.90	24	0.90	14	0.68	14

Environmental & Facilities Services																
31/12/2018																
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.				
β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	
	0.75	11	0.64	11	0.78	10	0.66	10	0.89	11	0.74	11	0.90	8	0.68	8
United States of America																
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	0.99	6	0.83	6	0.99	6	0.83	6	1.03	6	0.89	6	1.03	6	0.89	6
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East Asia	0.95	31	0.96	31	1.05	22	0.94	22	0.94	30	0.95	29	0.99	22	0.88	21
Oceania and Pacific	0.52	1	0.47	1	0.52	1	0.47	1	0.87	1	0.75	1	0.87	1	0.75	1
Global	0.90	49	0.86	49	0.96	39	0.84	39	0.94	48	0.89	47	0.97	37	0.83	36
Office Services & Supplies	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.
31/12/2018																
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.				
	1.35	10	1.09	10	1.41	9	1.11	9	1.07	11	0.85	11	1.17	9	0.87	9
United States of America																
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	0.56	1	0.56	1	-	-	-	-	-	-	-	-	-	-	-	-
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East Asia	0.76	19	0.90	18	0.82	6	0.76	6	0.83	18	1.03	17	1.02	6	0.97	6
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global	0.95	30	0.95	29	1.17	15	0.97	15	0.92	29	0.96	28	1.11	15	0.91	15

Diversified Support Services	5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.						
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018	0.83	10	0.69	10	0.88	8	0.69	8	0.87	10	0.75	10	0.83	8	0.66	8
United States of America																
Canada	0.76	3	0.76	3	0.68	2	0.63	2	1.01	5	0.82	5	1.03	4	0.78	4
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	0.89	10	0.75	10	0.89	9	0.73	9	0.97	10	0.81	10	1.01	9	0.83	9
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East Asia	0.74	11	0.67	11	0.86	6	0.70	6	0.87	11	0.84	11	0.86	6	0.68	6
Oceania and Pacific	0.96	2	0.85	2	0.96	2	0.85	2	0.85	2	0.74	2	0.85	2	0.74	2
Global	0.82	36	0.72	36	0.87	27	0.71	27	0.92	38	0.80	38	0.92	29	0.74	29
Security & Alarm Services	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018	5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.						
United States of America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	0.91	5	0.73	5	0.91	5	0.73	5	0.94	5	0.76	5	0.94	5	0.76	5
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East Asia	0.49	4	0.57	4	-	-	-	-	0.84	3	0.90	3	0.97	1	0.97	1
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global	0.72	9	0.66	9	0.91	5	0.73	5	0.90	8	0.81	8	0.94	6	0.79	6

Human Resource & Employment Services															
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
1.14	12	1.16	12	1.28	6	1.12	6	1.09	12	1.12	12	1.04	6	0.92	6
0.75	1	0.62	1	0.75	1	0.62	1	0.63	1	0.53	1	0.63	1	0.53	1
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.97	9	0.93	9	1.02	6	0.92	6	0.87	9	0.85	9	0.80	5	0.69	5
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.74	22	0.84	21	0.66	7	0.68	6	1.08	22	1.15	22	1.22	5	1.10	5
1.40	2	1.28	2	1.40	2	1.28	2	1.05	2	0.96	2	1.05	2	0.96	2
0.92	46	0.96	45	1.00	22	0.93	21	1.03	46	1.06	46	1.00	19	0.89	19
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
0.79	16	0.79	15	0.88	11	0.81	10	0.84	17	0.88	17	0.85	12	0.75	12
0.62	2	0.85	1	0.62	2	0.85	1	0.52	2	0.47	2	0.52	2	0.47	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.80	12	0.72	12	0.80	11	0.71	11	0.91	12	0.81	12	0.90	10	0.78	10
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.94	14	0.99	14	1.37	3	1.17	3	0.98	15	1.06	15	1.11	4	0.96	4
0.88	1	0.77	1	0.88	1	0.77	1	1.04	1	0.94	1	1.04	1	0.94	1
0.83	45	0.84	43	0.88	28	0.81	26	0.90	47	0.91	47	0.89	29	0.77	29

Air Freight & Logistics		5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.					
		β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n			
31/12/2018																
United States of America																
	0.95	9	0.83	9	1.00	8	0.86	8	1.02	10	0.87	10	1.05	9	0.87	9
Canada																
	1.33	1	0.82	1	1.33	1	0.82	1	0.96	1	0.66	1	0.96	1	0.66	1
Central and South America																
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries																
	0.95	8	0.92	8	0.99	5	0.85	5	0.91	8	0.97	8	0.96	6	0.85	6
Russia and other Eastern European countries																
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries																
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa																
	1.57	1	1.15	1	1.57	1	1.15	1	1.29	1	1.02	1	1.29	1	1.02	1
Central and South Asia																
	-	-	-	-	-	-	-	-	1.52	1	1.21	1	1.52	1	1.21	1
East Asia																
	0.93	26	0.87	26	0.98	18	0.84	18	0.84	26	0.76	26	0.89	20	0.73	20
Oceania and Pacific																
	0.57	2	0.51	2	0.57	2	0.51	2	0.74	2	0.68	2	0.74	2	0.68	2
Global																
	0.94	47	0.86	47	0.99	35	0.84	35	0.91	49	0.83	49	0.95	40	0.79	40
Airlines																
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018																
United States of America																
	0.92	10	0.72	10	0.92	10	0.72	10	0.89	10	0.69	10	0.89	10	0.69	10
Canada																
	0.86	4	0.57	4	0.86	4	0.57	4	1.02	4	0.67	4	1.02	4	0.67	4
Central and South America																
	0.62	2	0.63	2	0.66	1	0.60	1	0.65	2	0.69	2	0.40	1	0.37	1
European Union and other Western European countries																
	0.73	5	0.75	5	0.83	3	0.74	3	0.91	6	0.97	6	0.98	3	0.92	3
Russia and other Eastern European countries																
	0.67	1	0.39	1	0.67	1	0.39	1	0.44	1	0.35	1	0.44	1	0.35	1
Southern and Eastern Mediterranean and Gulf countries																
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa																
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia																
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East Asia																
	0.92	10	0.65	10	1.03	8	0.67	8	0.86	11	0.68	10	0.92	9	0.70	8
Oceania and Pacific																
	1.02	2	0.78	2	1.02	2	0.78	2	1.11	2	0.87	2	1.11	2	0.87	2
Global																
	0.87	34	0.67	34	0.92	29	0.68	29	0.88	36	0.73	35	0.91	30	0.70	29

Marine	5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.				
	β_L	n	β_U	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018	1.31	2	1.05	2	1.31	2	1.24	2	1.05	2	1.24	2	0.93	2
United States of America	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	0.87	3	0.79	3	0.82	2	0.89	3	0.78	3	0.89	3	0.78	3
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East Asia	0.97	26	0.74	25	0.96	23	0.83	26	0.68	22	0.83	26	0.63	25
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global	0.98	31	0.76	30	0.97	27	0.71	26	0.86	31	0.66	30	0.85	26
Railroads	β_L	n	β_U	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018	1.24	5	1.01	5	1.24	5	1.09	5	1.01	5	1.09	5	0.89	5
United States of America	1.03	2	0.88	2	1.03	2	0.88	2	0.88	2	1.18	2	1.00	2
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	0.60	2	0.51	2	0.83	1	0.61	1	0.61	1	0.80	2	0.73	2
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	0.98	1	1.05	1	-	-	-	-	-	-	0.93	1	0.98	1
East Asia	0.68	20	0.56	19	0.64	18	0.50	17	0.61	20	0.45	20	0.60	18
Oceania and Pacific	0.50	1	0.41	1	0.50	1	0.41	1	0.77	1	0.62	1	0.77	1
Global	0.79	31	0.67	30	0.78	27	0.63	26	0.75	31	0.60	31	0.75	27

Trucking	5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.				
	β_L	n	β_U	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018	0.99	12	0.87	12	1.05	11	0.81	12	0.72	12	0.81	8	0.67	8
United States of America														
Canada	1.32	1	0.91	1	1.32	1	1.13	1	0.81	1	1.13	1	0.81	1
Central and South America	0.96	1	0.78	1	0.96	1	0.91	1	0.72	1	0.91	1	0.72	1
European Union and other Western European countries	0.88	7	0.61	7	0.93	6	0.77	7	0.55	7	0.77	7	0.55	7
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	1.17	3	1.14	3	1.22	2	1.15	2	0.52	3	0.52	3	0.49	3
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East Asia	0.90	24	0.81	23	0.90	21	0.81	25	0.72	24	0.80	21	0.68	20
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global	0.95	48	0.82	47	0.97	42	0.82	41	0.79	49	0.68	48	0.79	41
0.65	40													
31/12/2018	1.57	1	1.19	1	1.57	1	1.01	1	0.78	1	1.01	1	0.78	1
United States of America														
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	0.76	1	0.73	1	0.76	1	1.22	1	1.17	1	1.22	1	1.17	1
European Union and other Western European countries	0.73	4	0.59	4	0.73	4	0.59	4	0.74	4	0.91	4	0.74	4
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East Asia	0.91	12	0.90	12	1.17	6	1.07	6	0.82	13	1.07	6	0.99	6
Oceania and Pacific	0.61	1	0.40	1	0.61	1	0.40	1	0.67	1	0.67	1	0.44	1
Global	0.88	19	0.82	19	0.99	13	0.86	13	0.82	20	1.00	13	0.87	13

Highways & Railtrucks															
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
United States of America															
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Canada															
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.78	2	0.72	2	0.88	1	0.70	1	0.71	2	0.66	2	0.94	1	0.76	1
European Union and other Western European countries															
0.97	4	0.61	4	0.97	4	0.61	4	0.83	4	0.63	3	0.83	4	0.63	3
Russia and other Eastern European countries															
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries															
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa															
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia															
0.72	1	0.53	1	0.72	1	0.53	1	0.56	1	0.39	1	0.56	1	0.39	1
0.85	18	0.68	18	0.82	16	0.62	16	0.68	18	0.59	17	0.67	16	0.55	15
Oceania and Pacific															
0.69	1	0.56	1	0.69	1	0.56	1	0.70	1	0.48	1	0.70	1	0.48	1
0.85	26	0.66	26	0.84	23	0.62	23	0.70	26	0.59	24	0.71	23	0.56	21
Global															
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
Maritime Ports & Services															
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
United States of America															
1.74	1	1.73	1	1.74	1	1.73	1	0.83	1	0.82	1	0.83	1	0.82	1
Canada															
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America															
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries															
0.25	1	-	-	0.25	1	-	-	1.10	1	0.96	1	1.10	1	0.96	1
Russia and other Eastern European countries															
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries															
0.95	1	0.63	1	0.95	1	0.63	1	0.68	1	0.46	1	0.68	1	0.46	1
Sub-Saharan Africa															
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia															
1.68	4	1.39	4	1.78	3	1.37	3	1.43	4	1.22	4	1.65	3	1.35	3
0.88	24	0.78	23	0.90	21	0.78	20	0.73	22	0.63	22	0.73	19	0.60	19
East Asia															
0.98	2	0.88	2	0.98	2	0.88	2	0.74	2	0.66	2	0.74	2	0.66	2
Oceania and Pacific															
0.99	33	0.89	31	1.01	29	0.88	27	0.84	31	0.72	31	0.85	27	0.70	27

Auto Parts & Equipment	5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.						
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018	1.34	18	1.16	18	1.42	15	1.19	15	0.99	18	0.86	18	1.04	15	0.88	15
United States of America																
Canada	1.31	3	1.01	3	1.31	3	1.01	3	0.92	3	0.71	3	0.92	3	0.71	3
Central and South America	0.35	1	0.41	1	-	-	-	-	0.43	2	0.47	2	0.36	1	0.35	1
European Union and other Western European countries	1.27	12	1.07	12	1.27	12	1.07	12	1.10	12	0.94	12	1.10	12	0.94	12
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	1.24	4	1.18	4	1.40	3	1.29	3	1.07	4	1.03	4	1.16	3	1.09	3
East Asia	1.08	153	1.05	152	1.14	86	0.94	86	0.92	150	0.92	146	0.96	89	0.80	86
Oceania and Pacific	1.20	2	1.14	2	1.42	1	1.30	1	1.03	2	0.99	2	1.02	1	0.93	1
Global	1.12	193	1.06	192	1.20	120	1.00	120	0.93	191	0.91	187	0.98	124	0.83	121
Tires & RuCadaaer	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018	0.97	2	0.73	2	0.97	2	0.73	2	0.95	2	0.77	2	0.95	2	0.77	2
United States of America																
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	1.09	2	1.02	2	1.07	1	0.86	1	0.64	2	0.56	2	0.92	1	0.74	1
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	1.03	4	1.02	4	1.08	3	0.99	3	1.13	4	1.12	4	1.29	2	1.13	2
East Asia	0.96	22	0.82	22	1.00	20	0.82	20	0.78	24	0.65	23	0.77	23	0.61	22
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global	0.98	30	0.85	30	1.01	26	0.83	26	0.83	32	0.71	31	0.82	28	0.66	27

Automobile Manufacturers															
31/12/2018															
5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.						
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
1.66	2	1.59	2	1.60	1	1.45	1	1.02	2	0.96	2	0.79	1	0.67	1
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.61	3	1.14	3	1.61	3	1.14	3	1.14	3	0.91	3	1.17	2	0.68	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.76	1	1.04	1	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.03	4	0.90	4	0.89	3	0.71	3	1.11	4	0.93	4	1.11	4	0.93	4
0.96	32	0.97	32	1.08	17	0.87	17	0.83	34	0.90	34	0.90	18	0.75	18
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.04	42	1.01	42	1.14	24	0.91	24	0.89	43	0.91	43	0.95	25	0.77	25
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
Motorcycle Manufacturers															
31/12/2018															
5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.						
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
1.26	1	0.87	1	1.26	1	0.87	1	1.36	1	0.86	1	1.36	1	0.86	1
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.92	1	0.61	1	0.92	1	0.61	1	0.83	1	0.56	1	0.83	1	0.56	1
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.95	2	1.00	2	-	-	-	-	0.82	2	0.88	2	-	-	-	-
1.07	6	1.03	6	1.07	3	0.89	3	0.87	4	0.88	4	0.92	1	0.76	1
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.05	10	0.96	10	1.08	5	0.83	5	0.92	8	0.84	8	1.04	3	0.73	3

Consumer Electronics		β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n		
31/12/2018		5Y net liq. incl.						5Y net liq. excl.						2Y net liq. incl.						2Y net liq. excl.							
United States of America		1.45	1	1.38	1	1.45	1	1.38	1	0.99	1	0.99	1	0.99	1	0.99	1	0.99	1	0.93	1	0.99	1	0.93	1	0.93	1
Canada		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries		1.32	2	0.35	1	-	-	-	-	1.16	2	1.34	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Russia and other Eastern European countries		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East Asia		1.19	29	1.17	14	1.24	14	0.97	14	1.15	14	1.15	29	1.15	27	1.15	14	0.90	14	-	-	-	-	-	-	-	-
Oceania and Pacific		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global		1.21	32	1.15	29	1.25	15	0.99	15	1.14	15	1.14	32	1.15	30	1.14	15	0.91	15	-	-	-	-	-	-	-	
Home Furnishings		β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n		
31/12/2018		5Y net liq. incl.						5Y net liq. excl.						2Y net liq. incl.						2Y net liq. excl.							
United States of America		1.04	8	0.98	8	1.30	4	1.12	4	0.84	8	0.79	8	1.03	4	0.86	4	-	-	-	-	-	-	-	-	-	
Canada		0.47	1	0.33	1	0.47	1	0.33	1	0.94	1	0.65	1	0.94	1	0.65	1	-	-	-	-	-	-	-	-	-	
Central and South America		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
European Union and other Western European countries		1.05	2	1.05	2	0.94	1	0.88	1	0.80	2	0.79	2	0.77	1	0.72	1	-	-	-	-	-	-	-	-	-	
Russia and other Eastern European countries		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Southern and Eastern Mediterranean and Gulf countries		1.23	2	1.22	1	1.12	1	1.02	1	0.82	2	0.84	2	0.62	1	0.60	1	-	-	-	-	-	-	-	-	-	
Sub-Saharan Africa		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Central and South Asia		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
East Asia		0.84	10	0.85	10	0.88	6	0.81	6	0.66	10	0.68	10	0.61	5	0.55	5	-	-	-	-	-	-	-	-	-	
Oceania and Pacific		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Global		0.94	23	0.92	23	1.00	13	0.89	13	0.76	23	0.74	23	0.79	12	0.68	12	-	-	-	-	-	-	-	-	-	

Homebuilding	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018	1.23	12	0.90	12	1.20	11	0.84	11	0.67	13	0.55	12	0.65	12	0.51	11
United States of America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Canada	1.05	6	0.82	6	1.05	5	0.76	5	0.99	7	0.84	7	1.00	5	0.76	5
Central and South America	0.75	10	0.74	10	0.79	5	0.72	5	0.92	10	0.92	10	0.99	5	0.89	5
European Union and other Western European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East Asia	0.77	19	0.71	18	0.78	14	0.62	14	0.84	19	0.76	18	0.88	14	0.68	14
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global	0.92	47	0.78	46	0.95	35	0.73	35	0.83	49	0.75	47	0.83	36	0.67	35
Household Appliances	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018	1.27	3	1.21	3	1.07	2	0.86	2	1.19	3	1.15	3	0.84	2	0.72	2
United States of America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	0.92	5	0.80	5	0.94	4	0.78	4	0.89	5	0.79	5	0.96	4	0.82	4
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	1.25	1	1.10	1	1.25	1	1.10	1	1.50	1	1.33	1	1.50	1	1.33	1
East Asia	0.94	39	1.05	38	1.17	11	1.04	11	0.93	36	1.05	36	0.96	12	0.83	12
Oceania and Pacific	1.23	1	1.26	1	-	-	-	-	1.14	1	1.17	1	-	-	-	-
Global	0.97	49	1.04	48	1.11	18	0.97	18	0.96	46	1.04	46	0.98	19	0.84	19

Housewares & Specialties		5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.					
31/12/2018	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
United States of America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	0.79	1	0.70	1	0.79	1	0.70	1	0.62	1	0.53	1	0.62	1	0.53	1
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East Asia	0.91	7	0.91	7	1.18	4	1.16	4	1.06	7	1.06	7	1.04	4	0.98	4
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global	0.89	8	0.88	8	1.10	5	1.07	5	1.01	8	0.99	8	0.95	5	0.89	5
Leisure Products	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018	5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.						
United States of America	1.03	8	1.02	8	1.00	6	0.94	6	0.78	10	0.75	10	0.84	7	0.76	7
Canada	1.69	1	1.43	1	1.69	1	1.43	1	0.94	1	0.81	1	0.94	1	0.81	1
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	0.74	2	0.61	2	0.74	2	0.61	2	0.44	1	0.39	1	0.44	1	0.39	1
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East Asia	0.93	38	1.04	36	0.87	17	0.78	16	0.81	38	0.87	37	0.85	19	0.68	19
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global	0.96	49	1.03	47	0.92	26	0.83	25	0.80	50	0.84	49	0.84	28	0.70	28

Apparel, Accessories & Luxury Goods															
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.
0.61	11	0.63	10	0.69	6	0.69	5	0.84	15	0.81	15	0.93	10	0.83	10
0.43	2	0.43	2	0.39	1	0.36	1	0.93	2	0.93	2	0.78	1	0.72	1
1.04	1	1.09	1	-	-	-	-	0.92	1	0.96	1	-	-	-	-
0.92	16	0.89	16	1.06	8	0.95	8	0.83	16	0.82	16	0.91	8	0.84	8
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.69	3	0.66	3	0.52	2	0.44	2	0.63	3	0.58	3	0.68	2	0.58	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.01	3	1.07	3	0.87	1	0.87	1	1.29	2	1.30	2	-	-	-	-
0.85	62	0.92	60	0.92	27	0.80	26	0.79	56	0.83	55	0.80	25	0.65	25
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.82	98	0.87	95	0.88	45	0.79	43	0.82	95	0.83	94	0.84	46	0.72	46
β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
0.58	8	0.61	8	0.73	2	0.62	2	0.67	7	0.70	7	0.90	1	0.77	1
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.67	4	0.72	3	0.45	1	0.43	1	0.80	3	0.84	3	1.01	1	0.99	1
0.93	2	0.88	2	0.93	2	0.88	2	0.66	2	0.61	2	0.66	2	0.61	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.14	1	1.19	1	-	-	-	-	1.28	1	1.35	1	-	-	-	-
0.90	7	0.94	7	0.96	5	0.90	5	0.68	9	0.78	9	0.67	5	0.60	5
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.76	22	0.79	21	0.86	10	0.79	10	0.72	22	0.77	22	0.73	9	0.66	9

Textiles	5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.						
	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.
31/12/2018																
United States of America	0.71	2	0.65	2	1.12	1	0.98	1	0.62	2	0.59	2	0.81	1	0.71	1
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	0.72	3	0.62	3	0.72	3	0.62	3	0.97	3	0.86	3	0.97	3	0.86	3
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	0.53	2	0.47	1	0.53	2	0.47	1	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	1.40	4	0.87	4	1.40	4	0.87	4	1.10	2	0.87	2	1.10	2	0.87	2
East Asia	1.00	65	0.95	63	1.04	44	0.92	43	0.82	65	0.80	64	0.87	41	0.75	40
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global	0.99	76	0.92	73	1.03	54	0.89	52	0.83	72	0.80	71	0.88	47	0.76	46
Casinos & Gaming																
31/12/2018																
United States of America	1.33	6	0.94	6	1.33	6	0.94	6	1.15	6	0.83	6	1.15	6	0.83	6
Canada	1.19	1	1.09	1	1.19	1	1.09	1	1.01	2	0.77	2	1.01	2	0.77	2
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	0.87	7	0.91	7	0.81	3	0.72	3	0.80	9	0.89	9	0.82	5	0.72	5
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	0.36	2	0.31	1	0.36	2	0.31	1	0.77	1	0.54	1	0.77	1	0.54	1
Central and South Asia	2.00	1	1.99	1	2.00	1	1.99	1	1.76	1	1.82	1	-	-	-	-
East Asia	1.09	19	1.16	18	1.27	8	1.10	8	0.96	21	0.95	21	1.04	11	0.87	11
Oceania and Pacific	1.22	3	1.10	3	1.22	3	1.10	3	1.00	3	0.93	3	1.00	3	0.93	3
Global	1.09	39	1.07	37	1.17	24	1.01	23	0.97	43	0.92	43	1.01	28	0.82	28

Hotels, Resorts & Cruise Lines															
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
1.19	11	0.93	11	1.19	11	0.93	11	1.10	11	0.84	11	1.10	11	0.84	11
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.67	2	0.61	2	0.67	2	0.61	2	0.66	2	0.57	2	0.66	2	0.57	2
0.93	6	0.82	6	0.93	6	0.82	6	0.74	6	0.66	6	0.74	6	0.66	6
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.13	3	1.13	3	1.09	1	1.01	1	0.88	3	0.84	3	0.90	2	0.80	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.31	2	1.11	2	1.31	2	1.11	2	1.04	2	0.89	2	1.04	2	0.89	2
0.94	35	0.94	34	0.95	21	0.82	20	0.90	34	0.90	33	0.96	20	0.83	19
1.17	2	1.22	2	-	-	-	-	0.67	2	0.71	2	-	-	-	-
1.01	61	0.94	60	1.02	43	0.86	42	0.91	60	0.84	59	0.95	43	0.80	42
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
0.98	8	0.72	8	0.98	8	0.72	8	0.81	8	0.67	8	0.79	7	0.64	7
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.63	3	0.64	2	0.63	3	0.64	2	0.89	3	0.69	3	0.89	3	0.69	3
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.58	18	0.55	17	0.55	15	0.49	14	0.69	16	0.65	15	0.74	12	0.68	11
0.82	1	0.69	1	0.82	1	0.69	1	0.94	1	0.82	1	0.94	1	0.82	1
0.70	30	0.61	28	0.70	27	0.59	25	0.75	28	0.67	27	0.79	23	0.67	22

Restaurants	5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.						
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018																
<i>United States of America</i>	0.55	19	0.49	18	0.53	17	0.45	16	0.63	26	0.54	24	0.61	22	0.50	20
<i>Canada</i>	0.71	6	0.65	6	0.74	5	0.68	5	0.59	5	0.54	5	0.59	5	0.54	5
<i>Central and South America</i>	0.81	1	0.68	1	0.81	1	0.68	1	0.85	1	0.70	1	0.85	1	0.70	1
<i>European Union and other Western European countries</i>	0.88	10	0.77	10	0.91	9	0.78	9	0.68	9	0.62	8	0.68	9	0.62	8
<i>Russia and other Eastern European countries</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Southern and Eastern Mediterranean and Gulf countries</i>	0.74	2	0.71	2	0.84	1	0.78	1	0.51	2	0.49	2	0.51	2	0.49	2
<i>Sub-Saharan Africa</i>	-	-	-	-	-	-	-	-	0.36	1	0.33	1	0.36	1	0.33	1
<i>Central and South Asia</i>	1.81	1	1.83	1	-	-	-	-	0.92	1	0.94	1	-	-	-	-
<i>East Asia</i>	0.56	38	0.58	37	0.55	20	0.51	19	0.53	46	0.56	46	0.52	21	0.48	21
<i>Oceania and Pacific</i>	1.30	1	1.25	1	1.30	1	1.25	1	0.43	2	0.38	2	0.43	2	0.38	2
<i>Global</i>	0.64	78	0.62	76	0.64	54	0.58	52	0.58	93	0.56	90	0.58	63	0.51	60
Distributors	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018																
<i>United States of America</i>	0.73	5	0.64	5	0.73	5	0.64	5	0.69	5	0.59	5	0.69	5	0.59	5
<i>Canada</i>	0.70	1	0.56	1	0.70	1	0.56	1	1.06	1	0.77	1	1.06	1	0.77	1
<i>Central and South America</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>European Union and other Western European countries</i>	0.75	3	0.63	3	0.75	3	0.63	3	0.91	2	0.84	2	1.20	1	0.91	1
<i>Russia and other Eastern European countries</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Southern and Eastern Mediterranean and Gulf countries</i>	1.26	1	0.88	1	1.26	1	0.88	1	0.68	1	0.36	1	0.68	1	0.36	1
<i>Sub-Saharan Africa</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Central and South Asia</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>East Asia</i>	0.79	32	0.82	29	0.83	15	0.75	13	0.67	30	0.68	28	0.64	14	0.51	13
<i>Oceania and Pacific</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Global</i>	0.79	42	0.78	39	0.81	25	0.71	23	0.69	39	0.67	37	0.69	22	0.55	21

Internet & Direct Marketing Retail																
31/12/2018																
	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
United States of America	0.99	11	1.09	11	0.99	6	0.95	6	0.97	10	1.02	10	1.08	4	1.02	4
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	0.28	1	0.29	1	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	1.20	6	1.14	6	1.07	3	0.92	3	1.24	6	1.16	6	1.12	4	1.00	4
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	1.57	1	1.57	1	1.57	1	1.57	1	1.88	1	1.93	1	-	-	-	-
Central and South Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East Asia	0.88	21	1.00	21	0.85	9	0.78	9	0.88	20	0.96	20	0.92	7	0.82	7
Oceania and Pacific	1.70	1	1.85	1	-	-	-	-	1.17	1	1.25	1	-	-	-	-
Global	0.98	41	1.06	41	0.97	19	0.90	19	0.99	38	1.04	38	1.02	15	0.92	15
Department Stores	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018																
	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
United States of America	0.73	4	0.59	4	0.73	4	0.59	4	1.06	4	0.82	4	1.06	4	0.82	4
Canada	1.22	1	0.61	1	1.22	1	0.61	1	1.36	1	0.43	1	1.36	1	0.43	1
Central and South America	0.79	2	0.75	2	0.79	2	0.75	2	0.94	2	0.89	2	0.94	2	0.89	2
European Union and other Western European countries	1.03	2	0.89	2	1.03	2	0.89	2	0.50	2	0.42	2	0.50	2	0.42	2
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	0.75	1	0.66	1	0.75	1	0.66	1	0.56	1	0.47	1	0.56	1	0.47	1
Central and South Asia	0.80	1	0.77	1	0.80	1	0.77	1	0.56	2	0.81	1	0.34	1	-	-
East Asia	0.98	44	1.00	43	1.02	25	0.86	25	0.75	47	0.80	47	0.83	25	0.69	25
Oceania and Pacific	1.79	1	1.50	1	1.79	1	1.50	1	1.20	1	1.08	1	1.20	1	1.08	1
Global	0.97	56	0.95	55	0.99	37	0.83	37	0.78	60	0.79	59	0.85	37	0.70	36

General Merchandise Stores															
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
0.91	4	0.85	4	0.91	4	0.85	4	0.77	5	0.76	4	0.77	5	0.76	4
0.62	2	0.52	2	0.62	2	0.52	2	0.93	2	0.77	2	0.93	2	0.77	2
0.77	1	0.67	1	0.77	1	0.67	1	1.33	1	1.15	1	1.33	1	1.15	1
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.80	14	0.81	14	0.76	7	0.62	7	0.68	16	0.71	16	0.55	5	0.43	5
0.80	2	0.73	2	0.80	2	0.73	2	1.16	2	1.06	2	1.16	2	1.06	2
0.80	23	0.78	23	0.78	16	0.68	16	0.78	26	0.77	25	0.81	15	0.72	14
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
0.79	23	0.82	23	1.06	6	0.85	6	0.79	21	0.83	20	0.90	6	0.72	5
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.10	7	1.12	7	1.23	3	1.02	3	0.78	7	0.85	7	0.84	4	0.72	4
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.15	1	0.95	1	1.15	1	0.95	1	0.91	1	0.65	1	0.91	1	0.65	1
0.54	3	0.52	3	0.51	2	0.47	2	0.79	3	0.75	3	0.81	2	0.73	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.63	16	0.68	16	0.67	9	0.59	9	0.66	18	0.75	18	0.67	9	0.60	9
1.04	2	1.05	2	0.85	1	0.81	1	1.15	2	1.10	2	1.15	2	1.10	2
0.79	52	0.81	52	0.87	22	0.74	22	0.76	52	0.81	51	0.82	24	0.70	23

Computer & Electronics Retail															
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
1.24	3	1.05	3	1.41	2	1.08	2	0.97	4	0.87	4	0.88	3	0.71	3
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.00	2	0.90	2	1.00	2	0.90	2	1.06	2	0.88	2	1.06	2	0.88	2
0.59	1	0.65	1	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.81	14	0.74	13	0.72	11	0.58	10	0.74	13	0.66	13	0.78	8	0.60	8
0.32	1	0.29	1	0.32	1	0.29	1	0.80	1	0.70	1	0.80	1	0.70	1
0.86	21	0.77	20	0.82	16	0.67	15	0.82	20	0.73	20	0.84	14	0.67	14
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
1.32	4	1.25	4	1.32	4	1.25	4	1.06	3	0.96	3	1.06	3	0.96	3
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.66	3	0.62	3	0.87	1	0.72	1	0.79	3	0.70	3	1.13	1	0.86	1
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.80	6	0.95	5	0.73	4	0.73	3	0.80	7	0.83	6	0.84	5	0.78	4
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.93	13	0.97	12	1.01	9	0.98	8	0.86	13	0.83	12	0.94	9	0.86	8

Specialty Stores		5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.					
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	
31/12/2018																
United States of America	1.03	12	0.90	12	1.15	10	0.99	10	0.95	12	0.74	12	1.00	10	0.74	10
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	0.61	1	0.55	1	0.61	1	0.55	1	0.66	1	0.54	1	0.66	1	0.54	1
European Union and other Western European countries	0.61	5	0.52	5	0.61	5	0.52	5	0.96	5	0.80	5	0.96	5	0.80	5
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	0.74	1	0.73	1	0.74	1	0.73	1	0.52	1	0.51	1	0.52	1	0.51	1
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	1.20	1	1.13	1	1.20	1	1.13	1	-	-	-	-	-	-	-	-
East Asia	0.82	15	0.80	15	0.88	9	0.80	9	0.73	18	0.76	17	0.71	10	0.69	9
Oceania and Pacific	1.45	1	1.23	1	1.45	1	1.23	1	1.15	1	0.96	1	1.15	1	0.96	1
Global	0.88	36	0.80	36	0.95	28	0.83	28	0.83	38	0.75	37	0.86	28	0.73	27
Automotive Retail																
31/12/2018																
United States of America	1.02	12	0.70	12	1.02	12	0.70	12	0.74	12	0.49	12	0.74	12	0.49	12
Canada	-	-	-	-	-	-	-	-	0.75	1	0.32	1	0.75	1	0.32	1
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	0.77	3	0.58	3	0.77	3	0.58	3	0.92	4	0.65	4	0.92	4	0.65	4
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	0.97	2	0.76	2	0.97	2	0.76	2	0.70	2	0.49	2	0.70	2	0.49	2
Sub-Saharan Africa	0.41	1	0.36	1	0.41	1	0.36	1	0.54	1	0.46	1	0.54	1	0.46	1
Central and South Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East Asia	0.87	20	0.79	20	0.97	11	0.75	11	0.96	20	0.79	20	0.98	13	0.71	13
Oceania and Pacific	1.24	1	0.76	1	1.24	1	0.76	1	1.14	1	0.62	1	1.14	1	0.62	1
Global	0.91	39	0.73	39	0.96	30	0.70	30	0.87	41	0.65	41	0.86	34	0.59	34

Homefurnishing Retail													
31/12/2018													
5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.				
β_L	n	β_U	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
0.81	7	0.80	7	0.94	4	0.88	4	0.88	7	0.89	7	0.86	4
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.66	1	0.63	1	0.66	1	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.56	1	0.57	1	-	-	0.61	1	0.62	1	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.77	9	0.75	9	0.88	5	0.84	5	0.85	8	0.85	8	0.86	4
-	-	-	-	-	-	-	-	-	-	-	-	-	-
β_L	n	β_U	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018													
5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.				
1.29	2	0.91	2	1.29	2	1.30	2	1.16	2	1.30	2	1.16	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.35	1	0.34	1	0.35	1	0.44	1	0.43	1	0.44	1	0.43	1
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.60	1	0.60	1	-	-	0.79	1	0.80	1	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.74	14	0.73	14	0.78	7	0.79	14	0.79	14	0.84	6	0.74	6
-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.77	18	0.72	18	0.84	10	0.82	18	0.81	18	0.89	9	0.80	9

Food Distributors		5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.					
	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.
31/12/2018																
United States of America	0.98	5	0.78	5	0.98	5	0.78	5	0.88	5	0.78	4	0.88	5	0.78	4
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	0.61	2	0.53	2	0.61	2	0.53	2	0.44	2	0.56	1	0.44	2	0.56	1
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	0.78	1	0.69	1	0.78	1	0.69	1	0.79	1	0.70	1	0.79	1	0.70	1
Central and South Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East Asia	0.59	15	0.62	15	0.58	7	0.47	7	0.60	15	0.63	15	0.63	8	0.50	8
Oceania and Pacific	1.25	1	1.02	1	1.25	1	1.02	1	1.10	1	1.01	1	1.10	1	1.01	1
Global	0.71	24	0.67	24	0.76	16	0.62	16	0.67	24	0.68	22	0.72	17	0.62	15
Food Retail	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.
31/12/2018																
United States of America	0.55	5	0.51	4	0.55	5	0.51	4	0.45	5	0.45	3	0.47	4	0.50	2
Canada	0.74	3	0.60	3	0.74	3	0.60	3	0.67	7	0.58	7	0.67	7	0.58	7
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	0.91	12	0.72	12	0.94	11	0.73	11	0.68	15	0.58	14	0.70	14	0.60	13
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	0.37	1	0.32	1	0.37	1	0.32	1
Southern and Eastern Mediterranean and Gulf countries	0.56	2	0.46	2	0.63	1	0.40	1	0.67	2	0.64	2	0.58	1	0.43	1
Sub-Saharan Africa	0.61	2	0.58	2	0.61	2	0.58	2	0.57	2	0.55	2	0.57	2	0.55	2
Central and South Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East Asia	0.65	36	0.62	36	0.71	23	0.62	23	0.65	33	0.66	30	0.67	23	0.65	20
Oceania and Pacific	0.80	1	0.74	1	0.80	1	0.74	1	0.75	1	0.71	1	0.75	1	0.71	1
Global	0.69	61	0.63	60	0.74	46	0.63	45	0.64	66	0.61	60	0.65	53	0.60	47

Hypermartets & Super Centers															
31/12/2018															
5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.						
β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.
0.57	3	0.55	3	0.57	3	0.55	3	0.63	3	0.60	3	0.63	3	0.60	3
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.92	2	0.92	2	0.88	1	0.86	1	0.75	2	0.73	2	0.86	1	0.81	1
1.10	2	0.88	2	1.10	2	0.88	2	0.94	2	0.82	2	0.94	2	0.82	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.58	1	0.55	1	0.58	1	0.55	1	0.93	1	0.92	1	0.93	1	0.92	1
0.90	1	0.81	1	0.90	1	0.81	1	0.97	1	0.86	1	0.97	1	0.86	1
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.80	7	0.87	7	0.70	3	0.48	3	0.74	7	0.73	7	0.90	3	0.62	3
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.80	16	0.79	16	0.76	11	0.65	11	0.77	16	0.74	16	0.84	11	0.72	11
β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.
31/12/2018															
5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.						
0.47	3	0.48	2	0.46	2	0.47	1	0.84	3	0.67	3	0.87	2	0.61	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	0.58	1	0.59	1	-	-	-	-
0.82	5	0.66	5	0.82	5	0.66	5	0.76	5	0.61	5	0.76	5	0.61	5
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.82	10	0.89	10	0.80	4	0.71	4	0.86	10	1.05	10	0.67	3	0.52	3
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.76	18	0.78	17	0.75	11	0.66	10	0.82	19	0.85	19	0.75	10	0.59	10

Distillers & Vintners		β_L		β_U		n		β_L		β_U		n		β_L		β_U		n		β_L		β_U		n	
31/12/2018		5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.											
		β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
United States of America		0.65	4	0.60	4	0.65	4	0.60	4	0.77	3	0.68	3	0.77	3	0.68	3	0.77	3	0.68	3	0.77	3	0.68	3
Canada		0.78	1	0.88	1	-	-	-	-	0.68	1	0.75	1	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries		0.71	5	0.62	5	0.71	5	0.62	5	0.60	6	0.53	6	0.60	6	0.53	6	0.60	6	0.53	6	0.60	6	0.53	6
Russia and other Eastern European countries		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia		1.02	2	0.88	2	1.02	2	0.88	2	1.92	2	1.74	2	1.92	2	1.74	2	1.92	2	1.74	2	1.92	2	1.74	2
East Asia		0.87	29	0.96	28	0.63	5	0.65	4	0.82	28	0.88	28	0.69	6	0.63	6	0.69	6	0.63	6	0.69	6	0.63	6
Oceania and Pacific		0.89	1	0.85	1	0.89	1	0.85	1	1.17	1	1.12	1	1.17	1	1.12	1	1.17	1	1.12	1	1.17	1	1.12	1
Global		0.83	42	0.88	41	0.72	17	0.67	16	0.84	41	0.86	41	0.84	18	0.76	18	0.84	18	0.76	18	0.84	18	0.76	18
Soft drinks		β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018		5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.											
United States of America		0.81	4	0.81	4	0.51	2	0.46	2	0.62	2	0.56	5	0.59	3	0.48	3	0.62	2	0.56	5	0.59	3	0.48	3
Canada		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America		0.89	3	0.84	3	0.89	3	0.84	3	0.62	3	0.59	3	0.62	3	0.59	3	0.62	3	0.59	3	0.62	3	0.59	3
European Union and other Western European countries		0.44	2	0.37	2	0.44	2	0.37	2	0.86	2	0.73	2	0.86	2	0.73	2	0.86	2	0.73	2	0.86	2	0.73	2
Russia and other Eastern European countries		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East Asia		0.49	5	0.47	5	0.49	4	0.42	4	0.51	4	0.51	4	0.58	3	0.55	3	0.58	3	0.55	3	0.58	3	0.55	3
Oceania and Pacific		0.82	1	0.71	1	0.82	1	0.71	1	0.92	1	0.80	1	0.92	1	0.80	1	0.92	1	0.80	1	0.92	1	0.80	1
Global		0.67	15	0.63	15	0.61	12	0.55	12	0.64	15	0.59	15	0.67	12	0.59	12	0.67	12	0.59	12	0.67	12	0.59	12

Agricultural Products														
31/12/2018														
5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.					
β_L	n.	β_U	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	
	0.84	6	0.64	6	0.84	6	0.64	6	0.75	5	0.58	5	0.58	
United States of America	-	-	-	-	-	-	-	-	-	-	-	-	-	
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	
Central and South America	0.51	2	0.42	2	0.51	2	0.42	2	0.39	1	0.32	1	0.32	
European Union and other Western European countries	-	-	-	-	-	-	-	-	0.73	2	0.55	2	0.55	
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	
Southern and Eastern Mediterranean and Gulf countries	1.13	5	1.09	5	1.15	2	0.90	2	0.68	5	0.67	5	0.57	
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	
Central and South Asia	0.66	5	0.67	5	0.44	3	0.40	3	0.95	3	1.07	3	0.58	
East Asia	0.89	37	0.83	36	0.90	25	0.79	24	0.77	32	0.69	32	0.84	
Oceania and Pacific	1.03	2	0.86	2	1.03	2	0.86	2	0.78	2	0.64	2	0.78	
Global	0.87	57	0.81	56	0.86	40	0.72	39	0.76	50	0.69	50	0.78	
Packaged Foods & Meats	β_L	n.	β_U	n.	β_U	n.	β_U	n.	β_L	n.	β_U	n.	β_U	n.
31/12/2018														
5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.					
β_L	n.	β_U	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	
	0.49	23	0.44	20	0.52	19	0.46	16	0.55	25	0.46	23	0.57	
United States of America	0.76	7	0.60	7	0.76	7	0.60	7	0.56	7	0.44	6	0.56	
Canada	0.54	7	0.55	5	0.54	7	0.55	5	0.71	7	0.52	7	0.71	
Central and South America	0.76	22	0.66	21	0.78	21	0.67	20	0.65	25	0.60	22	0.64	
European Union and other Western European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	
Russia and other Eastern European countries	0.65	6	0.56	6	0.69	5	0.59	5	0.82	5	0.68	5	0.92	
Southern and Eastern Mediterranean and Gulf countries	0.73	5	0.68	5	0.73	5	0.68	5	0.59	5	0.55	5	0.61	
Sub-Saharan Africa	1.01	6	0.87	6	1.10	5	0.93	5	1.18	7	1.06	7	1.26	
Central and South Asia	0.75	169	0.72	163	0.79	111	0.69	105	0.72	167	0.70	163	0.74	
East Asia	0.83	3	0.74	3	0.83	3	0.74	3	1.03	3	0.92	3	1.03	
Oceania and Pacific	0.73	248	0.69	236	0.75	183	0.66	171	0.71	251	0.67	241	0.72	
Global														

Tobacco	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018	0.75	4	0.65	4	0.75	4	0.65	4	0.72	4	0.75	3	0.72	4	0.75	3
United States of America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	1.02	3	0.81	3	1.02	3	0.81	3	0.79	3	0.62	3	0.79	3	0.62	3
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	0.70	1	0.72	1	-	-	-	-	0.79	2	0.77	2	0.81	1	0.73	1
East Asia	0.50	2	0.50	2	0.64	1	0.60	1	0.59	3	0.59	3	0.73	2	0.69	2
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global	0.77	10	0.68	10	0.84	8	0.71	8	0.72	12	0.67	11	0.75	10	0.69	9
Household Products	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
United States of America	0.56	6	0.57	5	0.56	6	0.57	5	0.66	8	0.60	8	0.66	8	0.60	8
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	0.64	1	0.59	1	0.64	1	0.59	1	0.70	1	0.62	1	0.70	1	0.62	1
European Union and other Western European countries	0.99	3	0.91	3	0.99	3	0.91	3	0.84	3	0.75	3	0.84	3	0.75	3
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	-	-	-	-	-	-	-	-	0.38	1	0.38	1	0.38	1	0.38	1
East Asia	0.95	12	0.81	12	1.09	8	0.83	8	0.85	12	0.85	11	0.82	8	0.75	7
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global	0.84	22	0.76	21	0.87	18	0.76	17	0.76	25	0.72	24	0.74	21	0.67	20

Personal Products	31/12/2018				5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
United States of America	0.62	7	0.63	7	0.61	4	0.57	4	0.71	7	0.71	7	0.78	4	0.72	4	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	0.74	1	0.62	1	0.74	1	0.62	1	0.94	1	0.71	1	0.94	1	0.71	1	-	-	-	-
European Union and other Western European countries	0.82	5	0.82	5	0.86	3	0.79	3	0.83	5	0.83	5	0.78	2	0.68	2	-	-	-	-
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	0.87	2	0.85	2	0.87	2	0.85	2	0.73	2	0.71	2	0.73	2	0.71	2	-	-	-	-
East Asia	0.92	36	0.97	36	1.20	13	1.11	13	0.95	38	1.03	38	0.97	12	0.86	12	-	-	-	-
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global	0.86	51	0.90	51	1.01	23	0.93	23	0.90	53	0.95	53	0.89	21	0.80	21	-	-	-	-
Health Care Equipment	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.							
United States of America	0.94	29	0.90	29	0.93	19	0.81	19	1.05	29	0.99	29	1.04	19	0.90	19	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	0.95	16	0.90	16	0.85	10	0.75	10	1.09	17	1.03	17	1.09	14	1.01	14	-	-	-	-
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	0.82	1	0.89	1	-	-	-	-	0.60	1	0.65	1	-	-	-	-	-	-	-	-
East Asia	1.06	36	1.11	36	0.94	14	0.85	14	0.98	38	0.98	37	0.94	16	0.83	16	-	-	-	-
Oceania and Pacific	1.31	2	1.29	2	1.31	2	1.29	2	1.40	2	1.39	2	1.40	2	1.39	2	-	-	-	-
Global	1.00	84	1.00	84	0.93	45	0.83	45	1.03	87	1.00	86	1.04	51	0.93	51	-	-	-	-

Health Care Supplies															
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
0.96	13	0.98	13	0.90	6	0.83	6	0.92	15	0.93	15	0.84	7	0.77	7
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	0.73	1	0.64	1	0.73	1	0.64	1
0.90	3	0.87	3	0.94	2	0.85	2	0.85	3	0.85	3	0.77	2	0.71	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.76	25	0.88	25	0.52	6	0.44	6	0.85	26	0.94	25	0.75	8	0.63	8
1.35	2	1.36	2	1.03	1	0.92	1	1.30	2	1.32	2	1.11	1	1.03	1
0.86	43	0.93	43	0.76	15	0.68	15	0.89	47	0.94	46	0.80	19	0.71	19
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
1.13	5	0.95	5	1.13	5	0.95	5	1.04	5	0.78	5	1.04	5	0.78	5
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.94	3	0.73	3	0.94	3	0.73	3	0.66	4	0.54	4	0.66	4	0.54	4
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.93	1	0.75	1	0.93	1	0.75	1	0.52	1	0.37	1	0.52	1	0.37	1
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.81	28	0.86	27	0.80	13	0.73	12	0.76	27	0.80	27	0.70	12	0.59	12
1.14	3	1.04	3	1.14	3	1.04	3	1.01	3	0.91	3	1.01	3	0.91	3
0.89	40	0.87	39	0.93	25	0.82	24	0.80	40	0.77	40	0.79	25	0.65	25

Managed Health Care															
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
0.99	7	1.03	7	0.87	5	0.79	5	0.93	8	0.91	8	0.99	5	0.88	5
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.82	1	0.81	1	0.82	1	0.81	1	0.83	2	0.82	2	0.83	2	0.82	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.97	8	1.00	8	0.86	6	0.79	6	0.91	10	0.89	10	0.95	7	0.86	7
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
1.08	7	1.12	7	1.12	2	1.09	2	1.01	9	1.01	9	0.95	4	0.87	4
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.20	4	1.21	4	0.55	2	0.55	2	0.97	4	0.98	4	0.91	2	0.89	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.06	9	1.20	9	-	-	-	-	1.03	9	1.18	9	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.10	20	1.17	20	0.84	4	0.82	4	1.01	22	1.08	22	0.93	6	0.88	6
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Biotechnology	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018																
United States of America	1.25	28	1.24	26	1.14	10	1.09	10	1.09	28	1.18	27	1.18	7	1.07	7
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	1.13	15	1.17	14	0.95	4	0.83	4	1.10	15	1.31	13	0.83	4	0.89	3
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	0.51	1	0.63	1	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	0.42	1	0.42	1	0.42	1	0.42	1	1.00	1	0.99	1	1.00	1	0.99	1
East Asia	1.01	34	1.03	34	0.94	11	0.89	11	0.93	36	0.98	35	0.86	13	0.87	12
Oceania and Pacific	0.99	1	0.94	1	0.99	1	0.94	1	1.24	1	1.17	1	1.24	1	1.17	1
Global	1.11	79	1.12	76	1.00	27	0.94	27	1.01	82	1.10	78	0.96	26	0.95	24
Pharmaceuticals	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018																
United States of America	1.35	19	1.21	18	1.25	14	1.08	14	1.13	19	1.09	19	1.08	14	0.95	14
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	0.42	2	0.39	2	0.42	2	0.39	2	0.51	2	0.49	2	0.51	1	0.45	1
European Union and other Western European countries	0.89	24	0.84	24	0.88	17	0.80	17	0.95	26	0.92	25	0.90	18	0.83	17
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	0.85	3	0.72	3	1.13	2	0.89	2	1.46	2	0.98	2	2.38	1	1.18	1
Sub-Saharan Africa	0.83	2	0.72	2	0.83	2	0.72	2	0.74	2	0.61	2	1.10	1	0.85	1
Central and South Asia	1.10	15	1.09	15	1.06	9	0.96	9	1.21	18	1.20	18	1.20	10	1.05	10
East Asia	0.96	203	0.97	203	1.00	92	0.91	92	0.86	210	0.89	209	0.85	93	0.77	92
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global	0.98	268	0.97	267	1.00	138	0.90	138	0.91	279	0.92	277	0.91	138	0.82	136

Life Sciences Tools & Services																
31/12/2018																
	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
United States of America	1.03	14	0.98	14	1.00	9	0.89	9	1.16	15	1.10	15	1.11	10	0.99	10
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	0.78	9	0.73	9	0.78	7	0.70	7	1.17	8	1.12	8	1.26	6	1.17	6
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	-	-	-	-	-	-	-	-	1.35	1	1.44	1	-	-	-	-
East Asia	1.05	6	1.11	6	1.25	2	1.23	2	1.31	6	1.41	6	1.32	2	1.28	2
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global	0.95	29	0.93	29	0.94	18	0.86	18	1.20	30	1.18	30	1.18	18	1.08	18
Diversified Banks	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018																
	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
United States of America	1.31	5	-	-	1.31	5	-	-	1.32	5	-	-	1.32	5	-	-
Canada	1.08	6	-	-	1.08	6	-	-	0.96	6	-	-	0.96	6	-	-
Central and South America	1.31	10	-	-	1.31	10	-	-	1.21	10	-	-	1.21	10	-	-
European Union and other Western European countries	1.14	45	-	-	1.14	45	-	-	1.10	48	-	-	1.10	48	-	-
Russia and other Eastern European countries	1.02	1	-	-	1.02	1	-	-	1.14	1	-	-	1.14	1	-	-
Southern and Eastern Mediterranean and Gulf countries	0.73	10	-	-	0.73	10	-	-	0.73	9	-	-	0.73	9	-	-
Sub-Saharan Africa	0.68	4	-	-	0.68	4	-	-	0.90	4	-	-	0.90	4	-	-
Central and South Asia	1.47	22	-	-	1.47	22	-	-	1.53	22	-	-	1.53	22	-	-
East Asia	0.87	63	-	-	0.87	63	-	-	0.82	63	-	-	0.82	63	-	-
Oceania and Pacific	1.20	5	-	-	1.20	5	-	-	1.06	5	-	-	1.06	5	-	-
Global	1.06	171	-	-	1.06	171	-	-	1.03	173	-	-	1.03	173	-	-

Regional Banks	5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.						
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018																
United States of America	0.76	171	-	-	0.76	171	-	-	0.74	174	-	-	0.74	174	-	-
Canada	1.34	2	-	-	1.34	2	-	-	1.15	2	-	-	1.15	2	-	-
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	0.43	7	-	-	0.43	7	-	-	0.60	8	-	-	0.60	8	-	-
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	-	-	-	-	-	-	-	-	0.88	1	-	-	0.88	1	-	-
East Asia	0.99	73	-	-	0.99	73	-	-	0.94	72	-	-	0.94	72	-	-
Oceania and Pacific	1.18	2	-	-	1.18	2	-	-	1.30	2	-	-	1.30	2	-	-
Global	0.83	255	-	-	0.83	255	-	-	0.80	259	-	-	0.80	259	-	-
Thrifts & Mortgage Finance	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018																
United States of America	0.74	33	-	-	0.74	33	-	-	0.65	37	-	-	0.65	37	-	-
Canada	1.16	5	-	-	1.16	5	-	-	1.01	5	-	-	1.01	5	-	-
Central and South America	0.25	1	-	-	0.25	1	-	-	0.39	1	-	-	0.39	1	-	-
European Union and other Western European countries	1.08	2	-	-	1.08	2	-	-	0.91	2	-	-	0.91	2	-	-
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	1.51	4	-	-	1.51	4	-	-	1.42	4	-	-	1.42	4	-	-
East Asia	1.14	3	-	-	1.14	3	-	-	0.99	3	-	-	0.99	3	-	-
Oceania and Pacific	0.90	2	-	-	0.90	2	-	-	0.60	2	-	-	0.60	2	-	-
Global	0.88	50	-	-	0.88	50	-	-	0.76	54	-	-	0.76	54	-	-

Other Diversified Financial Services																
31/12/2018																
	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.
United States of America	1.50	1	-	-	1.50	1	-	-	1.70	1	-	-	1.70	1	-	-
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	0.76	3	-	-	0.76	3	-	-	0.95	3	-	-	0.95	3	-	-
Central and South Asia	1.85	3	-	-	1.85	3	-	-	1.99	1	-	-	1.99	1	-	-
East Asia	0.92	6	-	-	0.92	6	-	-	0.71	6	-	-	0.71	6	-	-
Oceania and Pacific	1.51	1	-	-	1.51	1	-	-	1.35	1	-	-	1.35	1	-	-
Global	1.17	14	-	-	1.17	14	-	-	1.01	12	-	-	1.01	12	-	-
Specialized Finance	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.
31/12/2018																
	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
United States of America	0.87	1	-	-	0.87	1	-	-	0.31	1	-	-	0.31	1	-	-
Canada	0.87	2	-	-	0.87	2	-	-	1.39	2	-	-	1.39	2	-	-
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	1.21	2	-	-	1.21	2	-	-	1.56	2	-	-	1.56	2	-	-
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	1.79	4	-	-	1.79	4	-	-	1.68	4	-	-	1.68	4	-	-
East Asia	0.96	14	-	-	0.96	14	-	-	0.98	14	-	-	0.98	14	-	-
Oceania and Pacific	0.91	1	-	-	0.91	1	-	-	1.05	2	-	-	1.05	2	-	-
Global	1.11	24	-	-	1.11	24	-	-	1.15	25	-	-	1.15	25	-	-

Consumer Finance		β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018		5Y net liq. incl.						5Y net liq. excl.						2Y net liq. incl.						2Y net liq. excl.					
United States of America		1.21	14	-	-	1.21	14	-	-	1.07	14	-	-	1.07	14	-	-	1.07	14	-	-	1.07	14	-	-
Canada		1.50	1	-	-	1.50	1	-	-	1.91	1	-	-	1.91	1	-	-	1.91	1	-	-	1.91	1	-	-
Central and South America		1.07	1	-	-	1.07	1	-	-	0.94	1	-	-	0.94	1	-	-	0.94	1	-	-	0.94	1	-	-
European Union and other Western European countries		0.61	5	-	-	0.61	5	-	-	0.83	5	-	-	0.83	5	-	-	0.83	5	-	-	0.83	5	-	-
Russia and other Eastern European countries		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries		1.12	1	-	-	1.12	1	-	-	0.77	1	-	-	0.77	1	-	-	0.77	1	-	-	0.77	1	-	-
Sub-Saharan Africa		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia		1.08	5	-	-	1.08	5	-	-	1.59	5	-	-	1.59	5	-	-	1.59	5	-	-	1.59	5	-	-
East Asia		0.88	19	-	-	0.88	19	-	-	0.88	19	-	-	0.88	19	-	-	0.88	19	-	-	0.88	19	-	-
Oceania and Pacific		1.17	3	-	-	1.17	3	-	-	0.91	3	-	-	0.91	3	-	-	0.91	3	-	-	0.91	3	-	-
Global		1.01	49	-	-	1.01	49	-	-	1.02	49	-	-	1.02	49	-	-	1.02	49	-	-	1.02	49	-	-
Asset Management & Custody Banks		β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018		5Y net liq. incl.						5Y net liq. excl.						2Y net liq. incl.						2Y net liq. excl.					
United States of America		0.98	6	-	-	0.98	6	-	-	1.15	6	-	-	1.15	6	-	-	1.15	6	-	-	1.15	6	-	-
Canada		1.37	1	-	-	1.37	1	-	-	0.94	1	-	-	0.94	1	-	-	0.94	1	-	-	0.94	1	-	-
Central and South America		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries		0.97	12	-	-	0.97	12	-	-	1.01	10	-	-	1.01	10	-	-	1.01	10	-	-	1.01	10	-	-
Russia and other Eastern European countries		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia		2.04	2	-	-	2.04	2	-	-	1.99	2	-	-	1.99	2	-	-	1.99	2	-	-	1.99	2	-	-
East Asia		1.29	8	-	-	1.29	8	-	-	1.16	8	-	-	1.16	8	-	-	1.16	8	-	-	1.16	8	-	-
Oceania and Pacific		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global		1.15	29	-	-	1.15	29	-	-	1.15	27	-	-	1.15	27	-	-	1.15	27	-	-	1.15	27	-	-

Investment Banking & Brokerage																
31/12/2018																
	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.
United States of America	1.23	16	-	-	1.23	16	-	-	1.16	16	-	-	1.16	16	-	-
Canada	1.07	1	-	-	1.07	1	-	-	1.13	1	-	-	1.13	1	-	-
Central and South America	0.43	1	-	-	0.43	1	-	-	0.36	1	-	-	0.36	1	-	-
European Union and other Western European countries	0.75	4	-	-	0.75	4	-	-	0.83	4	-	-	0.83	4	-	-
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	1.26	2	-	-	1.26	2	-	-	1.09	2	-	-	1.09	2	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East Asia	1.22	65	-	-	1.22	65	-	-	1.06	69	-	-	1.06	69	-	-
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global	1.19	89	-	-	1.19	89	-	-	1.06	93	-	-	1.06	93	-	-
Financial Exchanges & Data	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.
31/12/2018																
	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
United States of America	0.73	7	0.69	7	0.74	6	0.69	6	0.78	9	0.73	9	0.86	7	0.79	7
Canada	1.20	1	1.01	1	1.20	1	1.01	1	0.77	1	0.65	1	0.77	1	0.65	1
Central and South America	0.92	3	1.40	3	-	-	-	-	0.93	2	0.99	2	-	-	-	-
European Union and other Western European countries	0.71	4	0.74	4	0.69	2	0.65	2	0.51	4	0.52	4	0.64	2	0.62	2
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	0.52	1	0.63	1	-	-	-	-	0.26	1	0.32	1	-	-	-	-
Central and South Asia	0.96	2	1.12	2	-	-	-	-	1.02	2	1.17	2	-	-	-	-
East Asia	1.40	5	1.56	5	-	-	-	-	0.95	5	1.08	5	-	-	-	-
Oceania and Pacific	0.99	1	1.10	1	-	-	-	-	0.89	1	0.98	1	-	-	-	-
Global	0.93	24	1.03	24	0.78	9	0.72	9	0.78	25	0.81	25	0.81	10	0.74	10

Insurance Brokers	5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.		
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018	0.93	3	0.78	3	0.93	3	0.78	3	0.72	3	0.63	3
United States of America	-	-	-	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	0.46	2	0.38	2	0.46	2	0.38	2	0.67	2	0.56	2
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	-	-	-	-	-	-	-	-	-	-	-	-
East Asia	0.80	2	1.27	2	-	-	-	0.76	2	0.96	2	-
Oceania and Pacific	0.47	1	0.45	1	0.47	1	0.45	1	1.20	1	1.14	1
Global	0.72	8	0.76	8	0.70	6	0.59	6	0.78	8	0.76	6
Life & Health Insurance	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018	1.27	13	-	-	1.27	13	-	-	1.20	13	-	-
United States of America	0.98	6	-	-	0.98	6	-	-	0.91	6	-	-
Canada	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	0.86	9	-	-	0.86	9	-	-	0.90	9	-	-
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	0.79	5	-	-	0.79	5	-	-	0.87	5	-	-
Central and South Asia	0.93	2	-	-	0.93	2	-	-	1.21	1	-	-
East Asia	0.99	19	-	-	0.99	19	-	-	0.94	19	-	-
Oceania and Pacific	1.35	1	-	-	1.35	1	-	-	1.34	1	-	-
Global	1.02	55	-	-	1.02	55	-	-	1.00	54	-	-

Multi-line Insurance																
31/12/2018																
	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
United States of America	0.76	5	-	-	0.76	5	-	-	0.83	6	-	-	0.83	6	-	-
Canada	0.37	1	-	-	0.37	1	-	-	0.93	1	-	-	0.93	1	-	-
Central and South America	0.67	3	-	-	0.67	3	-	-	0.68	3	-	-	0.68	3	-	-
European Union and other Western European countries	0.94	19	-	-	0.94	19	-	-	0.81	19	-	-	0.81	19	-	-
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	1.00	10	-	-	1.00	10	-	-	0.95	10	-	-	0.95	10	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	1.11	1	-	-	1.11	1	-	-	1.05	1	-	-	1.05	1	-	-
East Asia	1.01	4	-	-	1.01	4	-	-	1.06	4	-	-	1.06	4	-	-
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global	0.91	43	-	-	0.91	43	-	-	0.87	44	-	-	0.87	44	-	-
Property & Casualty Insurance	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018																
	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
United States of America	0.84	29	-	-	0.84	29	-	-	0.75	31	-	-	0.75	31	-	-
Canada	0.46	1	-	-	0.46	1	-	-	0.62	1	-	-	0.62	1	-	-
Central and South America	0.38	1	-	-	0.38	1	-	-	0.30	1	-	-	0.30	1	-	-
European Union and other Western European countries	0.60	6	-	-	0.60	6	-	-	0.60	6	-	-	0.60	6	-	-
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	1.28	3	-	-	1.28	3	-	-	0.89	3	-	-	0.89	3	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East Asia	0.75	17	-	-	0.75	17	-	-	0.66	16	-	-	0.66	16	-	-
Oceania and Pacific	1.07	3	-	-	1.07	3	-	-	1.03	3	-	-	1.03	3	-	-
Global	0.81	60	-	-	0.81	60	-	-	0.72	61	-	-	0.72	61	-	-

Reinsurance	31/12/2018				5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.					
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n		
United States of America	0.83	2	-	-	0.83	2	-	-	1.02	2	-	-	1.02	2	-	-	1.02	2	-	-		
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Central and South America	0.50	1	-	-	0.50	1	-	-	0.38	2	-	-	0.38	2	-	-	0.38	2	-	-		
European Union and other Western European countries	0.74	2	-	-	0.74	2	-	-	0.62	2	-	-	0.62	2	-	-	0.62	2	-	-		
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Central and South Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
East Asia	0.92	2	-	-	0.92	2	-	-	0.57	2	-	-	0.57	2	-	-	0.57	2	-	-		
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Global	0.78	7	-	-	0.78	7	-	-	0.65	8	-	-	0.65	8	-	-	0.65	8	-	-		
IT Consulting & Other Services	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n		
31/12/2018	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.									
United States of America	1.02	16	0.98	15	1.12	11	1.03	10	0.99	16	0.92	16	1.00	13	0.88	13	0.92	16	1.00	13	0.88	13
Canada	0.64	1	0.59	1	0.64	1	0.59	1	0.92	1	0.85	1	0.92	1	0.85	1	0.92	1	0.92	1	0.85	1
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	0.92	21	0.87	21	0.92	13	0.82	13	1.02	21	0.96	21	1.00	15	0.89	15	1.00	21	1.00	15	0.89	15
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	0.61	2	0.58	2	0.61	2	0.58	2	1.03	2	0.94	2	1.03	2	0.94	2	1.03	2	1.03	2	0.94	2
Sub-Saharan Africa	0.74	1	0.69	1	0.74	1	0.69	1	1.02	1	0.90	1	1.02	1	0.90	1	1.02	1	1.02	1	0.90	1
Central and South Asia	0.76	9	0.80	9	1.81	1	1.72	1	0.81	10	0.86	10	0.86	10	1.54	1	1.60	10	1.60	10	1.54	1
East Asia	1.08	82	1.15	80	1.05	23	0.99	23	1.10	81	1.20	79	1.07	24	0.99	24	1.07	81	1.07	24	0.99	24
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global	1.01	132	1.05	129	1.02	52	0.94	51	1.05	132	1.09	130	1.04	57	0.94	57	1.04	132	1.04	57	0.94	57

Data Processing & Outsourced Services														
31/12/2018														
	5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.				
	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.
United States of America	0.88	26	0.79	26	0.98	16	0.80	16	0.94	26	0.86	26	1.03	16
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	0.55	1	0.51	1	0.55	1	0.51	1	0.41	2	0.53	1	0.41	2
European Union and other Western European countries	0.64	3	0.77	3	0.45	1	0.42	1	1.05	2	1.09	2	0.80	1
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	0.58	1	0.59	1	-	-	-	-	0.71	1	0.71	1	0.71	1
Sub-Saharan Africa	-	-	-	-	-	-	-	-	0.80	1	1.01	1	-	-
Central and South Asia	0.76	1	0.59	1	0.76	1	0.59	1	0.86	2	0.79	2	1.20	1
East Asia	0.70	13	0.77	13	0.68	4	0.58	4	1.00	13	1.18	13	1.12	5
Oceania and Pacific	1.08	1	0.94	1	1.08	1	0.94	1	1.16	1	1.03	1	1.16	1
Global	0.80	46	0.77	46	0.88	24	0.73	24	0.93	48	0.95	47	0.99	27
Internet Services & Infrastructure	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.
31/12/2018														
5Y net liq. incl.														
United States of America	1.28	4	0.80	3	1.23	2	0.92	2	1.12	4	0.92	4	1.28	2
Canada	1.41	1	1.36	1	1.41	1	1.36	1	0.83	1	0.77	1	0.83	1
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	1.02	1	0.97	1	1.02	1	0.97	1	1.08	1	1.03	1	1.08	1
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East Asia	1.06	6	1.13	6	1.09	2	1.00	2	1.04	6	1.07	6	0.95	2
Oceania and Pacific	1.51	1	1.57	1	-	-	-	-	1.75	1	1.84	1	-	-
Global	1.19	13	1.09	12	1.18	6	1.03	6	1.11	13	1.06	13	1.06	6

Application Software		5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.						
31/12/2018	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	
United States of America	1.04	28	1.05	28	1.11	11	1.01	11	1.01	28	1.02	28	1.02	14	0.95	14	
Canada	0.55	4	0.52	4	0.70	2	0.63	2	0.93	4	0.93	4	0.80	1	0.69	1	
Central and South America	0.45	1	0.47	1	-	-	-	-	0.85	1	0.85	1	0.85	1	0.83	1	
European Union and other Western European countries	1.03	10	1.05	10	1.16	4	1.04	4	1.12	10	1.07	9	1.42	4	1.24	4	
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Southern and Eastern Mediterranean and Gulf countries	0.88	3	0.95	3	-	-	-	-	0.86	3	0.91	3	0.81	2	0.80	2	
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Central and South Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
East Asia	1.19	54	1.35	53	1.33	3	1.23	3	1.08	56	1.23	55	1.08	5	0.99	5	
Oceania and Pacific	0.87	4	0.88	4	0.87	1	0.81	1	0.88	4	0.89	4	0.85	1	0.80	1	
Global	1.08	104	1.17	103	1.10	21	1.00	21	1.04	106	1.12	104	1.06	28	0.97	28	
Systems Software		β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018		5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.						
United States of America	1.01	9	1.15	9	-	-	-	-	1.12	9	1.26	9	-	-	-	-	
Canada	1.25	2	1.56	2	-	-	-	-	1.39	2	1.71	2	-	-	-	-	
Central and South America	0.28	1	0.27	1	0.28	1	0.27	1	0.54	1	0.52	1	0.54	1	0.52	1	
European Union and other Western European countries	0.73	2	0.81	2	-	-	-	-	0.77	2	0.80	2	0.49	1	0.48	1	
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Southern and Eastern Mediterranean and Gulf countries	0.29	1	0.32	1	-	-	-	-	0.51	1	0.56	1	-	-	-	-	
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Central and South Asia	0.99	2	1.01	2	1.00	1	1.00	1	1.28	2	1.33	2	-	-	-	-	
East Asia	1.04	20	1.18	20	1.35	3	1.30	3	1.04	20	1.22	20	1.15	3	1.08	3	
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Global	0.99	37	1.11	37	1.06	5	1.03	5	1.05	37	1.20	37	0.90	5	0.85	5	

Communications Equipment															
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
0.99	23	1.06	23	0.92	8	0.84	8	0.88	25	0.94	25	0.91	11	0.83	11
1.32	2	1.66	2	-	-	-	-	1.39	2	1.77	2	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.00	9	1.01	9	1.04	4	0.93	4	1.03	9	0.96	9	1.30	5	1.12	5
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.44	3	0.52	3	-	-	-	-	0.72	4	0.84	4	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.10	82	1.19	80	1.10	25	1.04	25	1.07	85	1.15	82	1.07	27	0.99	27
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.06	119	1.14	117	1.05	37	0.99	37	1.03	125	1.09	122	1.06	43	0.96	43
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
1.29	11	1.24	11	1.34	7	1.09	7	1.18	12	1.06	12	1.41	7	1.06	7
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.71	5	0.61	5	0.78	4	0.64	4	1.02	4	0.92	4	0.86	3	0.69	3
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.12	84	1.23	78	1.08	23	0.94	23	1.07	84	1.20	78	0.99	24	0.89	23
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.12	100	1.19	94	1.10	34	0.93	34	1.08	100	1.17	94	1.06	34	0.90	33

Electronic Equipment & Instruments															
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
1.04	14	1.03	14	1.15	7	1.04	7	1.09	13	1.07	13	1.15	8	1.06	8
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.99	17	0.84	16	0.94	13	0.82	13	1.03	17	1.01	17	1.06	11	0.98	11
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.22	108	1.25	104	1.20	32	1.07	32	1.16	109	1.24	108	1.18	36	1.04	36
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.17	139	1.18	134	1.13	52	1.00	52	1.14	139	1.19	138	1.15	55	1.03	55
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
1.03	8	1.09	8	0.89	5	0.84	5	1.32	9	1.34	9	1.37	7	1.28	7
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.60	1	0.36	1	0.60	1	0.36	1	0.80	1	0.46	1	0.80	1	0.46	1
0.98	2	0.75	2	0.98	2	0.75	2	1.32	2	1.15	2	1.32	2	1.15	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.19	174	1.21	164	1.25	69	1.06	69	1.24	180	1.28	174	1.36	77	1.16	77
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.18	185	1.19	175	1.21	77	1.03	77	1.25	192	1.28	186	1.35	87	1.16	87

Electronic Manufacturing Services																
31/12/2018																
	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.
United States of America	0.86	7	1.05	6	0.35	2	0.33	1	1.05	8	1.06	8	1.09	3	0.88	3
Canada	0.68	1	0.69	1	-	-	-	-	0.90	1	0.81	1	0.90	1	0.81	1
Central and South America	0.49	1	0.59	1	-	-	-	-	0.55	1	0.64	1	-	-	-	-
European Union and other Western European countries	0.47	1	0.42	1	0.47	1	0.42	1	0.93	1	0.82	1	0.93	1	0.82	1
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East Asia	1.10	19	1.18	18	1.14	7	0.96	7	1.14	19	1.28	19	1.29	8	1.10	8
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global	0.99	29	1.09	27	0.91	10	0.83	9	1.08	30	1.17	30	1.18	13	1.01	13
Technology Distributors	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.
31/12/2018																
	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.
United States of America	0.90	12	0.89	12	0.95	10	0.77	10	1.09	12	0.98	12	1.18	10	0.93	10
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	1.08	2	1.21	2	1.14	1	1.03	1	1.07	2	1.29	2	1.27	1	1.19	1
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	0.31	1	0.26	1	0.31	1	0.26	1	0.29	1	-	-	0.29	1	-	-
Central and South Asia	1.15	2	0.82	2	1.15	2	0.82	2	1.22	1	0.99	1	1.22	1	0.99	1
East Asia	0.91	46	0.82	46	1.02	28	0.76	28	0.95	43	0.94	43	0.94	25	0.73	25
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global	0.91	63	0.84	63	1.00	42	0.76	42	0.97	59	0.96	58	1.00	38	0.81	37

Semiconductor Equipment															
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
1.15	17	1.26	17	1.33	2	1.05	2	1.37	17	1.48	17	1.44	4	1.30	4
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.26	6	1.35	6	2.11	1	1.73	1	1.36	6	1.52	6	0.98	1	0.73	1
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.04	2	1.38	2	-	-	-	-	1.39	2	1.77	2	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.07	50	1.15	49	1.20	18	1.07	17	1.30	52	1.38	51	1.26	18	1.09	18
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.10	75	1.20	74	1.26	21	1.10	20	1.32	77	1.42	76	1.28	23	1.11	23
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
1.05	28	1.09	28	1.15	11	1.03	11	1.11	28	1.14	28	1.17	11	1.03	11
1.34	1	0.67	1	1.34	1	0.67	1	1.10	1	0.45	1	1.10	1	0.45	1
0.28	2	0.36	2	-	-	-	-	0.66	3	0.75	3	-	-	-	-
1.08	10	1.05	10	1.28	4	1.14	4	1.40	10	1.41	10	1.24	2	1.05	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.04	1	1.07	1	-	-	-	-	0.73	1	0.81	1	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.33	129	1.35	117	1.24	51	1.06	50	1.28	129	1.33	123	1.18	49	0.96	49
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.25	171	1.27	159	1.23	67	1.06	66	1.24	172	1.28	166	1.18	63	0.97	63

Alternative Carriers	5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.						
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018																
United States of America	0.84	4	0.63	4	0.84	4	0.63	4	0.95	4	0.70	4	0.95	4	0.70	4
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	0.79	5	0.71	5	0.66	4	0.53	4	0.89	5	0.74	5	0.78	4	0.58	4
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East Asia	1.04	4	0.94	4	1.07	3	0.91	3	1.15	5	1.08	5	1.05	4	0.92	4
Oceania and Pacific	1.20	1	0.59	1	1.20	1	0.59	1	0.77	1	0.41	1	0.77	1	0.41	1
Global	0.90	14	0.74	14	0.87	12	0.66	12	0.98	15	0.82	15	0.91	13	0.71	13
Integrated Telecommunication Services	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018																
United States of America	0.50	4	0.47	4	0.59	2	0.39	2	0.62	4	0.50	4	0.86	2	0.55	2
Canada	0.46	2	0.43	1	0.46	2	0.43	1	0.61	2	0.45	2	0.61	2	0.45	2
Central and South America	0.58	1	0.55	1	0.58	1	0.55	1	0.46	1	0.44	1	0.46	1	0.44	1
European Union and other Western European countries	0.67	13	0.54	12	0.66	12	0.50	11	0.65	15	0.50	15	0.66	14	0.50	14
Russia and other Eastern European countries	0.33	1	-	-	0.33	1	-	-	0.28	1	-	-	0.28	1	-	-
Southern and Eastern Mediterranean and Gulf countries	0.79	2	0.70	2	0.82	1	0.59	1	0.96	2	0.82	2	1.00	1	0.65	1
Sub-Saharan Africa	0.74	1	0.65	1	0.74	1	0.65	1	0.36	1	0.31	1	0.36	1	0.31	1
Central and South Asia	1.07	2	0.86	2	1.07	2	0.86	2	1.31	2	1.06	2	1.31	2	1.06	2
East Asia	0.97	12	0.90	12	1.02	9	0.84	9	0.85	12	0.85	11	0.88	9	0.78	8
Oceania and Pacific	0.68	4	0.60	4	0.68	4	0.60	4	0.88	4	0.73	4	0.88	4	0.73	4
Global	0.75	42	0.67	39	0.76	35	0.63	32	0.75	44	0.65	42	0.76	37	0.62	35

Wireless Telecommunication Services																	
31/12/2018																	
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.					
β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.		
		0.57	3	0.53	2	0.57	3	0.53	2	0.77	4	0.57	4	0.77	4	0.57	4
United States of America		0.33	1	-	-	0.33	1	-	-	0.72	1	0.53	1	0.72	1	0.53	1
Canada		0.65	1	0.60	1	0.65	1	0.60	1	0.59	1	0.54	1	0.59	1	0.54	1
Central and South America		0.42	2	0.48	1	0.42	2	0.48	1	0.53	2	0.43	2	0.53	2	0.43	2
European Union and other Western European countries		1.25	1	0.95	1	1.25	1	0.95	1	1.02	1	0.75	1	1.02	1	0.75	1
Russia and other Eastern European countries		1.20	2	1.13	2	0.92	1	0.55	1	1.27	2	1.05	2	1.27	2	1.05	2
Southern and Eastern Mediterranean and Gulf countries		0.48	2	0.46	2	0.48	2	0.46	2	0.71	2	0.64	2	0.71	2	0.64	2
Sub-Saharan Africa		0.88	1	0.56	1	0.88	1	0.56	1	1.69	1	0.63	1	1.69	1	0.63	1
Central and South Asia		0.86	17	0.78	16	0.96	13	0.86	12	0.76	16	0.64	16	0.83	12	0.66	12
East Asia		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oceania and Pacific		0.79	30	0.74	26	0.80	25	0.73	21	0.81	30	0.64	30	0.85	26	0.65	26
Global		β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.
Advertising																	
31/12/2018																	
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.					
		0.71	5	0.61	5	0.68	4	0.56	4	0.89	5	0.66	5	0.96	4	0.67	4
United States of America		1.92	1	1.87	1	1.92	1	1.87	1	0.81	1	0.86	1	-	-	-	-
Canada		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America		1.00	8	0.90	8	0.99	7	0.84	7	0.83	8	0.72	8	0.82	7	0.67	7
European Union and other Western European countries		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Russia and other Eastern European countries		1.03	1	1.01	1	1.03	1	1.01	1	0.99	1	0.99	1	0.99	1	0.99	1
Southern and Eastern Mediterranean and Gulf countries		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia		0.95	19	1.11	19	1.00	6	0.93	6	1.01	19	1.19	19	1.11	5	0.95	5
East Asia		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oceania and Pacific		0.96	34	1.00	34	0.98	19	0.88	19	0.94	34	0.99	34	0.95	17	0.77	17
Global																	

Broadcasting	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018	1.10	10	0.79	10	1.10	10	0.79	10	0.88	9	0.60	9	0.92	8	0.59	8
United States of America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Canada	0.64	1	0.33	1	0.64	1	0.33	1	-	-	-	-	-	-	-	-
Central and South America	0.97	7	0.92	7	1.09	4	0.96	4	0.87	7	0.81	7	0.82	5	0.73	5
European Union and other Western European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	0.92	6	0.84	6	1.00	4	0.87	4	0.93	4	0.92	4	0.97	2	0.94	2
East Asia	0.98	15	0.96	14	0.99	6	0.87	6	0.85	15	0.94	15	0.88	9	0.80	9
Oceania and Pacific	1.34	4	1.08	4	1.34	4	1.08	4	1.48	4	1.24	4	1.48	4	1.24	4
Global	1.02	43	0.89	42	1.08	29	0.87	29	0.93	39	0.87	39	0.97	28	0.80	28
Cable & Satellite	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018	5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
United States of America	0.95	4	0.83	4	0.95	3	0.76	3	0.85	5	0.68	5	0.90	4	0.66	4
Canada	0.50	4	0.44	2	0.50	4	0.44	2	0.60	4	0.37	4	0.60	4	0.37	4
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	0.58	4	0.49	3	0.58	4	0.49	3	0.59	4	0.41	4	0.59	4	0.41	4
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	1.44	2	1.34	2	1.44	2	1.34	2	1.12	2	0.96	2	1.12	2	0.96	2
East Asia	0.84	12	1.03	11	0.71	6	0.66	5	0.62	11	0.68	11	0.61	6	0.46	6
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global	0.81	26	0.89	22	0.75	19	0.71	15	0.70	26	0.61	26	0.71	20	0.52	20

Publishing	5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.						
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018																
United States of America	1.04	6	1.05	6	1.25	3	1.09	3	0.86	6	0.86	6	1.02	3	0.87	3
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	1.06	6	0.90	6	1.06	6	0.90	6	0.87	7	0.78	7	0.87	7	0.78	7
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	1.08	1	0.97	1	1.08	1	0.97	1	0.86	1	0.84	1	0.86	1	0.84	1
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East Asia	0.96	22	1.02	20	0.96	6	0.92	6	0.74	22	0.88	21	0.82	6	0.75	6
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global	0.99	35	1.00	33	1.06	16	0.94	16	0.79	36	0.86	35	0.88	17	0.79	17
Movies & Entertainment	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018																
United States of America	1.03	9	0.85	9	1.02	8	0.81	8	0.88	9	0.79	8	0.88	8	0.77	7
Canada	1.51	2	1.40	2	1.58	1	1.26	1	0.81	3	1.01	2	0.66	2	0.89	1
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	0.92	5	0.77	5	1.09	3	0.80	3	1.03	5	0.88	5	1.11	3	0.78	3
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	1.60	2	1.41	2	1.60	2	1.41	2	1.71	2	1.40	2	1.71	2	1.40	2
East Asia	0.99	38	1.09	38	0.97	15	0.92	15	0.89	35	0.95	34	0.94	13	0.85	13
Oceania and Pacific	0.33	1	0.31	1	0.33	1	0.31	1	0.50	2	0.35	2	0.50	2	0.35	2
Global	1.02	57	1.03	57	1.04	30	0.90	30	0.91	56	0.92	53	0.94	30	0.83	28

Interactive Home Entertainment															
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
1.00	4	1.14	4	1.07	1	1.06	1	0.85	4	0.95	4	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.89	3	0.87	3	1.10	2	1.06	2	0.99	3	0.98	3	0.93	2	0.89	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.03	41	1.20	39	0.72	4	0.70	4	1.06	41	1.30	39	0.66	2	0.58	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.02	48	1.17	46	0.88	7	0.85	7	1.04	48	1.25	46	0.80	4	0.74	4
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
1.06	8	1.17	8	1.19	1	1.16	1	1.13	8	1.24	8	1.10	2	1.06	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.84	4	0.87	4	-	-	-	-	0.76	4	0.79	4	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.75	1	1.85	1	-	-	-	-	1.46	1	1.49	1	-	-	-	-
0.82	22	0.91	22	0.82	3	0.73	3	1.02	23	1.14	23	1.06	4	0.88	4
1.20	2	1.16	2	1.20	2	1.16	2	1.29	2	1.24	2	1.29	2	1.24	2
0.92	37	1.00	37	1.01	6	0.94	6	1.04	38	1.14	38	1.13	8	1.02	8

Electric Utilities		5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.					
31/12/2018	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.
United States of America	0.37	12	0.33	4	0.37	12	0.33	4	0.32	10	0.26	4	0.32	10	0.26	4
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	0.88	11	0.63	11	0.88	11	0.63	11	0.80	11	0.64	10	0.76	10	0.56	9
European Union and other Western European countries	0.84	15	0.58	14	0.84	15	0.58	14	0.81	16	0.54	15	0.81	16	0.54	15
Russia and other Eastern European countries	0.88	4	0.75	4	0.88	3	0.62	3	0.59	4	0.61	4	0.56	2	0.38	2
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	0.96	3	0.64	3	1.19	2	0.69	2	0.93	3	0.63	3	1.22	2	0.75	2
East Asia	0.66	19	0.54	18	0.69	16	0.53	15	0.61	18	0.48	17	0.65	14	0.48	13
Oceania and Pacific	0.73	5	0.52	5	0.73	5	0.52	5	0.51	4	0.40	3	0.51	4	0.40	3
Global	0.72	69	0.57	59	0.73	64	0.56	54	0.66	66	0.52	56	0.67	58	0.50	48
Gas Utilities		5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.					
31/12/2018	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.
United States of America	0.64	9	0.47	8	0.64	9	0.47	8	0.46	12	0.34	10	0.46	12	0.34	10
Canada	0.92	3	0.67	3	0.92	3	0.67	3	0.76	2	0.63	2	0.76	2	0.63	2
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	0.63	3	0.49	3	0.63	3	0.49	3	0.72	3	0.58	3	0.72	3	0.58	3
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	0.68	1	0.64	1	0.68	1	0.64	1	0.62	1	0.58	1	0.62	1	0.58	1
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	0.76	3	0.66	3	0.76	3	0.66	3	0.66	3	0.58	3	0.66	3	0.58	3
East Asia	0.80	21	0.69	21	0.75	19	0.62	19	0.61	21	0.54	21	0.59	18	0.49	18
Oceania and Pacific	1.04	1	0.64	1	1.04	1	0.64	1	0.87	1	0.55	1	0.87	1	0.55	1
Global	0.76	41	0.63	40	0.73	39	0.59	38	0.60	43	0.50	41	0.59	40	0.48	38

Multi-Utilities	5Y net liq. incl.			5Y net liq. excl.			2Y net liq. incl.			2Y net liq. excl.		
	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018	0.44	9	0.36	6	0.44	9	0.36	6	0.33	5	0.27	2
United States of America												
Canada	0.49	4	0.34	3	0.49	4	0.34	3	0.67	1	0.45	1
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	0.75	8	0.49	8	0.75	8	0.49	8	0.69	8	0.46	8
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	-	-	-	-	-	-	-	-	-	-	-	-
East Asia	0.97	4	0.75	4	1.15	3	0.81	3	0.91	4	1.04	3
Oceania and Pacific	0.66	1	0.55	1	0.66	1	0.55	1	0.79	1	0.79	1
Global	0.63	26	0.48	22	0.64	25	0.48	21	0.65	19	0.50	16
Water Utilities	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018	0.43	3	0.36	2	0.43	3	0.36	2	0.48	8	0.37	8
United States of America												
Canada	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	0.89	2	0.57	2	0.89	2	0.57	2	0.73	2	0.52	2
European Union and other Western European countries	0.76	3	0.40	3	0.76	3	0.40	3	0.73	3	0.36	3
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	1.99	1	1.97	1	1.99	1	1.97	1	1.15	1	1.09	1
East Asia	0.82	21	0.80	19	0.83	15	0.77	13	0.69	19	0.58	14
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Global	0.82	30	0.75	27	0.83	24	0.72	21	0.66	33	0.52	28

Independent Power Producers & Energy Traders															
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.
1.11	1	0.45	1	1.11	1	0.45	1	0.74	1	0.41	1	0.74	1	0.41	1
0.91	3	0.53	3	0.91	3	0.53	3	0.48	2	0.26	1	0.48	2	0.26	1
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.91	2	0.74	2	0.91	2	0.74	2	0.84	2	0.61	2	0.84	2	0.61	2
0.65	2	0.42	2	0.94	1	0.47	1	0.53	2	0.38	2	0.68	1	0.39	1
0.36	1	0.25	1	0.36	1	0.25	1	0.39	1	-	-	0.39	1	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.78	1	0.46	1	0.78	1	0.46	1	0.44	1	0.25	1	0.44	1	0.25	1
0.89	28	0.64	28	0.88	27	0.62	27	0.71	26	0.60	20	0.71	26	0.60	20
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.87	38	0.61	38	0.87	36	0.60	36	0.68	35	0.55	27	0.69	34	0.56	26
β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
1.48	1	1.13	1	1.48	1	1.13	1	0.72	1	0.56	1	0.72	1	0.56	1
0.91	1	0.77	1	0.91	1	0.77	1	0.62	1	0.53	1	0.62	1	0.53	1
0.55	1	0.49	1	0.55	1	0.49	1	0.46	1	0.39	1	0.46	1	0.39	1
0.77	3	0.45	3	0.77	3	0.45	3	0.67	3	0.47	2	0.67	3	0.47	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.99	16	0.78	15	0.98	15	0.75	14	0.94	13	0.77	12	0.97	11	0.75	10
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.96	22	0.74	21	0.95	21	0.71	20	0.85	19	0.68	17	0.85	17	0.66	15

Diversified Real Estate Activities																
31/12/2018																
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.				
β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	
	0.89	3	0.81	3	0.89	3	0.81	3	0.52	3	0.46	3	0.49	2	0.41	2
United States of America																
Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Union and other Western European countries	0.33	2	-	-	0.33	2	-	-	0.53	2	0.32	2	0.53	2	0.32	2
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	1.06	7	0.90	7	1.14	5	0.91	5	0.83	7	0.72	7	0.89	6	0.75	6
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	1.59	5	1.15	5	1.59	5	1.15	5	1.69	5	1.18	5	1.69	5	1.18	5
East Asia	1.00	58	0.82	58	1.00	51	0.78	51	0.86	58	0.74	58	0.87	47	0.67	47
Oceania and Pacific	1.22	1	1.07	1	1.22	1	1.07	1	0.72	1	0.65	1	0.72	1	0.65	1
Global	1.02	76	0.86	74	1.04	67	0.82	65	0.89	76	0.74	76	0.91	63	0.70	63
Real Estate Operating Companies																
31/12/2018																
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.				
β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	β_L	n.	β_U	n.	
0.83	3	0.70	2	0.83	3	0.70	2	0.66	2	0.40	2	0.66	2	0.40	2	
United States of America																
Canada	0.48	1	0.28	1	0.48	1	0.28	1	0.57	1	0.34	1	0.57	1	0.34	1
Central and South America	0.71	4	0.70	3	0.71	4	0.70	3	0.93	3	0.77	3	0.93	3	0.77	3
European Union and other Western European countries	0.73	17	0.50	14	0.73	17	0.50	14	0.68	16	0.43	16	0.68	16	0.43	16
Russia and other Eastern European countries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern and Eastern Mediterranean and Gulf countries	0.50	6	0.48	3	0.50	6	0.48	3	0.58	6	0.44	4	0.58	5	0.39	3
Sub-Saharan Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central and South Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East Asia	0.81	35	0.76	33	0.73	26	0.61	24	0.79	32	0.73	30	0.79	24	0.65	22
Oceania and Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global	0.75	66	0.67	56	0.71	57	0.57	47	0.74	60	0.61	56	0.74	51	0.55	47

Real Estate Development															
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
1.40	1	1.20	1	1.40	1	1.20	1	0.93	1	0.69	1	0.93	1	0.69	1
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.52	1	0.76	1	1.52	1	0.76	1	1.40	1	0.57	1	1.40	1	0.57	1
0.67	4	0.47	4	0.67	4	0.47	4	0.76	4	0.50	4	0.76	4	0.50	4
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.34	6	1.05	6	1.34	6	1.05	6	1.07	6	0.89	6	1.05	5	0.77	5
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.77	9	0.65	9	0.77	9	0.65	9	0.70	9	0.58	7	0.70	9	0.58	7
1.07	127	0.85	125	1.08	109	0.79	107	0.96	130	0.80	123	0.98	109	0.73	102
0.97	1	0.78	1	0.97	1	0.78	1	0.96	1	0.72	1	0.96	1	0.72	1
1.05	149	0.83	147	1.06	131	0.79	129	0.95	152	0.78	143	0.96	130	0.71	121
β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n	β_L	n	β_U	n
31/12/2018															
5Y net liq. incl.				5Y net liq. excl.				2Y net liq. incl.				2Y net liq. excl.			
1.41	6	1.27	6	1.44	5	1.22	5	1.14	6	1.06	6	1.14	5	0.97	5
1.03	3	0.93	3	1.03	3	0.93	3	1.04	3	0.93	3	1.04	3	0.93	3
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.62	1	0.66	1	-	-	-	-	0.85	1	0.87	1	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.94	6	0.87	6	0.80	4	0.69	4	1.06	6	1.00	6	1.03	5	0.92	5
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.11	16	1.02	16	1.12	12	0.97	12	1.07	16	1.00	16	1.07	13	0.94	13

Individual betas by geographical zone	5Y net liq. incl.		5Y net liq. excl.		2Y net liq. incl.		2Y net liq. excl.	
	β_L	β_U	β_L	β_U	β_L	β_U	β_L	β_U
31/12/2018								
United States of America	1'493	1'163	1'184	859	1'562	1'232	1'242	913
Canada	195	159	163	129	203	170	177	144
Central and South America	118	93	99	75	130	104	109	83
European Union and other Western European countries	928	796	760	633	947	814	778	648
Russia and other Eastern European countries	20	18	15	13	24	21	18	16
Southern and Eastern Mediterranean and Gulf countries	172	141	127	96	165	136	129	100
Sub-Saharan Africa	56	43	52	39	56	43	48	35
Central and South Asia	231	185	170	126	225	180	156	111
East Asia	5'201	4'789	2'920	2'581	5'182	4'767	2'885	2'522
Oceania and Pacific	145	124	120	102	145	123	124	104
Global	8'559	7'511	5'610	4'653	8'639	7'590	5'666	4'676
	5Y net liq. incl.		5Y net liq. excl.		2Y net liq. incl.		2Y net liq. excl.	
United States of America	17,4%	15,5%	21,1%	18,5%	18,1%	16,2%	21,9%	19,5%
Canada	2,3%	2,1%	2,9%	2,8%	2,3%	2,2%	3,1%	3,1%
Central and South America	1,4%	1,2%	1,8%	1,6%	1,5%	1,4%	1,9%	1,8%
European Union and other Western European countries	10,8%	10,6%	13,5%	13,6%	11,0%	10,7%	13,7%	13,9%
Russia and other Eastern European countries	0,2%	0,2%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%
Southern and Eastern Mediterranean and Gulf countries	2,0%	1,9%	2,3%	2,1%	1,9%	1,8%	2,3%	2,1%
Sub-Saharan Africa	0,7%	0,6%	0,9%	0,8%	0,6%	0,6%	0,8%	0,7%
Central and South Asia	2,7%	2,5%	3,0%	2,7%	2,6%	2,4%	2,8%	2,4%
East Asia	60,8%	63,8%	52,0%	55,5%	60,0%	62,8%	50,9%	53,9%
Oceania and Pacific	1,7%	1,7%	2,1%	2,2%	1,7%	1,6%	2,2%	2,2%
Global	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

