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List of acronyms

AAFLA	Asian-American Free Labour Association	EU ETS	European Union Emission Trading System
APV	Adjusted Present Value	FCF	Future free Cash Flow
ASEAN	Association of Southeast Asian Nations	FDI	Foreign Direct Investment
ASP	Application Service Provider	GATT	General Agreement on Tariffs and Trade
B2B	Business-to-Business	GBU	Global Business Unit
B2C	Business-to-Consumer	GBS	Global Business Service
BATNA	Best Alternative to a Negotiated Agreement	GCI	Global Capability Index
BIT	Bilateral Investment Treaty	GDP	Gross Domestic Product
BOT	Build, Operate and Transfer	GDP/Cap	Gross Domestic Product per capita
BPI	Bribe Payers Index	GHG	Greenhouse Gas
BPO	Business Process Outsourcing	GII	Global Innovation Index
BSR	Business for Social Responsibility	GM	General Manager
C2C	Customer-to-Customer	GNI	Gross National Income
CCA	Cost of Capital Adjustments	GNI/Cap	Gross National Income per capita
CCT	Cross-Company Teams	GRI	Global Revenue Index
CEO	Chief Executive Officer	GTCI	Global Talent Competitiveness Index
CFT	Cross Functional Teams	HRM	Human Resource Management
COO	Chief Operations Officer	IFI	International Financing Institution
CPI	Corruption Perceptions Index	II	Internalization Index
CSR	Corporate Social Responsibility	ILO	International Labour Organization
DFI	Development Finance Institution	IMF	International Monetary Fund
EBC	European Business Center	INSEAD	European Institute of Business Administration
EEC	European Economic Community	IPR	Intellectual Property Rights
EDI	Electronic Data Interchange	ITO	IT Outsourcing
EPP	Environmental Preferable Purchasing	JV	Joint Venture
EPZ	Export Processing Zone	LCC	Low-Cost Countries
ERP	Enterprise Resource Planning	M&A	Mergers and Acquisitions
EU	European Union	MNC	Multinational Corporation
		NAFTA	North American Free Trade Agreement

NGO	Non-Governmental Organization	SMO	Selling and Markets Operation
NPV	Net Present Value	SRI	Socially Responsible Investing
OECD	Organisation for Economic Co-operation and Development	TBL	Triple Bottom Line
OEM	Original Equipment Manufacturing	TCN	Third-Country National
P&L	Profit and Loss	TI	Transparency International
PCN	Parent-Country National	TNC	Transnational Corporation
PPP	Public–Private Partnership	TNI	Transnational Index
PPP	Purchasing Power Parity	UDHR	Universal Declaration of Human Rights
PTA	Preferential Trade Agreement	UN	United Nations
R&D	Research and Development	UNCTAD	United Nations Conference on Trade and Development
RBU	Regional Business Unit	UNEP	United Nations Environment Programme
RHQ	Regional Headquarters	UNESCO	United Nations Educational, Scientific and Cultural Organization
ROI	Return on Investment	WACC	Weighted Average Cost of Capital
RTA	Regional Trade Agreement	WEF	World Economic Forum
SBP	Sourcing Business Partner	WTO	World Trade Organization
SBU	Sector Business Unit	ZOPA	Zone of Possible Agreement
SBU	Strategic Business Unit		
SDG	Sustainable Development Goal		
SEM	Single European Market		
SME	Small and Medium-sized Enterprise		

Appendices

Appendix I.1 List of further potential case studies to be used to support the book (2015 and beyond)

Amity = Amity Research Centre, Bangalore, India; Darden = Darden School of Business, Charlottesville, Virginia, USA; ERB = ERB Institute, University of Michigan, USA; HBS = Harvard Business School, Cambridge, Massachusetts, USA; IBS = ICFAI Business School, Centre for Management Research, Ahmedabad, India; IIMA= Indian Institute of Management Ahmerabad; IMD = International Institute for Management Development, Lausanne, Switzerland; INSEAD = Fontainebleau, France–Singapore; ISB = Indian School of Business, Hyderabad, India; Ivey = Richard Ivey School of Business, Toronto, Canada; Kedge BS = Kedge Business School Nanyang, Nanyang Technological University; Thunderbird = Thunderbird School of Global Management, Glendale, Arizona, USA .

Chapter	Cases	Reference
Chapter 1 Globalization of Markets and Competition	<ul style="list-style-type: none"> • The Global Semiconductor Industry • Rechargeable Batteries 2017: Gigafactories wars in the offing? • The Global Oil and Gas Industry • Pfizer and the Challenges of the Global Pharmaceutical Industry (A), (B) • Chateau Margaux: Launching the third wine • Nordea and the European Market for Banking and Financial Services in 2015 • Continental and the Global Tire Industry in 2016 	Thunderbird SGM (2021) HBS (2021) Thunderbird SGM (r 2020) Ivey (2019) HBS (2016) INSEAD (2016) INSEAD (2017)
Chapter 2 The Emerging Global Environment	<ul style="list-style-type: none"> • Amazon in Emerging Markets • GOL Linhas Aeras Inteligente: Developing a Brazilian Airline Model • Digital Transformation in Latin America • UBER Africa • Monte Calçados • Huawei Smartphone Strategy • UBER vs DIDI: The race for China Ride Haiing Market • Volkswagen Trucks at a (Bumpy) Brazilian Crossroad • Banco do Brasil: From Brazil to the World • India and the Emerging Markets 	Michigan SOM (2014–2019) (INSEAD 2021) INSEAD (2020) IVEY. (2019) HBS (2018) INSEAD (2017) INSEAD (2017) INSEAD (2017) INSEAD (2016) Jaipura Institute of Management (2016)

Chapter	Cases	Reference
Chapter 3 Globalization, Societies and Cultures	<ul style="list-style-type: none"> ● Goldman Sachs and 1MDB ● The In-box ● The India railways Cash-cow (A), (B) ● Cheetah Mobile Cross-cultural clashes ● Negotiating With Chinese Business Partners: What Are You Going To Give Us? ● Camel's Milk and Lamb's Liver General Instructions, (A), (B), (C), (D) ● Cross Cultural Management In Papua New Guinea: Industrial Disharmony In The Mining Sector ● The Iranian Nuclear Negotiation (A), (B) ● The Indonesian Strategy Case (A), (B) ● The X-Caliber Project (A), (B) Short Articles: <ul style="list-style-type: none"> ● Bridging the Cultural Divide ● Understanding China ● Negotiating with Chinese Partners ● Emanuel Faber at Danone: Man on a Mission ● Sucafina: From Traders to Changemakers 	INSEAD (2021) INSEAD (2021) INSEAD (2020) Tsinghua (2018) IVEY (2016) INSEAD (2016) Dalhousie University (2015) ESSEC IRENE (2015) INSEAD (2015) INSEAD (2015) HBS (2021) HBS (2015) Ivey (2016) INSEAD (2022) INSEAD (2021)
Chapter 4 Globalization, Sustainable Development and Social Responsibility	<ul style="list-style-type: none"> ● Banking on EIB to lead Sustainable Finance ● Doing Business in Brazil after Operation Car Wash (A), (B) ● Greenland and the Paris agreement ● Does Sustainability Pay: Berry Callebaut's Sustainability improvement ● MSCI Low Carbon Indices ● Planting the Seeds or squandering the Fruits ● Leaks, Dumps and Whistleblowers Tax Havens and Wealth Inequality ● Unilever's New Global Strategy: Competing Through Sustainability ● Engie: Strategic transformation of an Energy Conglomerate ● Governance and Sustainability at Nike ● ITC e-Choupal Revolutioning Agriculture (A), (B) ● Disrupting Dengue with an Emerging Markets Launch Strategy ● INEOS ChlorVinyls (A), (B): A Positive Vision for PVC ● SGFE Cambodia (A), (B): High-energy Char Briquettes for the Bottom of the Pyramid ● Corruption in Russia: Ikea's Expansion to the East (A), (B), (C), (D) ● The Rise of Inequality (A), (B) ● Unilever in Vietnam: The 'Perfect Village' Initiative 	INSEAD (2021) INSEAD (2021) Harvard Kennedy School (2021) INSEAD (2020) INSEAD (2020) INSEAD (2019) INSEAD (2018) HBS (2017) Stanford (2016) HBS (2016) INSEAD (2016) INSEAD (2016) INSEAD (2016) INSEAD (2016) INSEAD (2016) Esmt (2016) INSEAD (2015) INSEAD (2015)

Chapter	Cases	Reference
	<ul style="list-style-type: none"> • BASIX: Microfinance is But a Part of the Solution • The Man in the Mirror (A) (B) • GlaxoSmithKline: U.S. Sales Practices • Ziqitza Health Care Limited: Responding to Corruption 	INSEAD (2015) INSEAD (2015) INSEAD (2015) INSEAD (2015)
Chapter 5 Designing a Global Strategy	<ul style="list-style-type: none"> • Amazon.com 2021 • General Motors Global Strategy • OYO Global Expansion • Carmine Tea South Africa Born Global • Wework Born Global • Bitmovin Born Global • Ant Financial (A) • Cotsco Wholesale Corpor Global Strategy • Yildiz Global Expansion • Walmart Around the World • Da jiang innovators • Uber (B): Uber in Every City • Uber and the Sharing Economy • Netflix Global Expansion 	HBS (2021) Thunderbird (2020) Ivey (2020) Ivey (2020) Ivey 2020 Ivey (202) HBS (2019) Ivey (2019) Ivey (2018) Nanyang (2017) Nanyang (2017) HBS (2017) ERB (2017) Ivey (2016)
Chapter 6 Assessing Countries' Attractiveness	<ul style="list-style-type: none"> • Business System Analysis (Background note) • Concise Profiles Series 2021, 12 Cases: Thailand, Vietnam, South Korea, Malaysia, India, China, Indonesia, Singapore, Hong Kong, Taiwan, Japan, Philippines • Systemic Country risk: Venezuela • Systemic Country risk: Egypt • Systemic Country risk: Argentina • Veracity Worldwide: Evaluating FCPA-Related Risks in West Africa • Two-A-Day: A Choice of Target Market Selection of Apple Export Business • 3-P Turbo cross border investment in Brazil 	INSEAD (2021) INSEAD (2021) Kedge BS (2019) Kedge BS (2019) Kedge BS (2019) HBS (2017) Business case Journal (2016:23-2) Thunderbird (2016)
Chapter 7 Entry Strategies	<ul style="list-style-type: none"> • Air Asia India • Sarva Pharmaceutical in Myanmar • Glami Global Expansion • Huawei and US Ban • Maha Research • Netflix's Entry Into India • Starbucks Enters India: The Indomitable Competitor or Underdog? • Ikea in Saudi Arabia (A), (B) • Huawei Enters the United States • Mauboussin 	IIMA (2021) Ivey (2020) Ivey (2019) Hong Kong University (2019) Ivey (2017) Times Centre For Learning Ltd (2016) Journal of Cases Studies, Vol 34, n°2, 2016 HBS (2016) Ivey (2015) HBS (2015)

Chapter	Cases	Reference
Chapter 8 Global Mergers, Acquisitions and Strategic Alliances	<ul style="list-style-type: none"> • Founders Factory • German Robotics and Chinese Money • The Mouse and the Fox • Midea Acquisition of Robotics • Nestlé alliance with Starbucks • PSA Acquisition of Opel • Toyota Tsusho Acquisition of CFAO • Wanxiang Group Global Strategy (C) • Huawei Leica Alliance • Hisense-Hitachi Joint Venture (A): Expanding Internationally • Hisense-Hitachi Joint Venture: Expanding in Southeast Asia • Execution and Performance of Strategic Alliances in Indian Software Industry • Starbucks Coffee (B): A Joint Venture with Tata Global Beverages? (Overhead Case) • Canon Inc.: Ambitious Acquisitions in the Video Surveillance Market • Steinhoff International: Realising Global Dream Through Acquisitions 	<p>HBS (2021) University of Hong Kong (2020) INSEAD (2019) Ivey (2019) Amity (2019) Ivey (2018) Ivey (2018) HBS (2018)</p> <p>Ivey (2016)</p> <p>Ivey (2016) IIT Delhi (2016)</p> <p>IMD (2015)</p> <p>Ivey (2016)</p> <p>Amity (2016)</p>
	<ul style="list-style-type: none"> • Foxconn's Acquisition of Sharp: Dreams of Building a Global Brand? • Sany's Cross-Border Acquisition, Integration, and Strategic Renewal • Sunac's Acquisition of Greentown in the Chinese Real Estate Market (A), (B), (C) • Bright Food Group: Banking on Acquisitions for Global Expansion 	<p>Amity (2016)</p> <p>Ivey (2016)</p> <p>INSEAD (2016)</p> <p>Amity (2015)</p>
Chapter 9 Global Marketing	<ul style="list-style-type: none"> • Analytic Driven Transformation at Majid Al Futtain • Accor Hotel and the Digital transformation • Tag Heuer Carrera Connected Watch (A), (B) • Capuros Foods Malaysia • Yalla Momos targetting the Expatriates • Chalhoub Group: a Luxury Success Story in the Middle East • Harmony Water: Refreshing the World • Heineken Strategy to Dominate Global Beer • From Heineken with Love: James Bond Product Promotion • Heineken Brewing a Better World (B) • Mahindra & Mahindra: Marketing A Low-Priced Mini-Tractor • Evolution of VivaKi at Publicis: Navigating the Digital Transformation of Marketing • Ombre, Tie-Dye, Splat Hair: Trends or Fads? "Pull" and "Push" Social Media • D-Light Design 	<p>INSEAD (2020) INSEAD (2020) INSEAD (2019) HBS (2018) Ivey (2017) INSEAD (2017) Amity (2017) HBS (2017) Darden (2017)</p> <p>HBS (2016) IVEY (2016) INSEAD (2016)</p> <p>HBS (2016)</p> <p>INSEAD (2016)</p>

Chapter	Cases	Reference
Chapter 10 Global Operations and Digital Networks	<ul style="list-style-type: none"> • Stefanini and the Digital Revolution: Transforming or Being Transformed • Fuyao Glass America: Sourcing Decision • AccorHotels and the Digital Transformation: Enriching Experiences Through Content Strategies Along the Customer Journey • Huawei Struggling to Develop a more Sustainable Supply Network • Facebook Fake News in the Post-Truth World • Fashion Forward Dubai: Digitally Transforming the Fashion Industry • Building the Digital Manufacturing Enterprise of the Future at Siemens • Amazon, Apple, Facebook, and Google 2018 • Supply Chain Hubs in Global Humanitarian Logistics • 3m Canada: The Health Care Supply Chain • Uniqlo: A Supply Chain Going Global • Prima: Building Infrastructure for Growth • Nissan: Recovering Supply Chain Operations • JBS Fribol: Building a Global Company • Shanghai Toex Trading Co.: The Going Global Challenge 	<p>INSEAD (2021)</p> <p>HBS (2020)</p> <p>INSEAD (2020)</p> <p>IVEY (2020)</p> <p>IMD (2020)</p> <p>HBS (2019)</p> <p>HBS (2018)</p> <p>HBS (2018)</p> <p>INSEAD (2017)</p> <p>IVEY (2015)</p> <p>IVEY (2016)</p> <p>IVEY (2016)</p> <p>IVEY (2016)</p> <p>INSEAD (2016)</p> <p>IVEY (2016)</p>
Chapter 11 Global Innovation	<ul style="list-style-type: none"> • Plug and Play Matching Corporates with Start-ups to Accelerate Open Innovation • Enel's Innovability: Global Open Innovation and Sustainability • Takeda pharmaceutical Company Limited (A), (B) • Group Managing Open Innovation • Embraer Group A Brazilian Global Innovator • BT Group Managing Global Open Innovation • Open Innovation at Huawei • CISCO India (A): Innovation in Emerging Market • CISCO India (B): Bootstrapping for Innovation • Shenzhen Fitroil: Finding balance 	<p>INSEAD (2021)</p> <p>INSEAD (2021)</p> <p>HBS (2020)</p> <p>INSEAD (2019)</p> <p>INSEAD (2019)</p> <p>INSEAD (2019)</p> <p>HKUST (2016)</p> <p>IMD (2016)</p> <p>IMD (2016)</p> <p>Darden (2015)</p>
Chapter 12 Global Financial Management	<p>International Tax Reform: G20/OECD Two-Pillar Solution</p> <ul style="list-style-type: none"> • Walmart Flikkart – A deal worth its price • Saskpower US Debt – Hedging Currency Exposure • Goodby IMF Conditions, Hello Chinese Capital • Infrastructure Investment: Unlocking Pension Funds Investments • IFC Asset Management: Mobilizing Capital for Development • 3-P Turbo: Cross Border Investemnt in Brazil • Nextel Peru Emerging Market Cost of Capital • Rutas De Lima • The Privatization Of Aluminium Bahrain 	<p>INSEAD (2022)</p> <p>ISB (2020)</p> <p>IVEY (2018)</p> <p>HBS (2018)</p> <p>HBS (2018)</p> <p>Stanford (2016)</p> <p>Thunderbird (2016)</p> <p>HBS (2015)</p> <p>INSEAD (2016)</p> <p>INSEAD (2016)</p>

Chapter	Cases	Reference
	<ul style="list-style-type: none"> • Did Apple Pay Too Little Tax? Appealing the EU Ruling On Illegal State Aid • The Pipeline Company: Financing for China's MNGPP • Shenzhen Fitroil Finding Balance • AES Tiete: Expansion Plant in Brazil 	INSEAD (2016) Ivey (2016) Darden (2015) Darden (2015-2016)
Chapter 13 Global Human Resource Management	<ul style="list-style-type: none"> • Aligning Incentives in the Public-School System Across the Democratic republic of Congo • Web Teb (A), (B): A Very Palestinian Dilemma • Bold and Responsible Leadership in Uncharted Waters • ABB India: Leveraging Diversity and Inclusion • Global Leadership in a Dynamic and Evolving Region: Molinas@Coca-Cola (A), (B), (C), (D) • Leadership Crisis at Steelworks' Xiamen Plant • Altessa Motors: Ericka Schmidt in China • Larson in Nigeria • Precena Strategic Partners: Staff Relocation Cost Minimization 	INSEAD (2021) INSEAD (2021) SMU (2018) IVEY (2015) HBS (2017) Ivey (2016) Ivey (2015) Ivey (2015) Ivey & SMU (2015)
Chapter 14 Designing a Global Organization	<ul style="list-style-type: none"> • Forbidden City: Launching a Craft Beer in China • The Future of GE Global Growth Organization • Coesia: Choosing an Operatin Model to Support its Transformation Journey (A), (B) 	HBS (2020) HBS (2020) Ivey (2019)
	<ul style="list-style-type: none"> • Embracing Digital: ING's Journey to a New way of Working • Google's Global Business Organization: Managing Innovation at Scale • Lenovo: The Next Step in Leadership • Thai Union: The Making of a World-Leading Seafood Company • Philips Healthcare Latin America • Wildfire Entertainment: Organizational Structure Archetypes 	INSEAD (2018) Stanford BS (2020) INSEAD (2020) IMD (2017) HBS (2015) INSEAD (2015)
Chapter 15 Current and Future Trends in Globalization	<ul style="list-style-type: none"> • Global Scenarios 2035 • Climate Change 2021 The Physical Science basis • Are Scenarios Limiting Your Pandemic Recovery (article) • Globalization, Robots, and the Future of Work (article) 	OECD (2021) IPCC (2021) McKinsey Quarterly (2020) HBS (2016)

The cases cited above can be acquired from the following websites:

ECCH, The Case Centre: <http://www.thecasecentre.org>

HBS cases, Harvard Business School Publishing: <https://cb.hbsp.harvard.edu>

INSEAD cases, INSEAD Publishing: <https://publishing.insead.edu/>

One can also consult cases at:

Asian Business Case Centre: <http://www.asiacase.com/>

CEIBS: <http://www.chinacases.org>

Darden School of Business: <https://store.darden.virginia.edu/>

IMD: <http://www.imd.org/research/information/tofind/cases.cfm>

ISB, Indian School of Business: <http://www.isb.edu/faculty-research/research/case-simulation-pedagogy>

ipcc: https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf

Ivey Business School: <http://www.ivey.uwo.ca/cases>

Thunderbird School of Global Management: <https://thunderbird.asu.edu/faculty-and-research/case-series>

In addition one may find useful cases studies in the following journals:

International Journal of Management Cases (IJMC): <https://www.circleinternational.co.uk/journals/ijmc/>

Journal of Case Studies: <https://sfc.org/jcs/>

Global business-related video clips are available on YouTube. See, for instance, an introduction to global strategies on <http://www.youtube.com/watch?v=9M5wWSA5vQQ>

Business video clips can be used as a complement for case studies. For instance, there are several videos available through the INSEAD Knowledge website <https://knowledge.insead.edu/videos>

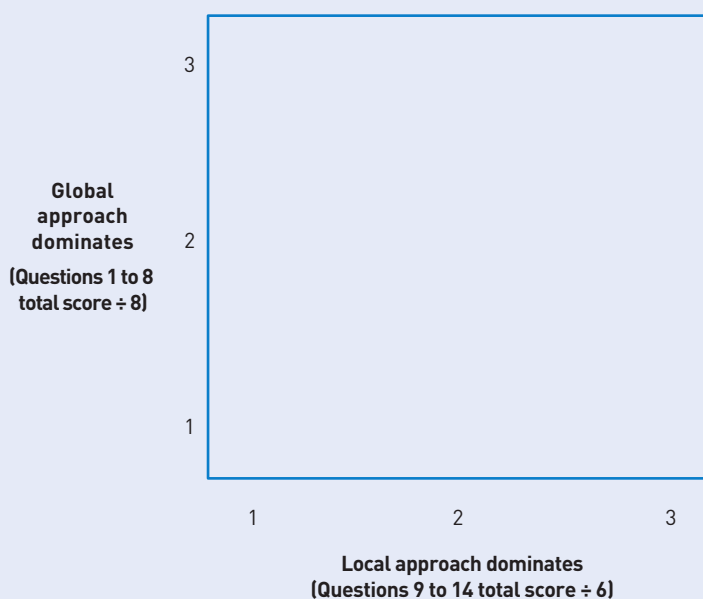
Appendix 1.1 Positioning a business on global/multi-local mapping

Assign a score for each question from 1 to 3 (2 points = halfway between the two opposites listed).

		1 point =	3 points =
1	To what extent do customers have similar demands for functionality and design across countries?	Very different	Very similar
2	To what extent do products or services have a high proportion of standard components across countries?	Low proportion of standard components	High proportion of standard components
3	To what extent are customers (or distributors) themselves operating in different countries and buying centrally your products or services?	Buying locally	Buying centrally
4	To what extent are significant economies of scale in your industry important for the cost of the product (i.e. one needs very high volume to obtain low cost)?	Low economies of scale	High economies of scale
5	To what extent is the speed of introducing new products worldwide important for competitiveness?	Speed is not that important	Speed is very important
6	To what extent are the sales of your product or service based on technical or cultural factors?	Highly cultural	Highly technical
7	To what extent can experience gained in other countries by a 'sister' subsidiary be successfully applied in other countries?	No great benefits	Yes, highly beneficial
8	To what extent do competitors in your industry operate in a 'standardized' way across countries and are successful in doing so?	Competitors are localizing	Competitors are successful in standardized approaches
9	To what extent can pricing be different from country to country without introducing dysfunctionalities?	Pricing has to be consistent across borders	Pricing can be very different

10	To what extent does distribution channel management differ from country to country?	Not so different	Yes, very different
11	To what extent do business regulations and contexts differ from country to country, requiring big differences in local practices?	Not so different	Highly different
12	To what extent do products or services require a high degree of interaction with customers (customization)?	Low customization	High customization
13	To what extent are transportation costs high compared to the product costs?	Not so high	Very high
14	To what extent is the customer interface critical for success?	Not critical	Very critical

Questions 1 to 8 represent the importance of global forces while questions 9 to 14 represent the importance of local forces. Divide global forces total by 8 and local total by 6. It is then possible to map a business in the following matrix:



Appendix 2.1 World Bank grouping of countries by income level (based on Gross National Income (GNI) per capita)

Low-income economies (\$1,035 or less)			
Afghanistan	Gambia, The	Mali	Syrian Arab Republic
Burkina Faso	Guinea	Mozambique	Tajikistan
Burundi	Guinea-Bissau	Niger	Togo
Central African Republic	Haiti	Rwanda	Uganda

Chad	Korea, Dem. People's Rep.	Sierra Leone	Yemen, Rep.
Congo, Dem. Rep	Liberia	Somalia	
Eritrea	Madagascar	South Sudan	
Ethiopia	Malawi	Sudan	
Lower-middle income economies (\$1,036 to \$4,045)			
Angola	Egypt, Arab Rep.	Moldova	Sri Lanka
Algeria	El Salvador	Mongolia	Tanzania
Bangladesh	Eswatini	Morocco	Timor-Leste
Benin	Ghana	Myanmar	Tunisia
Bhutan	Honduras	Nepal	Ukraine
Bolivia	India	Nicaragua	Uzbekistan
Cabo Verde	Kenya	Nigeria	Vanuatu
Cambodia	Kiribati	Pakistan	Vietnam
Cameroon	Kyrgyz Republic	Papua New Guinea	West Bank and Gaza
Comoros	Lao PDR	Philippines	Zambia
Congo, Rep.	Lesotho	São Tomé and Príncipe	Zimbabwe
Côte d'Ivoire	Mauritania	Senegal	
Djibouti	Micronesia, Fed. Sts.	Solomon Islands	
Upper-middle-income economies (\$4,046 to \$12,535)			
Albania	Dominica	Kosovo	Serbia
American Samoa	Dominican Republic	Lebanon	South Africa
Argentina	Equatorial Guinea	Libya	St. Lucia
Armenia	Ecuador	Malaysia	St. Vincent and the Grenadines
Azerbaijan	Fiji	Maldives	Suriname
Belarus	Gabon	Marshall Islands	Thailand
Belize	Georgia	Mexico	Tonga
Bosnia and Herzegovina	Grenada	Montenegro	Turkey
Botswana	Guatemala	Namibia	Turkmenistan
Brazil	Guyana	North Macedonia	Tuvalu
Bulgaria	Indonesia	Paraguay	Venezuela, RB
China	Iran, Islamic Rep.	Peru	
Colombia	Iraq	Russian Federation	
Cuba	Jamaica	Samoa	

High-income economies (\$12,536 or more)			
Andorra	Faroe Islands	Lithuania	Seychelles
Antigua and Barbuda	Finland	Luxembourg	Singapore
Aruba	France	Macao SAR, China	Sint Maarten (Dutch part)
Australia	French Polynesia	Malta	Slovak Republic
Austria	Germany	Mauritius	Slovenia
Bahamas, The	Gibraltar	Monaco	Spain
Bahrain	Greece	Nauru	St. Kitts and Nevis
Barbados	Greenland	Netherlands	St. Martin (French part)
Belgium	Guam	New Caledonia	Sweden
Bermuda	Hong Kong SAR, China	New Zealand	Switzerland
British Virgin Islands	Hungary	Northern Mariana Islands	Taiwan, China
Brunei Darussalam	Iceland	Norway	Trinidad and Tobago
Canada	Ireland	Oman	Turks and Caicos Islands
Cayman Islands	Isle of Man	Palau	United Arab Emirates
Channel Islands	Israel	Panama	United Kingdom
Chile	Italy	Poland	United States
Croatia	Japan	Portugal	Uruguay
Curaçao	Korea, Rep.	Puerto Rico	Virgin Islands (US)

Source: <https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups> (accessed 16 June 2021).

Appendix 2.2 A profile of selected countries considered in the chapter

Table A2.1 Country profiles

Lower middle-income economies							
	Bolivia	Egypt	India	Ivory Coast	Nigeria	Ukraine	Vietnam
Demography							
Population, total million	11.5	100.4	1,366.4	25.7	201.0	44.4	96.5
Urban population (% of total population)	69.8	42.7	34.5	51.2	51.2	69.5	36.6

Economic data							
GDP (US\$ m)	40,895	303,092	2,868,929	58,539	448,120	153,781	261,921
GDP growth (average 2009– 2019 %)	4.5	3.9	6.8	6.0	4.0	-0.9	6.2
GDP per capita (current US\$)	3,552	3,019	2,100	2,276	2,230	3,659	2,715
GDP/capita, PPP (current US\$)	9,111	12,284	6,997	5,443	5,363	13,341	8,397
GDP, PPP (current US\$ m)	104,891	1,233,148	9,560,220	139,981	1,077,719	562,213	809,994
Foreign direct investment, net inflows (average 2009–2019 US\$ m)	640	5,801	37,033	537	5,187	4,535	10,874
Households and final consumption expenditure (% of GDP)	68.4	82.9	60.3	68.7	73.5	75.3	68.2
Gross capital formation (% of GDP)	19.9	17.7	29.7	20.1	26.2	12.6	26.8
Exports of goods and services (% of GDP)	25.0	17.5	18.4	23.8	14.2	41.2	106.8
Imports of goods and services (% of GDP)	31.4	25.8	21.1	22.6	19.8	49.0	103.6
Infrastructure							
Internet users (per 100 people)	44	57	20.0	36	8.0		
Mobile cellular subscriptions (per 100 people)	102	95	84	145	92	131	141
Ease of doing business							
Ranking	150	114	63	110	131	64	70
Score	51.7	60.1	71.0	60.7	56.9	70.2	69.8

Governance indicators (from -2.5 to 2.5)							
Control of corruption	-0.74	-0.67	-0.23	-0.53	-1.09	-0.71	-0.51
Government effectiveness	-0.70	-0.42	0.17	-0.48	-1.09	-0.30	0.04
Rule of law	-1.12	-0.42	-0.03	-0.57	-0.90	-0.70	-0.02
Regulatory quality	-0.99	-0.83	-0.16	-0.24	-0.86	-0.26	-0.26
Political stability and absence of violence/terrorism	-0.62	-1.07	-0.70	-0.96	-1.93	-1.52	0.13
Voice and accountability	-0.09	-1.43	0.29	-0.22	-0.41	0.06	-1.38
Upper middle-income economies							
	Brazil	China	Indonesia	Mexico	South Africa	Turkey	Russia
Demography							
Population, total million	211	1397.7	270.6	127.6	58.6	83.4	144.4
Urban population (% of total population)	87	60	56	80	67	76	75
Economic data							
GDP (US\$ m)	1,839,758	14,279,937	1,119,191	1,268,871	351,432	761,425	1,699,877
GDP growth (average 2009–2019 %)	1	7.8	5.3	2	1.4	5	1.0
GDP per capita (current US\$)	8,717.2	10,217	4,136	9,946.0	6,001	9,126.6	11,585
GDP/capita, PPP (current US\$)	15,300	16,804	12,335	20,448	13,034	27,318	29,181
GDP, PPP (current million US\$)	3,229,055	23,487,798	3,338,144	2,608,650	763,258	2,279,166	4,315,443
Foreign direct investment, net inflows (average 2009–2019 US\$ m)	75,186	220,870	18,097	31,464	4,554	12,794	35,035

Households and final consumption expenditure (% of GDP)	64.9	39	58	65	60	57	50
Gross capital formation (% of GDP)	15	43	34	21	18	25	23
Exports of goods and services (% of GDP)	14	18	18	39	30	33	28
Imports of goods and services (% of GDP)	15	17	19	39	29	30	21
Infrastructure							
Internet users (per 100 people)	70	54	48	70	20	74	83
Mobile cellular subscriptions (per 100 people)	96	122	126	96	85	97	164
Ease of doing business							
Ranking	124	31	73	60	84	33	28
Score	59.1	78	70	72	67	77	78
Governance indicators (from -2.5 to 2.5)							
Control of corruption	-0.33	-0.32	-0.42	-0.82	0.08	-0.29	-0.51
Government effectiveness	-0.19	0.52	0.18	-0.16	0.37	0.05	0.04
Rule of law	-0.18	-0.27	-0.34	-0.66	-0.08	-0.28	-0.02
Regulatory quality	-0.18	-0.24	-0.09	0.10	0.16	-0.01	-0.26
Political stability and absence of violence/terrorism	-0.55	-0.24	-0.48	-0.71	-0.22	-1.34	0.13
Voice and accountability	0.34	-1.61	0.16	0.02	0.67	-0.81	-1.38
High income economies							
Demography	France	Germany	Japan	Korea	Singapore	UK	USA
Population, total million	67	83	126	51.7	5.7	66.8	328.2

Urban population (% of total population)	81	77	92	81	100	84	82
Economic data							
GDP (US\$ m)	2,715,518	3,861,124	5,081,770	1,646,739	372,063	2,829,108	21,433,226
GDP growth (average 2009– 2019 %)	1.0	1	0.7	3.1	4.5	1.3	1.8
GDP per capita (current US\$)	40,496	46,468	40,247	31,846	65,233	42,329	65,298
GDP/capita, PPP (current US\$)	49,519	55,891	42,338	42,728	101,649	48,484	65,298
GDP, PPP (current US\$ m)	3,320,559	4,644,166	5,345,808	2,209,424	579,763	3,240,511	21,433,226
Foreign direct investment, net inflows (average 2009–2019 US\$ m)	36,908.4	79,812	16,106	10,609	68,280	77,028	313,171
Households and final consumption expenditure (% of GDP)	54	52	56	49	36	65	68
Gross capital formation (% of GDP)	24	21	24	31	25	17	21
Exports of goods and services (% of GDP)	32	47	19	40	174	32	12
Imports of goods and services (% of GDP)	33	41	18	37	146	33	15
Infrastructure							
Internet users (per 100 people)	83	88	91	96	89	93	88
Mobile cellular subscriptions (per 100 people)	111	128	147	147	156	120	134
Ease of doing business							
Ranking	32	22	29	5	2	8	6
Score	76.8	80	78.0	84	86	84	84

Governance indicators (from -2.5 to 2.5)							
Control of corruption	1.30	1.90	1.48	0.76	2.16	1.77	1.22
Government effectiveness	1.38	1.59	1.59	1.38	2.22	1.44	1.49
Rule of law	1.41	1.62	1.54	1.19	1.88	1.60	1.46
Regulatory quality	1.44	1.72	1.33	1.07	2.16	1.63	1.35
Political stability and absence of violence/terrorism	0.31	0.58	1.04	0.48	1.53	0.52	0.30
Voice and accountability	1.14	1.34	0.96	0.77	-0.18	1.26	0.97

Appendix 4.1 Main non-governmental organizations involved in corporate social responsibility

Amnesty International (AI) is a worldwide movement of people who campaign for internationally recognized human rights. Its mission is to undertake research and action focused on preventing and ending grave abuses of the rights to physical and mental integrity, freedom of conscience and expression, and freedom from discrimination.

<http://www.amnesty.org>

Aspen Institute is an international non-profit organization dedicated to fostering enlightened leadership and open-minded dialogue through seminars, policy programmes, conferences and leadership.

<http://www.aspeninstitute.org/>

Center for Climate and Energy Solutions (previously the Pew Center on Global Climate Change) brings together business leaders, policy makers, scientists and other experts to take a new approach to a complex and often controversial issue. Their approach is based on sound science, straight talk and a belief that people can work together to protect the climate while sustaining economic growth. The Pew Center on Global Climate Change was established in 1998 as a non-profit, non-partisan and independent organization. The Center's mission is to provide credible information, straight answers and innovative solutions in the effort to address global climate change.

<https://www.c2es.org/>

GreenBiz is a programme of the National Environmental Education & Training Foundation. NEETF is a non-profit organization based in Washington, DC that is dedicated to advancing environmental education. It considers itself an information resource on how to align environmental responsibility with business success. It provides news and resources to large and small businesses through a combination of websites, workshops, daily news feeds, electronic newsletters and briefing papers. Resources are free to all users.

<http://www.greenbiz.com>

Greenpeace is a non-profit organization, with a presence in forty countries across Europe, the Americas, Asia and the Pacific. Greenpeace focuses on the crucial worldwide threats to our planet's biodiversity and environment.

<http://www.greenpeace.org>

Human Rights Watch started in 1978 as Helsinki Watch to monitor the compliance of Soviet bloc countries with the human rights provisions of the landmark Helsinki Accords. It is composed of lawyers, journalists, academics and country experts of many nationalities who investigate and expose human rights violations and hold abusers accountable.

<http://www.hrw.org>

Oxfam International is a confederation of twelve organizations working together with over 3,000 partners in more than 100 countries to find lasting solutions to poverty, suffering and injustice.

<http://www.oxfam.org/>

Transparency International (TI) is an international non-governmental organization devoted to combatting corruption. Through its International Secretariat in Berlin and its more than eighty-five independent National Chapters around the world, TI works at both the international and national level to curb the supply and demand of corrupt practices. In the international arena, TI raises awareness about the damaging effects of corruption, advocates policy reform, works towards the implementation of multilateral conventions and subsequently monitors compliance by governments, corporations and banks.

<http://www.transparency.org>

World Business Council for Sustainable Development (WBCSD) is a coalition of 180 international companies. Its mission is to provide business leadership as a catalyst for change toward sustainable development, and to promote the role of eco-efficiency, innovation and corporate social responsibility. Its main activities are publications, conferences and projects leadership.

<http://www.wbcscd.ch>

Appendix 4.2 Major business ethics codes

Amnesty International

Human Rights Principles for Business

<https://www.amnesty.org/download/Documents/148000/act700011998en.pdf>

The Asia-Pacific Economic Cooperation Forum

Business Code of Conduct

<http://www.apec.org>

Business Leaders Initiative on Human Rights

A Guide to Integrating Human Rights into Business Management

<http://www.blihr.org/Pdfs/GIHRBM.pdf>

Caux Round Table

Principles for Business

<http://www.cauxroundtable.org/index.cfm?menuid=8>

Coalition for Environmentally Responsible Economies (CERES)

The CERES Principles

<http://www.ceres.org/>

Clarkson Centre for Ethics

The Clarkson Principles of Stakeholder Management

<https://www.rotman.utoronto.ca/FacultyAndResearch/ResearchCentres/ClarksonCentre>

The Ethical Trading Initiative

The Ethical Trading Initiative Base Code

<http://www.ethicaltrade.org/eti-base-code>

The Fair Labor Association (FLA)

The Fair Labor Association Code of Conduct

<http://www.fairlabor.org/our-work/code-of-conduct>

Interfaith Declaration

A Code of Ethics on International Business for Christians, Muslims and Jews

<https://s3.amazonaws.com/berkeley-center/921130InterfaithDeclarationCodeEthicsBusiness.pdf>

International Confederation of Free Trade Union (ICFTU) and International Trade Secretariats (ITS)

Basic Code of Labor

http://training.itcilo.it/actrav_cdrom1/english/global/guide/icftuco.htm

International Council of Chemical Associations

Template Responsible Care Global Charter

<https://responsiblecare.americanchemistry.com/Responsible-Care-Program-Elements/Guiding-Principles/PDF-Responsible-Care-Guiding-Principles.pdf>

International Labour Organization (ILO)

The ILO Declaration of Fundamental Principles and Rights at Work

www.ilo.org/declaration

Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy

<http://www.ilo.org/public/english/standards/norm/sources/mne.htm>

Organisation for Economic Co-operation and Development (OECD)

The OECD Guidelines for Multinational Enterprises

<http://www.oecd.org/dataoecd/56/36/1922428.pdf>

OECD Principles of Corporate Governance

<http://www.oecd.org/dataoecd/32/18/31557724.pdf>

Social Accountability International

SA 8000 Standards

<http://www.sa-intl.org>

Social Venture Network

SNV Standards of Corporate Social Responsibility

<http://www.svn.org/>

United Nations

The United Nations Global Compact

<https://www.unglobalcompact.org/what-is-gc/mission/principles>

United Nations Convention against Corruption

<https://www.unodc.org/unodc/en/treaties/CAC/>

The United Nations Draft Human Rights Principles and Responsibilities for Transnational Corporations and Other Business Enterprises

<http://www1.umn.edu/humanrts/links/NormsApril2003.html>

Appendix 4.3 The OECD guidelines for multinational enterprises

The guidelines contain nine main chapters:

- 1 General principles:** sets out general areas for good corporate behaviour in the countries in which enterprises operate.
- 2 Disclosure:** deals with public dissemination of essential information on the activities of the enterprises.
- 3 Employment and industrial relations:** covers a number of issues, such as the rights and treatment of employees, and forced and child labour.
- 4 Environment:** recommendations on environmental management systems and the prevention of environmental damage.
- 5 Combatting bribery:** provides recommendations on the avoidance of bribery and other corrupt practices.
- 6 Consumer interests:** recommendations to ensure respect for all consumer rights.
- 7 Science and technology:** companies are encouraged to contribute to the development of local capacities through technology transfer.
- 8 Competition:** business competition consistent with all applicable competition laws.
- 9 Taxation:** fulfilment of tax liabilities and cooperation with the local tax authorities.

Source: *OECD Guidelines for Multinational Enterprises*, <http://www.oecd.org/dataoecd/56/36/1922428.pdf> (accessed 1 January 2021).

Appendix 5.1 Measuring corporate globalization

According to the definition given in this textbook, corporate globalization includes two major dimensions: firstly, the presence of a company in the key markets of the world and, secondly, an integrated and coordinated management of activities across the world. It is extremely difficult to measure the second dimension since no indicator is available to assess the degree of coordination and integration. Only a qualitative analysis can evaluate it. Measurements therefore concentrate on the first dimension: the extent to which a company is deployed worldwide.

There are two main approaches:

- Assessment of the proportion of activities outside the country of origin of a particular company. This method is the one adopted by UNCTAD in creating the **Transnational Index (TNI)** and **Internationalization Index (II)** for its yearly World Investment Reports.
- Assessment of the extent to which a particular company has deployed its activities in the key markets of the world in proportion to the weight of those markets. This method is the one proposed in this chapter via the **Global Revenue Index (GRI)** and the **Global Capabilities Index (GCI)**. A similar approach is adopted by Alan Rugman³⁷ who considers a company to be global when its sales are distributed across the three major regions of the world (Europe, North America, Asia) in such a way that any two regions combined do not represent more than 70 per cent.

The UNCTAD transnational index (TNI) and internationalization index (II)

Every year UNCTAD publishes in its World Investment Reports a ranking of firms according to their TNI. The TNI is calculated as the average of three ratios: foreign sales to total sales, foreign assets to total assets and foreign employment to total employment. For instance, Nestlé ranks 5th, with a TNI of 92, in the world's top 100 non-financial MNEs published by UNCTAD (UNCTAD, Annex table 24: The world's top 100 non-financial TNCs, <https://unctad.org/topic/investment/world-investment-report> (accessed 1 February 2022)). Nestlé's main competitors, Danone and Unilever, rank 9th (TNI = 86) and 13th (TNI = 83) respectively.

The global revenue index (GRI) and the global capabilities index (RCI)

These indices described above attempt to evaluate the extent to which a company's distribution of sales and capabilities reflects the industry distribution of markets. For instance, in the tyre industry the world markets are distributed as Europe (30 per cent), North America (39 per cent), Asia Pacific and the rest of the world (31 per cent), so one could argue that a perfect global firm would have its sales and assets distributed in the same proportion. Ideally both the industry and the firm would be distributed along the diagonal of Figure A5.1. In fact, nearly all firms are *not* located along the diagonal because their sales are somewhat more important in one region than in another one. For instance Goodyear's sales are distributed as North America (54 per cent), Europe (34 per cent), Asia Pacific and the rest of the world (12 per cent), that is, along the dotted line in Figure A5.1. Compared with the industry distribution, the two indices described represent the ratio between area B (Goodyear distribution) and area A (Industry distribution).

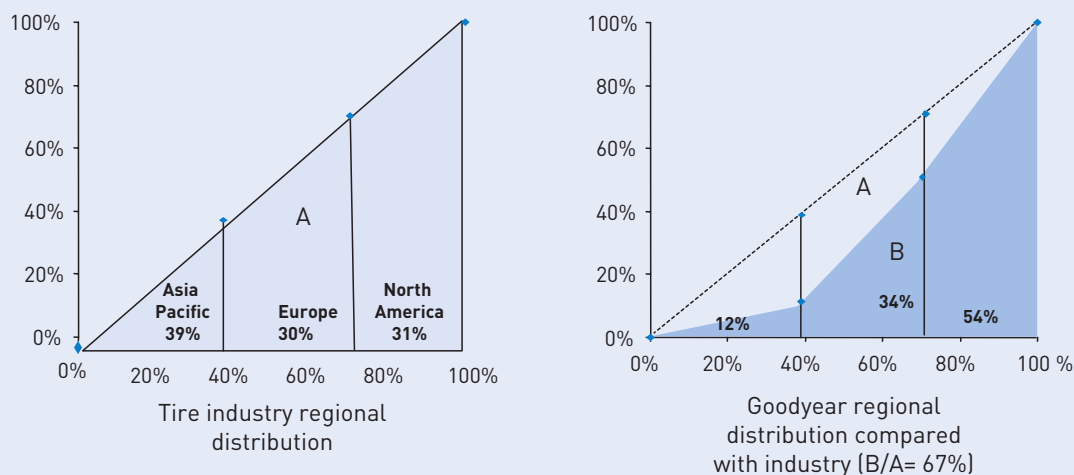


Figure A5.1 Goodyear regional distribution (B) compared to industry (B/A = 67%)

The **Global Revenue Index** (GRI) is calculated by taking the ratio of the company distribution of sales in the major world regions to the industry distribution of demand in the same regions. It is equal to the B area as a proportion of the A area. The calculation is quite complex to do since the B area is the sum of a triangle and two trapezoids (in case of three regions; there would be x-1 trapezoids in case of n regions or countries). A relatively simple way to calculate this is by using the following table.

Table A5.1 Calculating GRI of CPI

A Region/country (in ascending order of company share)	B Company Share (in ascending order)	C Industry Share (in ascending order of company share)	D Remaining Industry Share	E Score = B(C+2*D)
Ra	Ba= Company Share in Ra	Ca=Industry Share in Ra	Da=Cb+Cc+Cn..	Ea=Ba(Ca+2*Da)
Rb	Bb= Company Share in Rb	Cb=Industry Share in Rb	Db=Cc+Cn..	Eb=Bb(Cb+2*Db)
Rc	Bc= Company Share in Rc	Cc=Industry Share in Rc	Dc=Cn ...	Ec=Bc(Cc+2*Dc)
Rn Cn	Cn	Cn	En
			GRI	Sum (Ea+Eb+EcEn)

As an example, the calculation of Goodyear's GRI is shown in Table A5.2.

Table A5.2 Goodyear: calculation of GRI (2019)

A Region/country (in ascending order of company share)	B Goodyear Share (in ascending order)	C Tyre Industry Share (in ascending order of company share)	D Remaining Industry Share	E Score =B(C+2*D)
Asia + Africa	14 %	46%	71%	0.2296
Europe	32%	26%	33%	0.2844
Americas	54%	33%	0%	0.1774
			GRI	0.7032

A company whose sales distribution matches the exact distribution of its industry market would have a GRI of 100 per cent.

A company that concentrates its sales to one region and sells nothing elsewhere would obtain a GRI corresponding to the percentage of demand in this region. For instance, if Goodyear's sales were entirely concentrated in North America, Goodyear's GRI would have been 33 per cent.

GRI is used for measuring how *global* a company is. For firms engaged in an industry which is local in nature, the GRI will favour the firms that are in countries/regions with the biggest consumption for that industry. For example, in the restaurant business, which is local in nature, US restaurants would have had a higher GRI than that of Asian restaurants during the 1997 Asian Crisis simply because US people visited restaurants more often than Asians during that period. In this case, the higher GRI of the US restaurants should not be interpreted as the US restaurants being more global than their Asian counterparts because the majority of both the US and Asian restaurants are local players.

Also, for companies which implement globalization by competing in small markets (for example, South America, Eastern Europe), the GRI does not reflect the extent of the company's global sales. This is owing to the fact that the company's sales are in world markets that the other industry major global players have not yet fully explored. For example, ACER, the Taiwanese PC company, had a relatively low GRI at the early stage of its globalization strategy when it began to capture the South American markets. Nonetheless, the low GRI score correctly reflects the fact that the company did not closely resemble the industry's demand pattern. This type of company will further expand to the major world markets after establishing itself in smaller foreign markets. Once the company has established itself in the major world markets, it will have a higher GRI.

The **Global Capability Index** (GCI) is calculated in a similar way, but instead of taking the distribution of sales, one takes the distribution of *assets for capital-intensive industries* or else of *personnel*. The 'capability' described here is in-house capability, not capability which a firm can acquire through external sourcing such as outsourcing, subcontracting or strategic alliances with overseas companies in which the firm has no ownership in the alliance partner(s) and/or alliance venture. For strategic alliances in which a firm has ownership interest, one can theoretically include in the GCI calculation the proportional amount of assets which the company owns or has control over. When gathering data for the calculation

of GCI, care should be taken, and an attempt should be made to account for off-balance-sheet assets such as asset finance by sales and leaseback arrangements.

Companies which rely heavily on external sourcing will have a low GCI score. This is because the company cannot deploy resources and capabilities at will but relies on external parties to supply the capability. This reliance on external parties also means that the company can face potential problems such as product/service unavailability, time delays in delivery or price pressure from overseas suppliers.

For further information on SME Policy, the OECD created the SME Policy Index, a tool for benchmarking emerging economies to assess SME policy frameworks and monitor progress in policy implementation over time.³⁸ It was developed by the OECD in partnership with the European Commission, the European Bank for Reconstruction and Development (EBRD), and the European Training Foundation (ETF) in 2006.

Sources: SME Policy Index: Eastern Partner Countries 2020, Latin America and the Caribbean 2019, SME Policy Index: Western Balkans and Turkey 2019, SME Policy Index: ASEAN 2018, The Mediterranean Middle East and North Africa 2018.

Appendix 5.2 Selected government support programmes

Country	Programme	Objectives of programme	Focus	Finance	Environment	Capability	Access
Australia	NEDP EMDG	Assist SME in exporting Grants programme to encourage exports	E E	X			X
Canada	EXPORT help SME financial programme	Access to experts to assist exporters Finance or guaranteed financing for capital investments	E E	X		X	X X
European Union	Euro Info Centre	Provides market information	E//F				X
France	FASEP Partnership France	Guarantee against economic risks for FDI Piggybacking scheme	F F			X	
Germany	Worldwide Active	Overall support	E/I	X	X	X	X
Japan	JERO Programs	All kinds of support	E//F	X	X	X	X

Country	Programme	Objectives of programme	Focus	Finance	Environment	Capability	Access
UK	Passport to Export	Programme to enhance capabilities	E			X	
USA	SBA Passport to Export	Provide loans and information Develop trading capabilities	E	X		X	X

Note: E = Export, I = Import, F = Foreign investments and cooperation.

Source: Author's own, based on OECD (2008), Annex 1.2.

Appendix 6.1 Models and sources of countries' assessments

Organization/publication	Type of rating	Methodology
<p>World Bank Doing Business Ranking and by-country analysis of local regulations that make opening and operation of a business easier or harder http://www.doingbusiness.org</p>	<p>The <i>Doing Business</i> Project provides objective measures of business regulations and their enforcement across 183 economies down to the regional level and selected cities.</p>	<p>Quantitative measure of regulations for starting a business, dealing with construction permits, registering property, getting credit, protecting investors, paying taxes, trading across borders, enforcing contracts, closing a business.</p>
<p>World Bank and International Finance Corporation, Enterprise Survey Firm-level survey of a representative sample of an economy's private sector. The surveys cover a broad range of business environment topics including access to finance, corruption, infrastructure, crime, competition and performance measures http://www.enterprisesurveys.org/</p>	<p>Provides country profiles for 150 economies with 100 indicators and 12 industry surveys.</p>	<p>Data are collected from face-to-face interviews with top managers and business owners from more than 170,000 companies in 150 economies.</p>
<p>Fitch Solutions Previously named <i>Business Monitor International</i>, Fitch Solutions provides ongoing assessment of countries and industries as well as consulting services https://www.fitchsolutions.com/bmi-research</p>	<p>Provides industry- and country-specific reports with 5- and 10-year forecasts and in-depth analysis of current risks and future opportunities for the markets of your choice. Covers 24 major industries and monitors 200 global markets.</p>	<p><i>Risk Services</i>: Provides assessments of long-term and short-term political, economic and operational risk reports by countries. <i>Industry Intelligence</i>: data, analysis, and forecasting covering all major industries.</p>

<p>Economic Intelligence Unit Business ranking published in country forecast <i>Quarterly</i> report http://EIU.com</p>	Assess political and economic risks to rank 131 countries	Uses 220 macroeconomic variables grouped in five risks categories to establish the ranking (sovereign, currency, banking and economic structure)
<p>Central Intelligence Agency The World Factbook https://www.cia.gov/the-world-factbook/</p>	The <i>World Factbook</i> covers 26 world entities.	Provides information on history, people, government, economy, geography, communications, transportation, military and transnational issues.
<p>Research and markets Global market research information https://www.researchandmarkets.com/about-us</p>	Provides industry and company research over 800 industries across 246 territories	Gives market size, country data, forecasts, company and brand profiles, information sources and special industry reports.
<p>Business Environment Risk Intelligence https://beri.com</p>	Publishes three times a year the Business Risk Report that provides analysis and forecasts their political, operational and financial risks quantitatively and qualitatively for countries	Assessments of operating conditions, political risk and the foreign exchange/external accounts position. Computes three indices (Political risk, Operational risk, Financial risk (R factor)) to arrive at a composite Overall risk index.
<p>World Economic Forum The Global Risk Report https://www.weforum.org/reports/the-global-risks-report-2021/</p>	The <i>Global Risks Report 2021</i> features perspectives from nearly 750 experts on the perceived impact and likelihood of 30 prevalent global risks over a 10-year timeframe.	The risks are divided into five categories: economic, environmental, geopolitical, societal and technological.
<p>IMD: The World Competitiveness Yearbook Published annually https://www.imd.org/centers/world-competitiveness-center/publications/</p>	Measures 64 countries on the basis of 334 criteria. Assesses competitiveness as well as location attractiveness.	Uses statistical and survey data to score 334 criteria grouped into four main criteria: economic performance, government efficiency, business efficiency and infrastructure.
<p>Political Risk Services (PRS) International Country Risk Guide (ICRG) ICRG risk rating system https://www.prsgroup.com/explore-our-products/international-country-risk-guide/</p>	Monitors 161 countries, rating a wide range of risks to international businesses and financial institutions.	Rating comprises 22 variables in three categories of risk: political, financial and economic. A separate index is created for each of the categories.
<p>COFACE http://www.coface.com</p>	Provides Country Risk Assessment for 60 countries as well as 13 sectors in six geographical areas.	Country risk and sectors assessment are based on macroeconomic, financial and political data.

Country Risk Classification Model OECD http://www.oecd.org/tad/xcred/crc.htm	Assess country credit risk	Based on a model (The Country Risk Assessment Model) which is based on 3 assessments: payment, financial situation and political situation. It also produces a qualitative assessment based on interviews of experts.
CAGE Distance Framework Ghemawat (2007)	Introduced by Pankaj Ghemawat from the Harvard Business School, this model analyses the difference between countries and assesses the distance between the country of the investor and the host country.	The CAGE Distance Framework model analyses four kinds of difference: cultural distance, administrative distance, geographical distance and economic distance.
Business System Analysis Witt and Redding (2014)	Assesses the way economic activities are structured, coordinated and managed. It is the result of the interaction between three sub-systems: governance, culture and institutional fabric.	See Chapter 3 for a more detailed description of this method.

Note: This list is a brief selection. One can find a more complete guide to country analysis resources at <http://ggu.libguides.com/c.php?g=106866&p=693904> (accessed 1 February 2022).

Appendix 6.2 Comparison of Turkey and Egypt, 2019

	Turkey	Egypt	Difference
Demographic			
• Population, total (millions)	83	100	Low
• Population, growth (average yearly 2000–2019, %)	1.46	1.98	Significant
• Urban population (%)	75	43	Significant
Geographical			
• Surface area (thousand sq. km)	784	1,001	Low
• Physical distance	Part of Europe and Central Asia	Part of Middle East	Low (1,400 km)
• Land border	None with Egypt	None with Turkey	Moderate
• Time zone	1 hour with Egypt	1 hour with Turkey	Low
• Climatic	Mediterranean/ Continental	Mediterranean/Desert	Low

Economy			
• GDP at market prices (current US\$ bn)	761	303	Significant
• GDP growth (annual, %)	4.6	4.3	Low
• GDP per capita, PPP (current international \$US)	28,134	12,284	Significant
• GDP, PPP (current US\$ bn)	2,347	1,233	Significant
• Inflation, GDP deflator (annual, %)	16	11	Significant
• Gross capital formation (% of GDP)	25	18	Significant
• Foreign direct investment Inflow (cumulated 2000–2019 US\$ bn)	221,161	108,383	Significant
• Stock of direct foreign investment, net (US\$ bn)	164,906	126,639	Significant
• Rich–poor differences	Gini = 41	Gini = 32	High
• Natural capital* (US\$)	12,854	11,220	Moderate
• Stock of productive assets** (US\$)	26,986	5,605	High
• Human capital*** (US\$)	12,081	22,591	High
• Pay/productivity score (0–100)	42	41	Low
• Skill of workforce score (0–100)	40	47	Low
• Quality of transport infrastructure index (1–100)	33	44	Moderate
• Quality of utility supply index (1–100)	75	64	Moderate
• Internet users (per 100 people) (latest data for 2014)	53	37	
Cultural			
• Language	Turkish/Kurdish (English as main second language)	Arabic (English as main second language)	Relatively high
• Ethnicities	Turks/Kurds	Arabs	Relatively high
• Religion	Muslim (Sunni)	Muslim (Sunni), Christian Coptic	Low
	Part ex Ottoman Empire and British Protectorate	Moderate	
• Currency	Turkish lira	Egyptian pound	No common currency
• Government	Presidential, autocratic democracy	Presidential, autocratic democracy	Low
• Geopolitical	Part of NATO	Part of Arab league	High
• Tensions	Kurdish civil unrest/ radical Islamism	Radical Islamism	Moderate

Governance (from -2.5 to +2.5)			
• Regulatory quality	0.41	-0.75	Moderate
• Rule of law	0.04	-0.60	Significant
• Control of corruption	-0.12	-0.59	Significant
• Voice and accountability	-0.32	-1.19	Significant
• Political stability and absence of violence	-1.06	-1.58	Moderate
• Government effectiveness	-0.04	-0.42	Significant
Business context			
• Ease of doing business index (1 = most business-friendly regulations to 190 = least)	51	126	Significant
• Country risk index (0 = high to 100 = low)	56,80	54,30	Low
• Top five obstacles for firms' operations:	Tax rate Informal competition Political instability Access to finance Transport	Political instability Access to finance Electricity shortages Corruption licenses, permits	
Informal competition	Access to finances		

Sources: World Bank Indicators (2019); UNCTAD (2019); BMI 2016; World Economic Forum 2019; Fitch Connect (2020). Reproduced with permission of The Changing Wealth of Nations 2018, World Bank.

Appendix 12.1 Description of risk linked to infrastructure assets

Political and regulatory risk

Procurement of permits (land, construction, environmental): Obtaining the necessary land, construction or environmental permits might prove more costly or take longer (and thus increase costs) than expected.

Cancellation of permits: The risk of a public authority cancelling the necessary permits.

Contract renegotiation: The risk of a public authority forcing renegotiation of contracts, thereby changing the financial arrangements of the original project.

Change in tariff regulation: The risk of a price change in regulated markets due to a political decision.

Contract duration: The length of the contract is matched to the length of the useful lifespan of the asset.

Decommission: The risk related to the disposal of the asset at the end of the contract agreement, or useful life of the asset. This risk is especially related to large assets that may generate toxic waste or environmental risks that need to be cleaned up before the asset can be retired.

Asset transfer: The feasibility and cost of transfer of the asset at the end of the contract agreement. The risk that an asset could become 'stranded' due to changing government regulations or policy.

Enforceability of contracts, collateral and security: This risk is closely related to the legal environment that is associated with infrastructure finance such as PPP frameworks, and the enforceability of leases, concessions and other contracted payment schemes.

Changes in wider regulatory or legal environment: Any modification of the regulatory or legal environment can have widespread consequences on affected companies. This risk can be differentiated through the range of affected entities. A general change in law applies to all businesses in the country, a specific change in law to a defined industry and a discriminatory change in law singles out one company. The ability to cope with or even anticipate such changes can be important for the continued economic viability of a project.

Changes in taxation: Changes in taxation of company or project revenues, output delivered by the project, financial transactions or any other element of the project structure including taxation levied on investors themselves. Changes might be categorized similarly to changes in regulatory or legal environment.

Currency convertibility: Sufficient amounts of requested foreign currencies are available at the time needed to repay foreign debt or repatriate dividends and principal. This risk generally does not apply to developed economies with stable and developed foreign exchange markets.

Social acceptance: This risk applies specifically to large-scale public infrastructure projects and applies when the general population does not support the project. Consequences can impact all phases of the project. Protests might lead to a delay in construction or hamper proper operation leading to a loss of revenue; official bodies supporting the project might come under pressure from public opinion translating into political action.

Macroeconomic and business risk

Default of counterparty: Default of any party involved in the project agreement including government, suppliers, lenders and insurers.

Availability of prefunding: The availability of funds to perform viability and feasibility studies. Prefunding is a sunk cost thus making it difficult to raise from private sources before commercial viability can be established.

Exchange rate fluctuation: If liabilities and revenues are in different currencies from one another, project participants can be exposed to exchange rate risk due to the volatility of exchange rates over time.

Liquidity risk: The risk that assets will generate enough cash flow to service debt payments and any other obligation. Also the risk associated with pricing assets where market prices are not observable.

Refinancing risk: If a project is initially financed via agreements with shorter duration than the project life itself, there is a risk of an inability to refinance loans at maturity due to performance issues or unfavourable market conditions (liquidity, interest rates).

Inflation risk: The risk that aggregate prices increase in an economy and the asset is exposed to rising prices in a detrimental manner. The risk that the replacement cost of the asset increases over time. Interest rates tend to be correlated with inflation, thus inflation risk can be thought of as interest rate risk.

Real interest rate risk: A component of nominal interest rates, an increase in real interest rates translates to an increase in the real cost of finance, which can strongly affect profitability.

Volatility of demand/revenue risk: The risk that the project company might fail to generate sufficient demand (usage of facilities or service) at the projected price of usage, ultimately leading to a lower level of revenue than projected. Profitability can also be affected by an unforeseen increase in costs.

Technical risk

Archaeological: Additional costs might arise if archaeological discoveries (historical sites, fossils) are discovered on the land intended for construction.

Obsolescence: The technology might become outdated and lose its economic appeal, or become the subject of constraining regulation rendering it uncompetitive in the market. This is true for established technologies but is also applicable to new technologies, where unintended consequences might lead to higher costs or removal from the market.

Technology risk: A (new) technology might not perform as projected or have unforeseen consequences, for example on the environment. Lenders are more reluctant to lend against a project using novel technologies due to a lack of performance benchmarks and increased uncertainty of risks. Yescombe (2014) notes that project finance is more suitable for projects using established technologies.

Governance and management of the project: Failure to deliver and operate the project to the standards agreed due to poor management or poor risk control procedures.

Reliability of forecasts for construction costs and delivery time: The risk that the construction authority fails to deliver the project on time and on budget. The reasons can be due to a performance deficit of the construction contractor, unexpected events leading to a longer construction period or the failure of third parties to provide auxiliary services necessary for operation. The consequences could be a rise in financing costs, including interest payments during a prolonged construction period, loss or deferral of project revenue, as well as financial penalties payable to the contracting authority. A delay in construction thus very often leads to the need for additional funding, responsibilities for which should be allocated in the contract signed between the relevant parties.

Qualitative deficit of physical structure/service: The risk that the project might not deliver the agreed output at agreed conditions.

Force majeure: Risk of forces outside the control of any project participant and affecting the proper delivery, operation and termination of the project. This includes direct (physical damage) and economic (loss of revenue) consequences from natural disasters, as well as economic (strike) and political (war) developments. Force majeure events might be defined in insurance or risk transfer agreements.

Environmental risk: A project's impact on the environment does not only have significant financial implications, but it is also an increasingly important factor for potential investors operating under environmental, social and governance (ESG) guidelines. The direct, quantifiable impact on the environment such as the production of waste and carbon emissions may be reflected in the form of permits or additional taxes, thus creating a cost factor which needs to be estimated and managed. Indirect risks stemming from a project's impact on the environment include public opposition to construction or operation, as well as negative image effects for involved sponsors or lenders. Legislation and regulation defining environmental requirements and standards might substantially change, even rendering a technology obsolete. New technologies might have unintended negative consequences on the environment, exposing projects to a possible surge in costs and endangering the business model. Since infrastructure assets are built for long operation phases, this risk is especially relevant for them. An Environmental Impact Assessment might help to quantify the exposure to environmental risk and establish compliance with current laws, but does not protect from unforeseen events. On the financing side, environmental factors become increasingly important to potential investors, illustrated by the spread of guidelines and principles they are adhering to.

Termination value: Since infrastructure assets are long lived, any issues with forecasting, particularly related to salvage values and depreciation of assets over time, can affect the expected termination value of an investment. For PPP contracts where the terminal value is zero, this is less of an issue. This risk can be greater for direct equity owners such as corporate balance sheets or direct equity sponsors.

Source: Reproduced with permission from OECD, *Infrastructure Financing Instruments and Incentives*, 2015.

Appendix 12.2 A manufacturing operation in malaysia vs singapore: an example of cash flow adjustment

The situation

TEXROBOTIX, a US manufacturer of remote intelligent control devices for manufacturing, plans to open a technical and production unit for sensors in Asia. The choice of location is between Malaysia and Singapore. The advantages of Malaysia are in its low cost of operations and technology infrastructure, but there are small political and fiscal uncertainties, as well as currency instability. The advantages of Singapore are its low financial, fiscal and political risks and high level of infrastructure. The disadvantage is its high operational costs.

The investment cost is US\$100 million in Singapore (135 million Singapore dollars at the prevailing exchange rate of 1US\$ = 1.35 SGD) and US\$72 million in Malaysia (300 Malaysian Ringgit (MYD) at the prevailing rate of 1US\$ = 4.14 MYD).

The cash flows of the projects are the following:

The inflation rate is 0.1 per cent in Singapore, 1.9 per cent in Malaysia and 1.8 per cent in the USA.

The TEXROBOTIX's weighted average cost of capital (WACC) in the USA is 10 per cent.

There is a 10 per cent chance that political troubles may occur in Malaysia over the seven-year period under consideration. If that is the case, 20 per cent of the cash flow will disappear. There is also a 10 per cent chance over the period that the government will impose a special tax that would decrease the cash flow by 6 per cent.

Table A12.1 Projected cash flows for TEXROBOTIX project

	Singapore project SGD millions	Malaysia project MYD billions	Singapore project US\$ m at the prevailing exchange rate	Malaysia project US\$ m at the prevailing exchange rate
Investment costs	-135	-300	-100	-72
Cash flow year 1	27	75	20	18
Cash flow year 2	31	85	23	21
Cash flow year 3	34	96	25	23
Cash flow year 4	39	110	29	27
Cash flow year 5	47	129	35	31
Cash flow year 6	61	170	45	41
Cash flow year 7	74	204	55	49
Terminal value year 7	135	377	100	91
NPV 10% without inflation and risks			\$89	\$97

Project evaluation and comparison

- Baseline project: value at prevailing exchange rate with inflation and without risks in Malaysia net present value (NPV)⁵ at 10 per cent = US\$89 in Singapore and US\$97 in Malaysia. The Malaysian project in that case is economically better than the Singapore one.
- Value after taking into consideration the exchange rate fluctuation.

In order to evaluate the possible exchange rate fluctuation, you can use the inflation differential. This technique, based on the purchasing power parity, assumes that if prices increase faster or slower in one country than in another country, the exchange rate will vary according to the following formula:

Spot rate X/Y at time $n = \text{Spot rate at time } n - 1 \times ((1 + \text{Inflation in country X}) / (1 + \text{Inflation in country Y}))$

In the case of Singapore: $\text{Infl SGD/US\$} = 1.01/1.018 = 0.999$

In the case of Malaysia: $\text{Infl MYD/US\$} = 1.019/1.18 = 1.017$

Therefore the new cash flow in US\$ can be seen in Table A12.2:

The Singapore project NPV is higher than the base line due to a lower rate of inflation than in the USA. The Malaysian project is still slightly more attractive. The Malaysian project NPV is similar to the base line due to a similar rate of inflation with the USA. However, the Malaysian project is still slightly better than the Singapore one.

- Value after taking into consideration the country risks.

Two methods:

- *Adjusting the cost of capital*

Table A12.2 The Malaysia project after inflation

	Singapore project SGD millions	Malaysia project MYD billions	Rate of SGD	Rate of MYD	Singapore project US\$ millions	Malaysia project US\$ millions
Investment costs	-135	-300	1,35	4,14	-100	-72
Cash flow year 1	27	75	1,34	4,15	20	18
Cash flow year 2	31	85	1,33	4,15	23	21
Cash flow year 3	34	96	1,32	4,15	26	23
Cash flow year 4	39	110	1,31	4,16	30	27
Cash flow year 5	47	129	1,30	4,16	36	31
Cash flow year 6	61	170	1,29	4,17	48	41
Cash flow year 7	74	204	1,28	4,17	58	49
Terminal value year 7	135	377	1,27	4,17	107	90
			NPV 10%		€96,35	€96,72

This method is simple but requires introducing a risk premium into the WACC of TEXROBOTIX. The simplest way would be to add to the base WACC premium calculated on the sovereign risk of Singapore and Malaysia compared with the USA. According to Moody, the risk premium for Singapore is 0 per cent and 1.6 per cent for Malaysia.

The discount factor for the Singapore project stays at 10 per cent and becomes for Malaysia 11.6 per cent.

The NPV under this calculation is:

US\$89 million for the Singapore project

US\$85 million for the Malaysian project

This method, often used in practice, has some theoretical flaws because sovereign risks are related to government finances and not to specific project risks.

Table A12.3 The Malaysian project after political and tax risks

Malaysia project cash flow after exchange rate variations and maximum political and tax risks (US\$ million)	
Investment costs	-72
Cash flow year 1	13.4
Cash flow year 2	15.3
Cash flow year 3	17.2
Cash flow year 4	19.7
Cash flow year 5	23.0
Cash flow year 6	30.4
Cash flow year 7	36.5
Terminal value year 7	67.3
NPV 10% WACC	54.84

It is preferable, although more complex, to use the APV method based on a probabilistic risk assessment.

– *Adjusting the cash flows*

Given the 10 per cent risk of a major political turmoil and a 20 per cent risk of additional taxes, the Malaysian project cash flow becomes that shown in Table A12.3.

The Malaysian project NPV goes down just below the Singaporean project, which is free of political and tax risks.

Various risk hypotheses in Malaysia can be simulated, giving the Malaysian project cash flows according to various probabilities of risks (Table A12.4).

Calculating expected exchange rates using the PPP relation

The purchasing power parity (PPP) relation says that exchange rates should adjust so that the same basket of goods will cost the same in different countries. It is based on the following premise: if the price of goods increases faster in one country than in another because the inflation rate is higher in the first country than in the second, then the exchange rate between the two countries should move to offset the difference in inflation rates and, consequently, the difference in prices. More formally, according to the PPP relation:

$$\text{Expected future spot rate} = \text{Current spot rate} \times \frac{1 + \text{Expected inflation rate in the home country}}{1 + \text{Expected inflation rate in the foreign country}}$$

If $S^0_{h/f}$ is the current spot rate and $E(S^1_{h/f})$ is the expected future spot rate in one year, both expressed in units of the home currency per unit of the foreign currency, and if $E(i_h)$ and $E(i_f)$ are the expected inflation rates for next year at home and in the foreign country, respectively, then:

$$E(S^1_{h/f}) = S^0_{h/f} \times \frac{1 + E(i_h)}{1 + E(i_f)}$$

The Malaysian project is better than the Singaporean one if there is no political turmoil. However, if there is a change in taxation or political turmoil there are consequences.

The Malaysian project NPV goes down well below the Singaporean project, which is free of political and tax risks.

The Malaysian project, not taking inflation in consideration, is better than the Singaporean baseline one if there is 0 per cent or 10 per cent chance of political turmoil and if there is at most a 30 per cent chance tax increase. If inflation is taken into consideration the Malaysian project's NPV is below the Singapore one in any configuration.

Table A12.4 Probabilities of taxation and political turmoil

Probabilities of taxation	Probabilities of political turmoil				
	0%	10%	30%	50%	100%
0%	97.24	93.97	87.5	80.9	64.6
10%	95.36	93.00	86.5	80.0	63.6
20%	94.39	92.00	85.5	79.0	62.7
30%	93.41	91.04	84.52	78.0	61.7
40%	91.56	90.06	83.5	77.0	60.7
50%	91.47	89.06	82.6	76.0	59.7
100%	86.60	84.19	77.7	71.1	54.8

Appendix 12.3 Cryptocurrencies

The term cryptocurrency first emerged in 2009, since then multiple definitions have been suggested from various institutes yet there remains no generally accepted definition available in the regulatory space. A recent EU report summarised cryptocurrency as 'a digital representation of value that i) is intended to constitute a peer-to-peer (P2P) alternative to government-issued legal tender, ii) is used as a general-purpose medium of exchange (independent of any central bank), iii) is secured by a mechanism known as cryptography and iv) can be converted into legal tender and vice versa'.¹³

Cryptocurrency is linked to cryptography, a technique for protecting information by transforming it into a readable format that can be decoded by someone with the 'key'. Some policy makers define cryptocurrencies as a subset of virtual currencies – a form of unregulated digital money issued by developers and used by members of a specific virtual group.¹⁴ Others classify them as digital currency schemes that are controlled by supply and demand (similar to commodities such as gold) but with no intrinsic value; that use distributed ledgers to allow remote peer-to-peer exchanges of electronic value in the absence of trust between parties and without the need for intermediaries; that are not operated by any specific individual or institution.¹⁵ Others, including the World Bank, classify cryptocurrencies as a subset of digital currencies that have their own unit of account – a digital payment mechanism, representing and denominated in fiat money.¹⁶

Cryptocurrencies are not tokens or crypto securities. They are associated with blockchain, a type of distributed ledger technology behind most crypto currencies (cryptomarket). The blockchain contains different actors including: 1) the user – a person or entity that obtains the currency and uses them to purchase real or virtual goods or services, P2P payments or store for future investment; 2) miners – these validate any transaction within the blockchain by deciphering the cryptographic puzzle. There are also cryptocurrency exchanges – individuals or entities who offer exchange services to cryptocurrency users, usually against payment of a certain fee.

Bitcoin was the first and most well-known cryptocurrency, invented in 2008 by an anonymous individual or group of people under the name Satoshi Nakamoto. It came into use in 2009 when its implementation was released as an open-source software. Bitcoin has been criticized for its use in illegal

transactions, price volatility and thefts from exchanges. Other cryptocurrencies have emerged since the appearance of Bitcoin, although it has dominated the market. Cryptocurrency prices are volatile and often follow movements in the stock markets. It fell 6 per cent to \$39,774 in New York trading in January 2022; the decline was the largest start to a year since 2012 compared to its all time high of \$69,000 for early November 2021.

Other uses of cryptocurrency technology have emerged including Ethereum which decentralizes the internet, replacing servers with a worldwide system of nodes, creating 'one computer for the entire world'. Ethereum is a software platform based off blockchain technology in which users can exchange a cryptocurrency called ether. Ether has become one of the most popular cryptocurrencies in the world. Another example is Tron, a blockchain-based platform for sharing content. Many large entertainment companies profit from gathering and selling data about their users, however using Tron leaves no footprints.

In February 2019, the first cryptocurrency created by a major US bank emerged – the JPM coin by J.P. Morgan Chase. Until then the banking industry had avoided the asset class claiming it was too risky. In 2018, J.P. Morgan and two other lenders forbid the purchase of Bitcoin by credit card.¹⁷ The JPM coin, however was reserved for only J.P. Morgan's large institutional clients that have undergone regulatory checks, including corporations, banks and broker-dealers. The JPM coin also differed from the popular Bitcoin as each JPM coin is redeemable for US\$1 meaning its value would not fluctuate. Clients are issued JPM coins once dollars are deposited in the bank. Once the tokens are used for a payment or security purchase on the blockchain, the bank destroys the coins and gives clients the equivalent in dollars. The JPM coins could also be used for securities transactions and for corporations that use J.P. Morgan's treasury services business to replace the dollars they hold in subsidiaries worldwide. Despite the creation of the JPM coin, the role of cryptocurrencies global payment systems is still uncertain, however, its adoption by financial institutions is likely to increase significantly in the future. On 22 March 2021 there were 200 cryptocurrencies identified. Below is the list of the ten major ones.

Table A12.5 Cryptocurrencies ranked

Rank	Name	Market Cap (US\$ m)	Price
1	Bitcoin	1,071,979	57,444.66
2	Ethereum	206,320	1,791.69
3	Binance Coin	41,204	266.64
4	Tether	39,587	1.00
5	Cardano	37,913	1.19
6	Polkadot	34,742	37.66
7	XRP	25,936	0.5712
8	Uniswap	18,247	34.97
9	Litecoin	13,231	198.35
10	Chainlink	12,152	29.32

Appendix 12.4 Multinational development banks providing project equity and debt financing

Table A12.6 Selected development banks and types of funding

Name of development bank	Details of funding available
<p>African Development Bank (AfDB) takes equity positions in qualifying business enterprises in its Regional Member's countries: Algeria, Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, Egypt, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Libya, Mali, Mauritania, Morocco, Niger, Nigeria, Tunisia.</p> <p>http://www.afdb.org/</p>	<p>AfDB's ability to provide risk capital through equity and quasi-equity is a key linchpin of its resource mobilization role in spurring sustainable economic development and social progress in its regional member countries (RMCs), and thus contributing to poverty reduction.</p>
<p>CAF Development Bank of Latin America is a development bank owned by 19 countries – 17 from Latin America and the Caribbean, plus Spain and Portugal, as well as 13 private banks in the region.</p> <p>It promotes a sustainable development model through credit operations, non-reimbursable resources and support in the technical and financial structuring of projects in the public and private sectors of Latin America.</p> <p>https://www.caf.com</p>	<p>Capital investments are made in strategic areas in order to support the development and growth of enterprises in shareholder countries and their holdings in the securities markets.</p>
<p>The Asian Development Bank (ADB) is composed of 67 members, 48 of which are from the Asia Pacific region. ADB assists its members, and partners, by providing loans, technical assistance, grants and equity investments to promote social and economic development.</p> <p>https://www.adb.org/</p>	<p>ADB provides direct financial assistance to private sector projects. While ADB's participation is usually limited, it leverages a large amount of funds from commercial sources to finance these projects.</p>
<p>The European Bank for Reconstruction and Development (EBRD) was established to help build a new, post-Cold War era in Central and Eastern Europe. It is committed to furthering progress towards 'market-oriented economies and the promotion of private and entrepreneurial initiative'.</p> <p>http://www.ebrd.com/home</p>	<p>Equity investments are undertaken in a variety of forms. When the EBRD takes an equity stake, it expects an appropriate return on its investment and will only take a minority position.</p>
<p>IDB Invest is the private sector arm of the Inter-American Development Bank (IDB)</p> <p>IDB Invest is owned by its 47 member countries, 26 of which are in the Latin American and Caribbean region. Each country's voting power is proportional to the number of IDB Invest shares it holds.</p> <p>https://www.idbinvest.org/en</p>	<p>IDB Invest provides financial solutions to clients (equity participation, credit guarantees, bridge loans, trade finance, guarantees, resource mobilization, blended finance) as well as non-financial solutions (public-private partnerships, promotion of climate change and diversity initiatives)</p>
<p>The International Finance Corporation (IFC), a member of the World Bank Group, is the largest global development institution focused exclusively on the private sector in developing countries.</p> <p>http://www.ifc.org/</p>	<p>Equity investments provide developmental support and long-term growth capital that private enterprises need. The IFC invests directly in companies' equity and also through private-equity funds.</p>

Created at the fourth BRICS Summit in New Delhi (2012) with an initial capital of \$100 billion, the New Development Bank (NDB) is a multilateral development bank (MDB) established by Brazil, Russia, India, China and South Africa (BRICS). https://www.ndb.int	The main areas of intervention are: Clean Energy, Urban Development, Transport Infrastructure, Irrigation and Water preservation, Environmental Efficiency, Social Infrastructure.
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Appendix 12.5 Official export credit agencies for OECD member countries

Table A12.7 Official export credit agencies for OECD member countries

Country	Agency	Abbreviation
Australia	Export Finance and Insurance Corporation	EFIC
Austria	Oesterreichische Kontrollbank AG	OeKB
Belgium	Office National du Ducreire/Nationale Delcrederedienst	ONDD
Canada	Export Development Corporation	EDC
Czech Republic	Export Guarantees Development Corporation	EGAP
	Czech Export Bank	CEB
Denmark	Eksport Kredit Fonden	EKF
Finland	Finnvera Oyj	Finnvera
	FIDE Ltd	FIDE
France	Compagnie Française d'Assurance pour le Commerce Extérieur	COFACE
	Direction des Relations Economiques Extérieures (Ministère de l'Economie)	DREE
	Coface Scrl	SCRL
Germany	Hermes Kreditversicherungs AG	HERMES
	Gerling Credit Insurance Group	GCIG
Greece	Export Credit Insurance Organization	ECIO
Hong Kong	Hong Kong Export Credit Insurance Corporation	HKEC
Hungary	Magyar Exporthitel Biztosító Rt.	MEHIB
India	Export-Import Bank of India	Eximbankindia
Indonesia	Asuransi Ekspo Indonesia	ASEI
	PT Bank Ekspor Indonesia (Persero)	BEI
Israel	Israel Foreign Risks Insurance Corporation Ltd	IFTRIC
	Israel Discount Bank	Discount Bank
Italy	Sezione Speciale per l'Assicurazione del Credito all'Esportazione	SACE
Japan	Export-Import Insurance Department	EID/MITI
	Japan Bank for International Cooperation	JBIC
Korea	Korea Export Insurance Corporation	KEIC
	The Export-Import Bank of Korea	Korea Eximbank
Malaysia	Malaysia Export Credit Insurance Berhad	MECIB
Mexico	Banco Nacional de Comercio Exterior, SNC	Bancomext

Netherlands	Nederlandsche Credietverzekering Maatschappij NV	NCM
New Zealand	Export Guarantee Office	EXGO
Norway	The Norwegian Guarantee Institute for Export Credits	GIEK
Oman	Export Credit Guarantee Agency, Oman Development Bank	ECGA
Poland	Korporacja Ubezpieczeń Kredytów	KUKE
Portugal	Companhia de Seguro de Créditos, SA	COSEC
Singapore	ECICS Credit Insurance Ltd	ECICS
Slovenia	Slovene Export Corporation, Inc.	SEC
South Africa	Credit Guarantee Insurance Corporation of Africa	CGIC
Spain	Compañía Española de Seguros de Crédito a la Exportación, SA	CESCE
	Compañía Española de Seguros y Reaseguros de Crédito y Caución, SA	CESCC
	Secretaría de Estado de Comercio (Ministerio de Economía)	SEC
Sri Lanka	Export Credit Insurance Corporation	SLECIC
Sweden	Exportkreditnämnden	EKN
Switzerland	Export Risk Guarantee	ERG
United Kingdom	Export Credits Guarantee Department	ECGD
United States	Export–Import Bank of the United States	Exim Bank

Source: Data from [https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?doclanguage=en&cote=tad/pg\(2018\)1](https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?doclanguage=en&cote=tad/pg(2018)1) (accessed 1 February 2022).

Appendix 14.1 Types of organizational design

Table A14.1 Types of organizational design

	Global functional model	Geographical model	Single matrix model	Multi-business global product division model	Multi-business geographical model	Multi-business matrix model	International divisions model	Dual complex structure model
Organizational structure	Centralized decision making, coordination and control	Decentralized decision making, coordination and control	Both functions and geography are given equal power and responsibilities	Each business division is responsible for a product or a service Within the division, organizational design can be matrix or global functional or geographical	Country subsidiaries have full strategic and operational responsibilities for all products in their territories	Emphasizes dual or triple responsibilities which are shared between product divisions and geographical units	Overseas subsidiaries have high autonomy but rely upon home country division for products and technical support	A mix of different designs with global product division and geographical subsidiaries
Supporting line(s)	Functional manager reports to vice-president or director in charge of their functions	Functional manager reports to local national manager	Middle managers typically have two bosses	Country subsidiary managers report to division heads	Central global functions and product divisions have a 'dotted-line' role	Same as single matrix model	Division executives manage home country businesses and international division executives manage international subsidiaries	Reporting line is complex and depends on the choice of organizational design
Advantages	Efficiencies of scale Rapid transfer of know-how	Flexibility Can incorporate local needs Can quickly adapt to market conditions	Global efficiencies Local responsiveness	Flexibility Global efficiencies Global coordination	Flexibility Adaptive to local conditions Optimization of product and investment portfolio at country level	Refer to the single matrix model	Global efficiencies Local responsiveness	Flexibility

Disadvantages	<p>Inflexibility Local dysfunctionalities Market rejection Bureaucracy Discourages initiative</p>	<p>Diseconomies of scale Duplication Lack of global coordination means poor at serving global customers</p>	<p>Potential power struggles Role ambiguity Dilution of responsibilities Cost inefficiencies Turf battles Costs of compromise</p>	<p>Duplication of commercial effort Lack of local responsiveness</p>	<p>Sub- optimization of resources allocation Delay in new product introduction Inefficiencies and loss of competitive advantage for industries which require globalization</p>	<p>Refer to the single matrix model</p>	<p>Inflexibility Market rejection</p>	<p>Complexity</p>
Potential application	<p>Single business environment with strong demand for global integration and coordination</p>	<p>Businesses where customer tastes or needs differ significantly across countries</p>	<p>Professional firms such as consulting or engineering</p>	<p>Vast majority of multi-business corporations with relatively high product diversity and significant geographical expansion</p>	<p>Becoming less popular with large global corporations</p>	<p>Decreasing popularity</p>	<p>Other models will be used when international sales become a significant amount of turnover</p>	<p>Companies with sophisticated and diverse offerings</p>

Appendix 15.1 Description of global risks and trends 2021

Global risks

A 'global risk' is defined as an uncertain event or condition that, if it occurs, can cause significant negative impact for several countries or industries within the next ten years.

Table A15.1 Types and examples of global risk

	Global risk	Example
Economic risks	Asset bubbles	Dutch 'tulip mania' 1637; the USA dot-com bubble burst 2000
	Sharp decline of an important industry	Coal-fuelled electric plants
	Debt crises	The failure and collapse of over 300 US banks between 2008 and 2010
	Failure to control inflation	German hyperinflation of the 1930s
	Expansion of criminal and illicit activities	Counterfeiting, illicit financial flows, illicit trade, tax evasion, human trafficking, organized crime, etc.
	Economic stagnation	Japan's 'lost decade' between 1991–2001 (although some commentators argue this continues today)
	Commodity shocks	1973 oil crisis
Environmental risks	Biodiversity and ecosystem severe crisis	The affects of pollution and climate change on the Great Barrier Reef
	Lack of action against climate change	United States withdrawal from the Paris Agreement in 2017
	Weather disasters	Australian wild fires 2020; the European heatwave 2003
	Industrial disasters	Chernobyl (1986) and Bhopal (1984) disasters
	Geophysical disasters	The Indian Ocean Boxing Day tsunami 2004; Lisbon earthquake 1755; solar flares
Geopolitical risks	Natural resource shortages	Global shortage of helium from 2015
	Failure of multilateral intitutions	The failure of the League of Nations to prevent the Second World War
	Quasi conflicts among nations	The Cold War 1945–1991
	Use of strategic resources for political power	Water disputes
	Interstate conflict	Armenia–Azerbaijan war 2020
	State collapse	Collapse of the Soviet Union 1991
	Global terrorism	Islamist terrorism (New York, London, Paris)
	Weapons of mass destruction	Chemical weapons usage in Syria; nuclear weapons dropped on Nagasaki and Hiroshima

Societal risks	Failure of social security systems	The Covid-19 pandemic has revealed weaknesses in the Brazilian health system
	Employment and livelihood crises	Economic recession of 1980–1981 in Britain
	Erosion of social cohesion	Ethnic and religious friction in India
	Failure of public infrastructure	New Orleans flood 2005
	Global diseases	Spanish flu pandemic (1918–1920); Covid-19 pandemic (2020–2022)
	Uncontrolled migration	Post-Syrian civil war 2016
	Generational imbalance	Low natality in China and Eastern Europe; high natality in Sub-Saharan region
Technological risks	Pervasive backlash against science	The antivax movement in the USA and Western Europe
	Adverse technological advances	Possible human genetics manipulation
	Breakdown of critical information infrastructure	Multiplication of digital virus invasion
	Digital access	According to the UN half of the world population still offline
	Digital dominance	Possible increase in dominance of big five (Apple, Microsoft, Facebook, Google, Amazon)
	Cybersecurity	Possible increase in cyber attacks
	Lack of technology governance	Inability to regulate the global digital world

Source: Adapted by authors from *The Global Risks Report 2021*, <https://www.weforum.org/reports/the-global-risks-report-2021> (accessed 1 February 2022).

Trends

A 'trend' is defined as a long-term pattern that is currently taking place and that could contribute to amplifying global risks and/or altering the relationship between them.

Table A15.2 Major trends

Trend	Description
Aging population	Aging populations in developed and developing countries driven by declining fertility and decrease of middle- and old-age mortality
Changing landscape of international governance	Changing landscape of global or regional institutions (e.g. UN, IMF, NATO, etc.), agreements or networks
Climate change	Change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere, in addition to natural climate variability
Environmental degradation	Deterioration in the quality of air, soil and water from ambient concentrations of pollutants and other activities and processes

Growing middle class in emerging economies	Growing share of population reaching middle-class income levels in emerging economies
Increasing nationalist sentiment	Increasing national sentiment among populations and political leaders affecting countries' national and international political positions
Increasing polarization of societies	Inability to reach agreement on key issues within countries because of diverging or extreme values, political or religious views
Rise of chronic diseases	Increasing rates of non-communicable diseases, also known as chronic diseases, leading to long-term costs of treatment and threatening recent societal gains in life expectancy and quality
Rise of cyber dependency	Rise of cyber dependency due to increasing digital interconnection of people, things and organizations
Rising geographic mobility	Increasing mobility of people and things due to quicker and better-performing means of transport and lowered regulatory barriers
Rising income and wealth disparity	Increasing socioeconomic gap between rich and poor in major countries or regions
Shifts in power	Shifting power from state to non-state actors and individuals, from global to regional levels, and from developed to emerging market and developing economies
Urbanization	Rising number of people living in urban areas resulting in physical growth of cities

Source: Reproduced with permission from World Economic Forum (2016: 87).

Appendix 15.2 A simplified methodology for elaborating scenarios

The proposed methodology consists of seven steps:

- Define a future 'issue'
- List underlying driving forces
- Reduce the number of forces to a manageable number
- For each force, select its possible state of affairs (variables)
- Combine the variables (independent combination or causal combination)
- Analyse each of the projected outcomes and reduce it to a small number of plausible and contrasted stories under the form of 'scenarios'
- Discuss the possible consequence of each scenario for the company.

Define a future 'issue': 'What could happen in the future for ... and what are the consequences for ... ?'

At this first stage the team in charge of writing a scenario has to address three questions:

- What is the primary purpose of the project? Is it to:
 - Improve understanding of the environment?
 - Improve the quality of the strategy?

- Prepare contingent actions?
- Assess risks?
- Who will be using the scenarios?
 - Top management?
 - Operational decision makers?
 - General internal and external communication?
- What are the expected outcomes?
 - Support strategy or specific investment decisions?
 - Raising the public profile of particular issues?
 - Improving a team's expected performance?

List underlying driving forces. The team has to identify the elements that drive the phenomenon under consideration. These can be:

- External forces (exogenous): forces that affect directly or indirectly the phenomenon and whose origin is in the external environment:
 - Economic
 - Social
 - Technological
 - Political
 - Ecological
- Internal forces (endogenous): forces internal to the organization, either controllable or given as constraints:
 - Costs
 - Organizational structure
 - Behaviour of players

The team should come up with a list of two to a maximum of five external and internal forces.

Reduce the number of forces to a manageable number by ranking them and take only those that are seen to be the most important (based on consensus or the Delphi method). One question to address in order to reduce the number of forces is to see whether some of them are two different ways to describe the same phenomenon and are highly correlated (e.g. inflation and price increase). Those forces are now qualified as variables.

Select a possible state of affairs for the variables, either continuous (with a numerical score) or discrete (by categories, e.g. high, medium, low).

Combine the variables (independent combination or causal combination):

- Independent combinations are combinations in which variables act independently of each other and the outcome is a combination of various states of affairs. For instance, in the decision tree in Figure A15.1, the outcome is derived from a yes/no combination of independent variables.

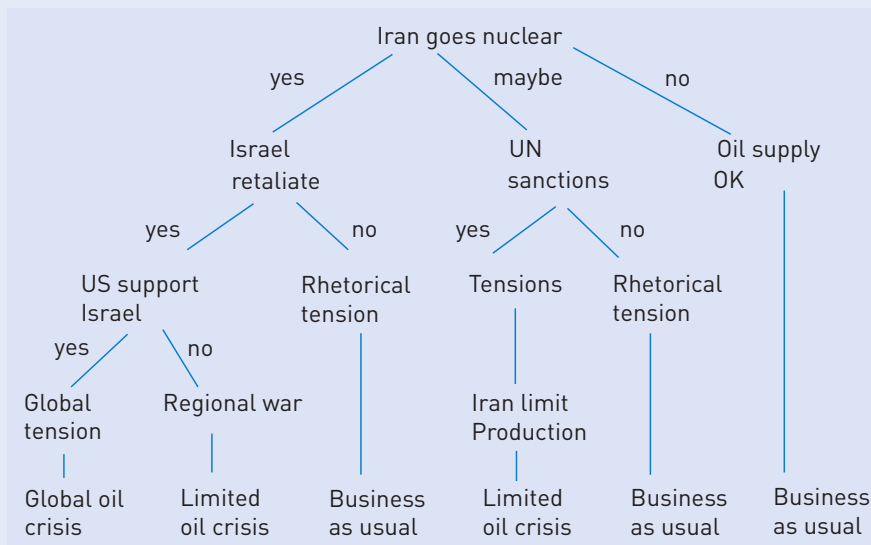


Figure A15.1 Decision tree of independent variables

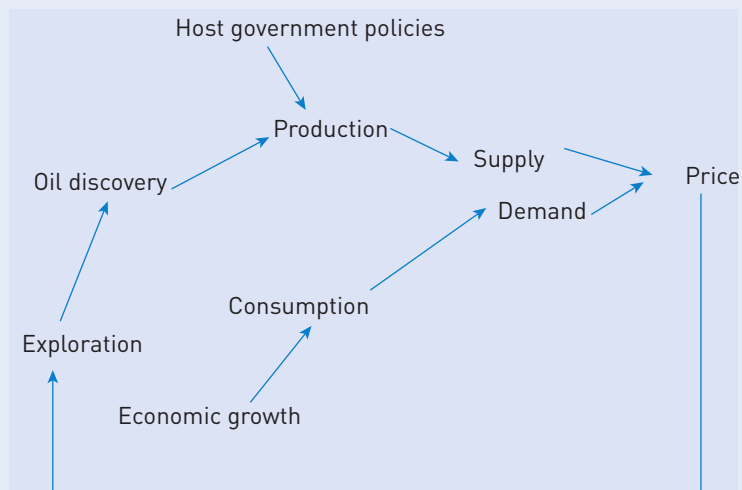


Figure A15.2 Example of simple causal paths for price setting in the oil industry

- Causal relationships are variables that influence others as, for instance, in the causal path illustrated in Figure A15.2.

Many techniques for combining variables are available:

- Some of them highly quantitative: cross impact analysis, simulation models, multivariable models.
- Others are less quantitative: decision trees, simple matrices and simple causal paths.

Analyse each of the projected outcomes and reduce it to a small number of plausible and contrasted stories under the form of 'scenarios'. For instance, in 2006 the World Economic Forum designed three possible scenarios for China by 2025: *Unfulfilled Promise*, *New Silk Road*, *Regional Ties* (see p. XXX).

Discuss the possible consequence of each scenario for society, the company or the issue defined in step 1.

Table A15.3 shows a simplified scenario for China in 2025 from the World Economic Forum.

Table A15.3 An example of an uncertain scenario

	Regional ties	Unfulfilled promise	New Silk Road
Leadership and governance	Strong one-party leadership Strategic vision helps to weather the economic crisis	Reactive leadership lacking long-term vision Fear of dissent hinders enforcement of local reforms	Next generation leadership more open to individual rights Foundations are laid for the separation of judicial, legislative and executive
Economic performance	Global slowdown affects exports to Europe and North America. Focus on Asia and domestic and Asian markets	Growth eventually slows as exports weaken and domestic market demand does not significantly increase	Balanced growth based on both external and domestic markets High growth continues
Social development	China succeeds in maintaining social stability and cohesion despite global slowdown Emphasis is placed on social inclusion and the development of social systems	Unbalanced development driven by coastal areas High disparity across regions and classes	Reforms of state-owned enterprises and accelerated urbanization combined with an inadequate social safety net cause some concerns Inequality is tackled in earnest by 2025
External relationships	Successful regional ties fuel growth and prosperity in the region after Western countries shift attention away from the region	Aspiration to be a global player not fulfilled Lagging reforms affect trade and international relations	China plays an increasingly active role on the world stage and in international organizations

Source: World Economic Forum (2006), *China and the World: Scenarios to 2025*.

Appendix 15.3 Three global scenarios

Table A15.4 Global scenarios

Name of project and origin	Scenarios	Brief description
<p>Global Trends 2040</p> <p>Four alternative scenarios*</p>	<ul style="list-style-type: none"> • Renaissance of Democracies • A World Adrift • Competitive Coexistence • Separate Silos 	<ul style="list-style-type: none"> • Rapid technological advancements in the United States and other democratic societies are transforming the global economy, raising incomes, and improving the quality of life for millions around the globe. • International rules and institutions are largely ignored. OECD countries are plagued by slower economic growth, widening societal divisions, and political paralysis. China is expanding its international influence. Many global challenges are unaddressed. • The United States and China have a robust trading relationship, alongside competition over political influence, governance models, technological dominance and strategic advantage. Low risk of war, international cooperation and technological innovation make global problems manageable. • Fragmented world into several blocks of varying size and strength: USA, EU, China, Russia and a few regional powers; focus on self-sufficiency, resiliency, and defense. Vulnerable developing countries are caught in the middle.
	<ul style="list-style-type: none"> • Tragedy and Mobilization 	<ul style="list-style-type: none"> • A global coalition, led by the EU and China working with NGOs and revitalized multilateral institutions, is implementing far-reaching changes designed to address climate change, resource depletion and poverty following a global food catastrophe caused by climate events and environmental degradation. Richer countries shift to help poorer ones manage the crisis and then transition to low carbon economies through broad aid programmes and transfers of advanced energy technologies.
<p>Work/Technology 2050: Scenarios and Actions**</p>	<ul style="list-style-type: none"> • It's Complicated – A Mixed Bag 	<ul style="list-style-type: none"> • A business-as-usual trend projection of the increasing acceleration of change with both intelligence and stupidity characterizing decision making. Irregular adoption of advance technology; high unemployment where governments did not create long-range strategies, and mixed success on the use of universal basic income. Giant corporations' powers have often grown beyond government control, in this government-corporate, virtual-3D, multi-polar world of 2050.

	<ul style="list-style-type: none"> Political/ Economic Turmoil If Humans Were Free – the Self-Actualization Economy 	<ul style="list-style-type: none"> Future Despair. Governments did not anticipate the impacts of artificial general intelligence and had no strategies in place as unemployment exploded in the 2030s leaving the world of 2050 in political turmoil. Social polarization and political gridlock in many forms have grown. Global order has deteriorated into a combination of nation states, mega-corporations, local militias, terrorism and organized crime. Governments did anticipate the impacts of artificial general intelligence, conducted extensive research on how to phase in universal basic income systems and promoted self-employment. Artists, media moguls and entertainers helped to foster cultural change from an employment culture to a self-actualization economy.
Scenarios for Resilient Leaders (3–5 Years)***	<ul style="list-style-type: none"> The passing storm 	<ul style="list-style-type: none"> Society: Social cohesion rises, with a heightened appreciation for interpersonal and familial relationships Technology: Technologies advances stay on course, as previous holdouts move online Economy: Worldwide economies enter an extended recession with increased income inequality Environment: Focus on climate change is renewed as global collaboration provides hope for progress Politics: Governments around the world gain trust and international organizations such as WHO grow in relevance
	<ul style="list-style-type: none"> Good company 	<ul style="list-style-type: none"> Society: Social cohesion is maintained, as society shifts to become more 'purpose-driven' Technology: Technologies advances take the centre stage with large companies driving solutions in areas such as health tech and biotech Economy: Worldwide economies are disrupted with a growing concentration of power among large companies Environment: Focus on climate change is mixed with some sustainability-minded companies investing in renewable energy Politics: Governments around the world partner with large corporations, who step up as part of the solution
	<ul style="list-style-type: none"> Sunrise in the East 	<ul style="list-style-type: none"> Society: Shift to an increased emphasis on the 'good of the whole' Technology: Technologies advances are accelerated as more data-sharing allows for advances in AI and other advanced tech capabilities Economy: Worldwide economies shrink due to the prolonged nature of the virus

	<ul style="list-style-type: none"> • Lone wolves 	<ul style="list-style-type: none"> • Environment: Focus on climate change is deemphasized as economic recovery is prioritized Politics: Governments around the world look to the east for guidance, as Asian countries effectively manage the virus • Society: Social cohesion falls and xenophobia and suspicion of others become the norm Technology: Technologies advances are divergent among different markets, with a focus on advances in surveillance and control measures Economy: Worldwide economies are left in turmoil as global supply chains are disrupted Environment: Focus on climate change declines as countries shift toward energy independence Politics: Governments around the world adopt isolationism as they attempt to contain the virus
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Sources:* National Intelligence Council (2021); ** Milenium Project (2019); *** Deloitte (2020).