

DIGITALES ARCHIV

ZBW – Leibniz-Informationszentrum Wirtschaft
ZBW – Leibniz Information Centre for Economics

Periodical Part

IMD world talent ranking ; 2020

Provided in Cooperation with:

International Institute for Management Development (IMD), Lausanne

Reference: IMD world talent ranking ; 2020 (2020).
[https://www.imd.org/globalassets/wcc/docs/release-2020/talent/](https://www.imd.org/globalassets/wcc/docs/release-2020/talent/imd_world_talent_ranking_2020.pdf)
[imd_world_talent_ranking_2020.pdf](https://www.imd.org/globalassets/wcc/docs/release-2020/talent/imd_world_talent_ranking_2020.pdf).

This Version is available at:
<http://hdl.handle.net/11159/6115>

Kontakt/Contact

ZBW – Leibniz-Informationszentrum Wirtschaft/Leibniz Information Centre for Economics
Düsternbrooker Weg 120
24105 Kiel (Germany)
E-Mail: [rights\[at\]zbw.eu](mailto:rights[at]zbw.eu)
<https://www.zbw.eu/econis-archiv/>

Standard-Nutzungsbedingungen:

Dieses Dokument darf zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden. Sie dürfen dieses Dokument nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, aufführen, vertreiben oder anderweitig nutzen. Sofern für das Dokument eine Open-Content-Lizenz verwendet wurde, so gelten abweichend von diesen Nutzungsbedingungen die in der Lizenz gewährten Nutzungsrechte.
<https://zbw.eu/econis-archiv/terms-of-use>

Terms of use:

This document may be saved and copied for your personal and scholarly purposes. You are not to copy it for public or commercial purposes, to exhibit the document in public, to perform, distribute or otherwise use the document in public. If the document is made available under a Creative Commons Licence you may exercise further usage rights as specified in the licence.

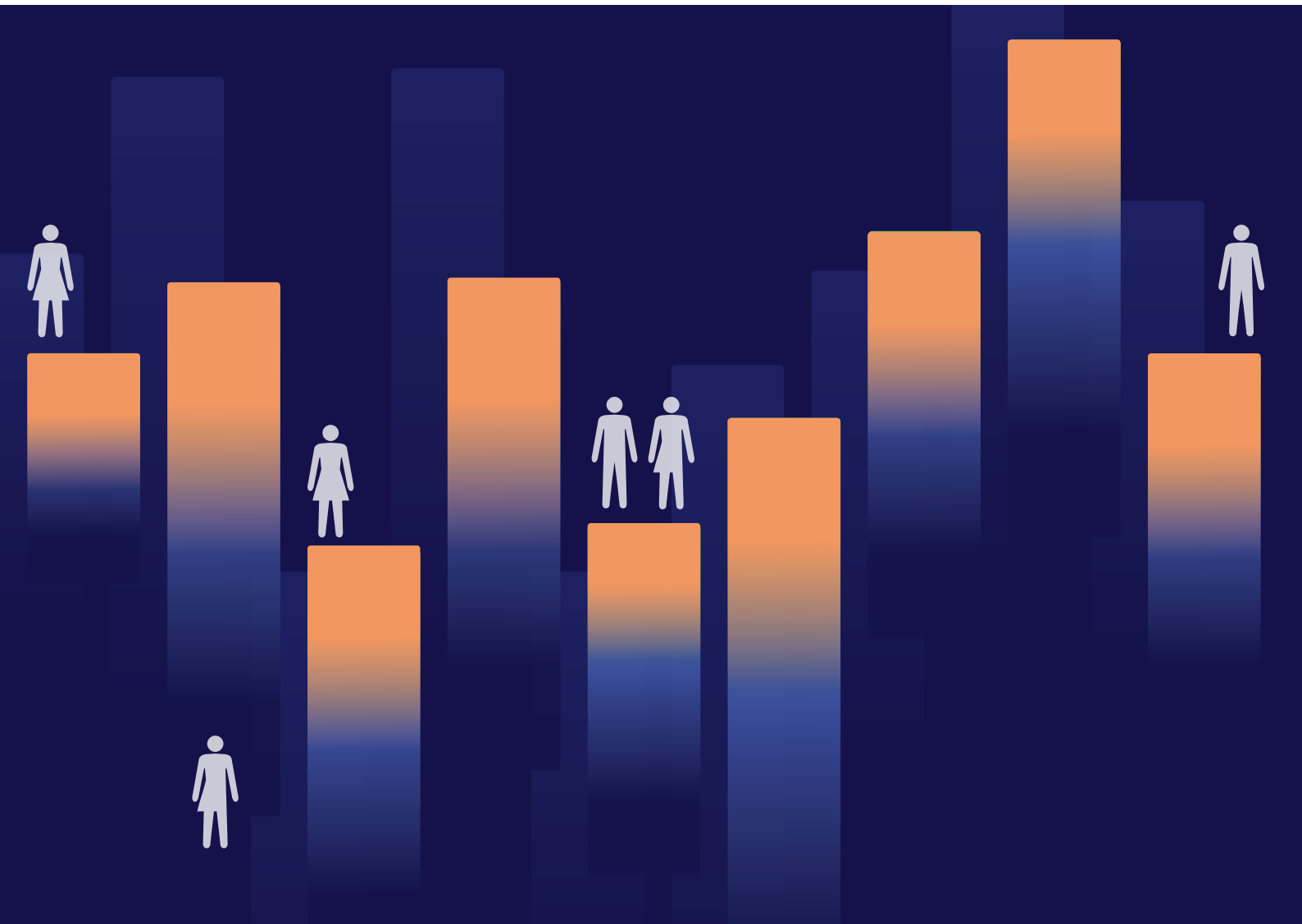


IMD WORLD
COMPETITIVENESS
CENTER

IMD WORLD

TALENT

RANKING 2020



November 2020
IMD WORLD TALENT RANKING 2020

Copyright © 2020
IMD: Institute for Management Development
23, Ch. de Bellerive
P.O. Box 915
CH-1001 Lausanne
Switzerland

Tel : +41 21 618 02 51

e-mail : wccinfo@imd.org

Internet: www.imd.org/wcc

Choose the product
that meets your needs

Visit our eShop
www.wcceshop.org

All rights reserved. No part of this publication may be transmitted in any form or by any means, including photocopying and recording, or by any information storage and retrieval system. Nor may any part of this publication be included as a reference in any other work without authorization.

IMD, IMD INTERNATIONAL, REAL LEARNING, REAL IMPACT, IMD BUSINESS SCHOOL and IMD WORLD COMPETITIVENESS YEARBOOK are trademarks of IMD – International Institute for Management Development

Preface

How do different economies invest and develop their local talent? How do countries appeal to the international talent pool as well as retaining their own high-skilled work force? And how do economies measure the quality of the skills and competences that are available?

These are the questions that the *IMD World Talent Ranking* addresses. We are delighted to present the seventh edition of this publication.

The latest ranking suggests that most economies that perform well focus their talent development efforts in every stage of the educational process. From primary education to tertiary, to apprenticeships and continuous work training, enhancing the skills and competencies of the work force is important. The top performing economies are open to both people and ideas. Finally, in the difficult times of social distancing and working from home, keeping the employees motivated contributes to the talent competitiveness of an economy.

An undertaking like the *IMD World Talent Ranking* could not have been accomplished without the support and assistance of many stakeholders. Our *Partner Institutes*, the *IMD Alumni* community and our *Panel of Experts* from all the countries generously offer data and insights that are crucial for completing such a project. We are always most grateful for their support. Yet, as we stressed in all our publications, this year, our stakeholders managed to make us feel that it was business as usual and not a uniquely complicated and difficult environment. The reason you have this publication in your hands now is, for a great part, because of our stakeholders. We are humbled and thankful!



Professor Arturo Bris
Director
IMD World Competitiveness Center



Dr Christos Cabolis
Chief Economist & Head of Operations
IMD World Competitiveness Center



Table of Contents

The IMD World Talent Ranking 2020

Preface	3
The IMD World Competitiveness Center	7
Partner Institutes	8
Trends in the World Talent Ranking 2020	14
IMD World Talent Ranking 2020	23
Methodology in a Nutshell	26
What is the IMD World Talent Ranking?	27
IMD World Talent Rankings selected breakdowns	28
Populations greater than 20 million	28
Populations less than 20 million	29
GDP per capita greater than \$20,000	30
GDP per capita less than \$20,000	31
Europe - Middle East - Africa.....	32
Asia - Pacific.....	33
The Americas	33
Factor 1: Investment and development	34
Factor 2: Appeal	35
Factor 3: Readiness	36
Factor rankings.....	38
Talent country profiles	41
The IMD World Talent Ranking methodology	106
Notes and sources by criteria	110

World Talent Country Profiles

Argentina	42	Lithuania	74
Australia.....	43	Luxembourg.....	75
Austria	44	Malaysia	76
Belgium.....	45	Mexico	77
Brazil.....	46	Mongolia	78
Bulgaria	47	Netherlands	79
Canada	48	New Zealand	80
Chile	49	Norway	81
China	50	Peru	82
Colombia	51	Philippines	83
Croatia	52	Poland	84
Cyprus	53	Portugal	85
Czech Republic	54	Qatar.....	86
Denmark.....	55	Romania	87
Estonia.....	56	Russia.....	88
Finland.....	57	Saudi Arabia	89
France	58	Singapore	90
Germany.....	59	Slovak Republic.....	91
Greece.....	60	Slovenia	92
Hong Kong SAR	61	South Africa	93
Hungary	62	Spain	94
Iceland	63	Sweden.....	95
India.....	64	Switzerland	96
Indonesia	65	Taiwan, China	97
Ireland.....	66	Thailand	98
Israel.....	67	Turkey.....	99
Italy	68	UAE	100
Japan.....	69	Ukraine	101
Jordan.....	70	United Kingdom	102
Kazakhstan.....	71	USA	103
Korea Republic.....	72	Venezuela.....	104
Latvia	73		

The IMD World Competitiveness Center

For more than thirty years, the IMD World Competitiveness Center has pioneered research on how economies and companies compete to lay the foundations for sustainable value creation. The competitiveness of nations is probably one of the most significant developments in modern management and IMD is committed to leading the field. The World Competitiveness Center conducts its mission in cooperation with a network of 56 Partner Institutes worldwide to provide the government, business and academic communities with the following services:

- Competitiveness Special Reports
- Competitiveness Prognostic Reports
- Workshops/Mega Dives on competitiveness
- IMD World Competitiveness Yearbook
- IMD World Digital Competitiveness Ranking
- IMD World Talent Ranking

The IMD World Competitiveness Center team:

At IMD	Professor Arturo Bris	Director of The IMD World Competitiveness Center
	Christos Cabolis	Chief Economist & Head of Operations
	José Caballero	Senior Economist
	Madeleine Hediger	Data Research and Online Services Specialist
	Catherine Jobin	Order and Sales Administrator
	William Milner	Research Projects Associate Manager
	Marco Pistis	Research Specialist
	Maryam Zargari	Research Specialist

At KAESCO	Jean-François Kaeser	Consulting
-----------	----------------------	------------

We also have the privilege of collaborating with a unique network of Partner Institutes, and other organizations, which guarantees the relevance of the data gathered.

Contact:

Tel: + 41 21/618 02 51

E-mail : wccinfo@imd.org

Internet: www.imd.org/wcc

Partner Institutes

We would like to express our deep appreciation for the contribution of our Partner Institutes, enabling an extensive coverage of competitiveness in their home countries. The following Institutes and people supplied data from national sources and helped distribute the survey questionnaires:

Argentina

Research Program on Economic Development and Institutions
Faculty of Economic Sciences
Catholic University of Argentina, Buenos Aires
<http://www.uca.edu.ar>

Dr. Alicia Caballero, Dean
Dr. Marcelo F. Resico, Senior Economist
Mr. Santiago Franco, Research Assistant

Australia

CEDA – Committee for Economic Development of Australia
www.ceda.com.au

Jarrod Ball, Chief Economist
Roxanne Punton, Director, External Affairs

Austria

Federation of Austrian Industries, Vienna
Austrian Institute of Economic Research, Vienna
<http://www.iv-net.at>

Dr. Christian Helmenstein, Chief Economist
Ms. Helena Zwickl
Mr. Michael Oliver

Belgium

FEB - Federation of Enterprises in Belgium, Brussels
www.vbo-feb.be

Christophe Ernaelsteen, Conseiller
Centre de compétence Economie & conjoncture

Brazil

Fundação Dom Cabral, Innovation and Entrepreneurship Center
<https://www.fdc.org.br/>

Carlos Arruda, Professor and Director FDC Innovation and Entrepreneurship Center
Ana Burcharth, Professor
Naira T. A. C. Gonçalves, Researcher

Bulgaria

Center for the Study of Democracy, Sofia
www.csd.bg

Mr. Ruslan Stefanov, Director, Economic Program
Ms. Daniela Mineva, Research Fellow, Economic Program
Mr. Martin Vladimirov, Analyst, Economic Program
Dr. Todor Galev, Senior Analyst, Economic Program

Canada

Information and Communications Technology Council (ICTC)
www.ictc-ctic.ca

Alexandra Cutean, Director Research & Policy
Rosina Hamoni, Research Analyst

Chile

Universidad de Chile
Facultad de Economía y Negocios (FEN)
www.fen.uchile.cl

Dr. Enrique Manzur, Vice Dean
Dr. Sergio Olavarrieta, Ph.D Program Director
Dr. Pedro Hidalgo, Department Head

China

China Institute for Development Planning, Tsinghua University

Prof. Yang Yongheng, Associate Dean of School of Public Policy & Management, Executive Associate Director of China Institute for Development Planning
Prof. Wang Youqiang, Associate Director of China Institute for Development Planning
Dr. Gong Pu, Research Fellow
Mr. Wang Hongshuai, PhD Candidate

Ms. Song Wenjuan, PhD Candidate
 Mr. You Shuai, PhD Candidate
 Ms. Xie Xiaohong, PhD Candidate
 Mr. Mao Junsong, Graduate Student
 Ms. Sun Xiao, Graduate Student

Colombia

National Planning Department
<https://www.dnp.gov.co/DNPN/Paginas/default.aspx>

Luis Alberto Rodríguez, Director, National Department of Planning
 Juan Sebastián Robledo Botero, Director, Innovation and Private Sector Development

Croatia

National Competitiveness Council
<http://konkurentnost.hr/en/>

Ivica Mudrinic, President
 Jadranka Gable, Advisor
 Kresimir Jurlin, PhD, Researcher

Cyprus

Economics Research Centre, University of Cyprus

Sofronis Clerides, Professor of Economics
 Nicoletta Pashourtidou, Assistant Director

Cyprus Employers and Industrialists Federation (OEB)
www.oeb.org.cy

Antonis Frangoudis

Czech Republic

Consumer Forum (Spotřebitelské fórum)
www.spotrebiteleskeforum.cz

Dr. Kryštof Kruliš

Denmark

Confederation of Danish Industry
<https://www.danskindustri.dk/english/>

Allan Sørensen, Chief analyst

Estonia

Estonian Institute of Economic Research (EKI)
www.ki.ee

Ms. Marje Josing, Director

Enterprise Estonia (EAS)

Mr. Tanel Rebane, Director of Trade Development Agency

Finland

ETLA Economic Research
www.etla.fi

Ville Kaitila, Researcher
 Markku Lehmus, Head of Forecasting
 Aki Kangasharju, Managing Director

France

Business France, Paris
<http://en.businessfrance.fr/>

Ms. Sylvie Montout, Chief Economist

Greece

Federation of Industries of Greece (SBE), Thessaloniki

Dr. Christos Georgiou, Director, Research and Documentation Department
 Mr. Constantinos Styliaras, Economist, Research and Documentation Department

Foundation for Economic and Industrial Research (FEIR/IOBE), Athens

Aggelos Tsakanikas, Associate Professor National Technical University of Athens - Head of Entrepreneurship Observatory
 Sophia Stavraki, Research Associate

Hong Kong SAR

Hong Kong Trade Development Council
www.hktdc.com

Ms. Alice Tsang, Assistant Principal Economist
 Ms. Doris Fung, Economist

Hungary

ICEG European Center, Budapest
<http://icegec.org>

Ms. Renata Anna Jaksa, Director
Dr. Oliver Kovacs, Senior Research Fellow

National University of Public Service,
Competitiveness and Fiscal Stability Research Group,
Budapest - <http://en.uni-nke.hu/>

Prof. Dr. Magdolna Csath, Research Professor

Iceland

Icelandic Chamber of Commerce, Reykjavik
www.chamber.is

Mr. Konrad S. Gudjonsson, Chief Economist
Mr. Isak Einar Runarsson, Economic Analyst

India

National Productivity Council, New Delhi
www.npcindia.gov.in

Dr.K.P.Sunny, Director & Head (Economic Services)
Mr. Rajesh Sund, Director (Economic Services) & Head
(Productivity Awareness)
Dr. Rajat Sharma, Director (Economic Services)

Indonesia

Lembaga Management, Faculty of Economics and
Business, Universitas Indonesia (LM FEB UI), Jakarta
<http://www.lmfeui.com/index.php>

Dr. Willem A. Makaliwe, Managing Director
Dr. Toto Pranoto, Senior Adviser
Bayuadi Wibowo, Group Head of Research Services
Arza Faldy Prameswara, Senior Researcher
Yendra Emirsyah Kivatra, Research Analyst
Ajeng Awliya Puspitasari, Research Analyst
Nadia Feby Artharini, Research Analyst

NuPMK Consulting, Jakarta
<http://nupmk.co.id>

Ms. Tini Moeis, Managing Director

Ireland

IDA Ireland
www.idaireland.com

Karen Law

Israel

The Federation of Israeli Chambers of Commerce, Tel-Aviv
www.chamber.org.il

Israella Many – Deputy Managing Director of Economy and
Tax
Itay Boyman – Executive Economist

Italy

CONFINDUSTRIA, Economic Research Department, Rome
www.confindustria.it

Dr. Alessandro Fontana, Economist
Dr. Cristina Pensa, Economist
Dr. Lorena Scaperrotta, Economist

Japan

Mitsubishi Research Institute, Inc., Tokyo
Research Center for Policy and Economy
www.mri.co.jp

Dr. Hirotsugu Sakai, Research Director

Jordan

Ministry of planning and International Cooperation
www.mop.gov.jo

Zeina Toukan, Secretary General
Ghada Issa, Head of Competitiveness Division

Kazakhstan

Economic Research Institute, JSC of the Ministry of National
Economy of the Republic of Kazakhstan, Nur-Sultan
www.economy.kz

Ruslan Sultanov, Chairman of the Board
Shakharbanu Zhakupova, Deputy Chairman of the Board
Bakytgul Khambar, Director, Center for Strategic Research
and Sustainable Development
Assem Mukazhanova, Deputy Director, Center for Strategic
Research and Sustainable Development

Madina Nurzhanova, Senior Expert, Center for Strategic Research and Sustainable Development
 Nauryz Baizakov, Senior Expert, Center for Strategic Research and Sustainable Development
 Temirlan Otepov, Expert, Center for Strategic Research and Sustainable Development

Korea Rep.

Korea Institute for International Economic Policy (KIEP) http://www.kiep.go.kr/eng/	Dr. Young gui Kim, Senior Research Fellow Ms. Nayoun Park, Researcher
The Korea Chamber of Commerce and Industry http://english.korcham.net/	Ethan Cho, Manager

Latvia

University of Latvia Centre for European and Transition Studies, LU CETS http://www.lu.lv/cets	Mrs. Zane Zeibote
---	-------------------

Lithuania

Enterprise Lithuania www.enterpriselithuania.com	Vytautas Adomaitis, Regulatory Affairs Officer
--	--

Luxembourg

Chamber of Commerce of the Grand Duchy of Luxembourg www.cc.lu	Ms. Christel Chatelain, Head of Economic Affairs Mr. Jean-Baptiste Nivet, Senior Economist Ms. Sidonie Paris, Economist
--	---

Malaysia

Malaysia Productivity Corporation (MPC), Petaling Jaya, Selangor www.mpc.gov.my	Dato' Abdul Latif Hj. Abu Seman, Director General MPC En. Ab Rahim Yusoff, Deputy Director General MPC En. Zahid Ismail, Deputy Director General MPC Pn. Wan Fazlin Nadia Wan Osman, Director Productivity & Competitiveness Development Division En. Mohamad Muzaffar Abdul Hamid, Deputy Director Productivity & Competitiveness Development Division Pn. Haslizayanti Othman, Assistant Manager Productivity & Competitiveness Development Division
--	---

Mexico

Center for Strategic Studies for Competitiveness www.ceec.edu.mx	M.C. Carlos Maroto Cabrera M.S. Carlos Maroto Espinosa
--	---

Mongolia

Economic Policy and Competitiveness Research Center www.ecrc.mn	Mr. Tsagaan Puntsag, Founder and Chairman of Board Ms. Lakshmi Boojoo, Director General Ms. Odonchimeg Ikhbayar, Deputy Director and Head of Research Ms. Tungalag Erdenebat, Research Economist Mr. Mungunjiguur Battsolmon, Research Economist Ms. Munkhshur Purevsuren, Researcher and Administrative Officer Mr. Iderkhangai Khenmedekh, Research Economist Ms. Yesunchuluu Khuderchuluu, Research Economist
---	---

Netherlands

Confederation of Netherlands Industry and Employers (VNO-NCW), The Hague www.vno-ncw.nl	Mr. Thomas Grosfeld Mr. Tim Zandbergen
--	---

New Zealand

Kerridge & Partners, Auckland https://kerridgepartners.com/	Mr Peter Kerridge, Partner
--	----------------------------

Peru

CENTRUM PUCP
<http://centrum.pucp.edu.pe>

Mrs. Beatrice Avolio, Head of the Graduate Business Department
Mr. Percy Marquina, General Director
Mr. Luis Del Carpio, Center of Competitiveness Director
Mr. Victor Fajardo, Research Analyst

Philippines

Asian Institute of Management Rizalino S. Navarro Policy Center for Competitiveness (AIM RSN PCC)
policy.aim.edu

Jamil Paolo Francisco, Ph.D. – Executive Director, AIM RSN PCC & Associate Dean, Asian Institute of Management
John Paul Flaminiano – Associate Director and Senior Economist, AIM RSN PCC
Christopher Ed Caboverde – Research Associate, AIM RSN PCC

Poland

SGH Warsaw School of Economics
World Economy Research Institute
Collegium of World Economy
<https://ssl-www.sgh.waw.pl/pl/Strony/default.aspx>

Prof. Marzenna Weresa
Dr. Anna Dzienis

Portugal

Porto Business School, University of Porto, Porto
<https://www.pbs.up.pt/>

Prof. Daniel Bessa
Prof. Álvaro Almeida
Prof. José Luís Alvim
Prof. João Loureiro
Prof. Filipe Grilo
Prof. Ramon O'Callaghan
Dr. Rui Coutinho

Qatar

Planning and Statistics Authority
Department of Strategic Planning
www.psa.gov.qa

Dr. Issa Ju'ma Ibrahim, Economic Expert
Hissa Alassiry, Project Manager

Romania

CIT-IRECSON Center of Technological Information, Bucharest
www.cit-irecson.ro

Mr. Bogdan Ciocanel, PhD, Director
Mr. Dan Grigore, Economist

Russia

Moscow School of Management SKOLKOVO
<https://school.skolkovo.ru/en/>

Dr. Andrey Shapenko, Associate Professor, Academic Director, MBA Programme
Mr. Vladimir Korovkin, Head of Digital and Innovations Research

Saudi Arabia

NCC, National Competitiveness Center
<https://www.ncc.gov.sa/en/Pages/default.aspx>

H.E. Dr. Eiman AlMutairi, CEO of National Competitiveness Center
Waleed AlRudaian, Vice President
Salman M. AlTukhaifi, Director of Analytical Department
Deema Almudaheem, Project Manager
Abdulrahman AlGhamdi, Senior Analyst

Singapore

Singapore Business Federation
www.sbf.org.sg/

Ms. Cheryl Kong, Assistant Executive Director

Economics Division, Ministry of Trade and Industry, Singapore
www.mti.gov

Slovak Republic

F.A.Hayek foundation, Bratislava
<http://www.hayek.sk/>

Martin Reguli, Project Manager
Matúš Pošvanc, Director

Slovenia

Institute for Economic Research, Ljubljana
<http://www.ier.si/>

Mr. Peter Stanovnik, PhD, Associate Professor
Ms. Sonja Ursic, M.A.

University of Ljubljana, Faculty of Economics
<http://www.ef.uni-lj.si/en>

Ms. Mateja Drnovsek, PhD, Full Professor
Mr. Ales Vahcic, PhD, Full Professor

South Africa

Productivity SA
<https://productivitysa.co.za/>

Mr Mothunye Mothiba, CEO
Dr Leroi Raputsoane, Chief Economist
Ms Juliet Sebolelo Mashabela, Economist

Spain

Spanish Confederation of Employers, Madrid
www.ceoe.es

Ms. Edita Pereira, Head of Economic Research Unit
Ms. Paloma Blanco, Economic Research Unit

Taiwan, China

National Development Council, Taipei
<http://www.ndc.gov.tw>

Mr. Cheng, Cheng-Mount, Deputy Minister
Ms. Wu, Ming Huei, Director of Economic Development
Department
Mr. Wang, Chen-Ya, Specialist

Thailand

Thailand Management Association (TMA), Bangkok
www.tma.or.th

Ms. Wanweera Rachdawong, Chief Executive Officer, TMA
Ms. Pornkanok Wipusanawan, Director, TMA Center for
Competitiveness
Mr. Nussati Khaneekul, Senior Manager, TMA Center for
Competitiveness

Turkey

TUSIAD, Turkish Industry and Business Association
Economic Research Department
www.tusiad.org

Zümrüt İmamoğlu, Chief Economist
İsmet Tosunoğlu, Expert

United Arab Emirates (UAE)

Federal Competitiveness & Statistics Authority (FCSA),
Dubai
<http://fcsa.gov.ae/en-us>

Ukraine

International Management Institute (MIM-Kyiv)
<https://mim.kiev.ua/en>

Dr. Iryna Tykhomyrova, President
Dr. Volodymyr Danko, Professor
Ms. Oksana Kukuruza, External Relations Director

Venezuela

National Council to Investment Promotion (CONAPRI)
www.conapri.org

Mr. Juan Cabral, Executive Director
Ms. Jennyn Osorio, Manager of Economic Affairs
Ms. Lilian Zambrano, Manager of Legal Affairs

Trends in the World Talent Ranking 2020

Arturo Bris
Director
IMD World Competitiveness Center

José Caballero
Senior Economist
IMD World Competitiveness Center

Christos Cabolis
Chief Economist
IMD World Competitiveness Center

Marco Pistis
Research Specialist
IMD World Competitiveness Center

Introduction

The IMD World Talent Ranking captures the capacity of an economy to develop as well as attract talent to strengthen its competitiveness. In order to quantify the quality of an economy's talent pool we evaluate three factors. The *Investment and Development* factor measures how an economy fosters domestic talent; the *Appeal* factor assesses the extent to which an economy retains homegrown talent along with drawing from the international talent pool; and finally, the *Readiness* factor measures the quality of the skills and competences that are available in the country.

In 2020, Switzerland and Denmark hold the first and second position, respectively, for the fifth consecutive year. Luxembourg, Iceland and Sweden complete the five most competitive economies with respect to talent. Austria, Norway, Singapore and the Netherlands remain in the top ten positions with small fluctuations from last year while Canada moves up five spots to become the eighth most talent-competitive economy.

For 2020, the most talent-competitive economies are those that invest in education. In our ranking we include criteria that capture the quality of education at all levels: primary, secondary, and tertiary. Furthermore, in the most competitive economies apprenticeships are sufficiently implemented and the provision of employee training is a priority for companies. The top performers, therefore, are

countries that invest in a holistic concept of education. To put it differently, highly competitive countries focus their talent development efforts on every stage of the educational process.

In addition, economies at the top of the ranking are those that appeal to an international talent pool. By definition, these are countries that are open, both to people and ideas.

The pandemic has affected our lives in different ways. A major disruption that occurred rapidly for many people, was the separation between the working place and “the place from which people work nowadays”. Throughout the world, those members of the labor force whose tasks can be accomplished remotely, work from home. There are different pros and cons for this reality. An important component is the sustainability of workers' motivation while being away from the physical work-place and their co-workers. In this regard, in the midst of the current COVID-19 crisis, we identify a trend among the top-ranking economies. Firms in these countries are able to motivate their work force continuously.

The next section provides an analysis of the trends and outcomes from a regional perspective. It follows with a detailed account of the highest and lowest ranked economies, as well as the countries that experienced a significant change in their position compared to last year.

Regional trends in the World Talent Ranking 2020

In this section we provide the trends of the 2020 IMD World Talent Ranking at a regional level.

The IMD World Talent Ranking studies 63 economies of middle and high income per capita. **Figure 1** provides a visualization of the changes in the Talent Ranking between 2019 and 2020 in Asia, Europe and the Americas. In 2020, 27 economies improved their performance in the

World Talent Ranking, 11 remained in the same position and 25 declined. The largest improvements in the ranking compared to 2019 have been experienced by Turkey (+12), Estonia (+8), the UAE (+6), Peru, Chile and Canada (+5). On the other hand, Russia (-7), Kazakhstan (-6), Hungary and Saudi Arabia (-5) are the economies that showed the most significant declines this year.

Figure 1: Talent Ranking 2020: improvements (+) and declines (-) between 2019-2020

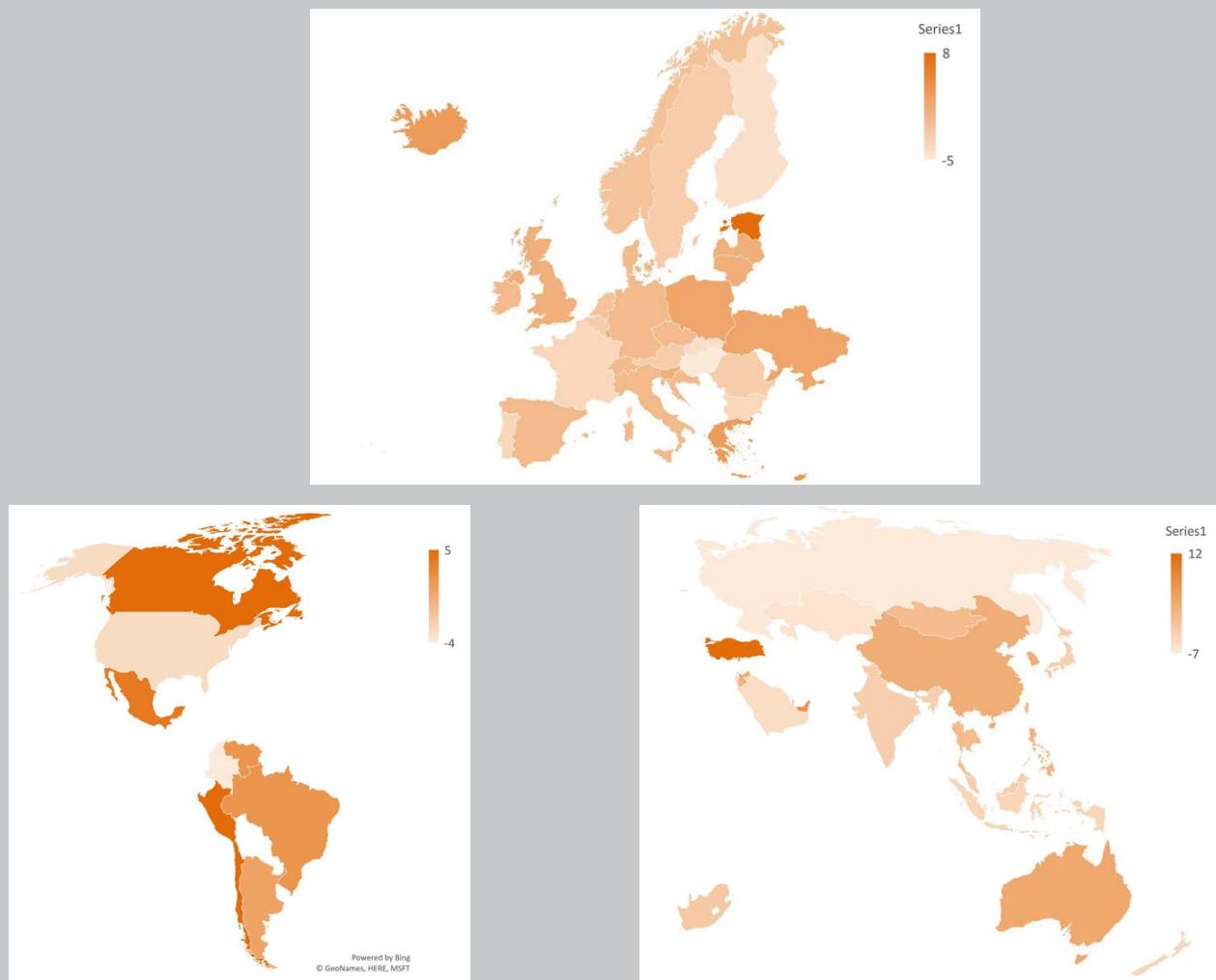


Figure 2: Trends in the World Talent Ranking by region

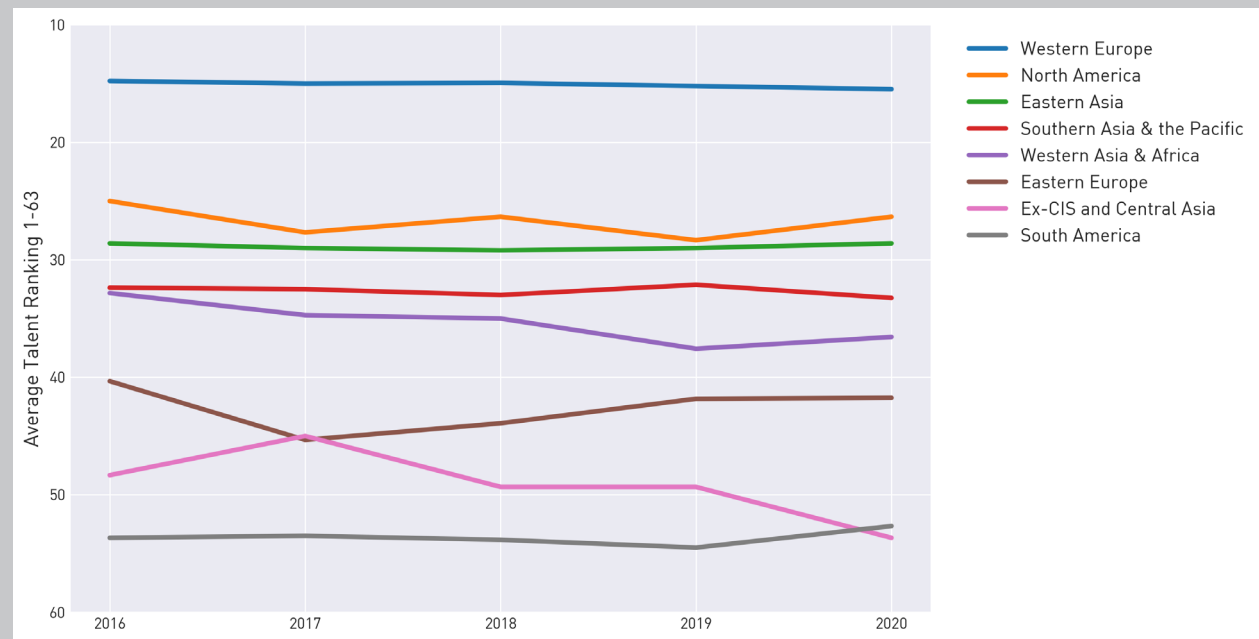


Figure 2 presents the sub-regional Talent Ranking trend for the years 2016 to 2020. These trends show that Western European countries remain, on average, the most talent competitive in the world. North America, and Eastern Asia place second and third respectively. Ex-CIS and Central Asia, South America and Eastern Europe are instead regions that continue to underperform in the World Talent Ranking 2020.

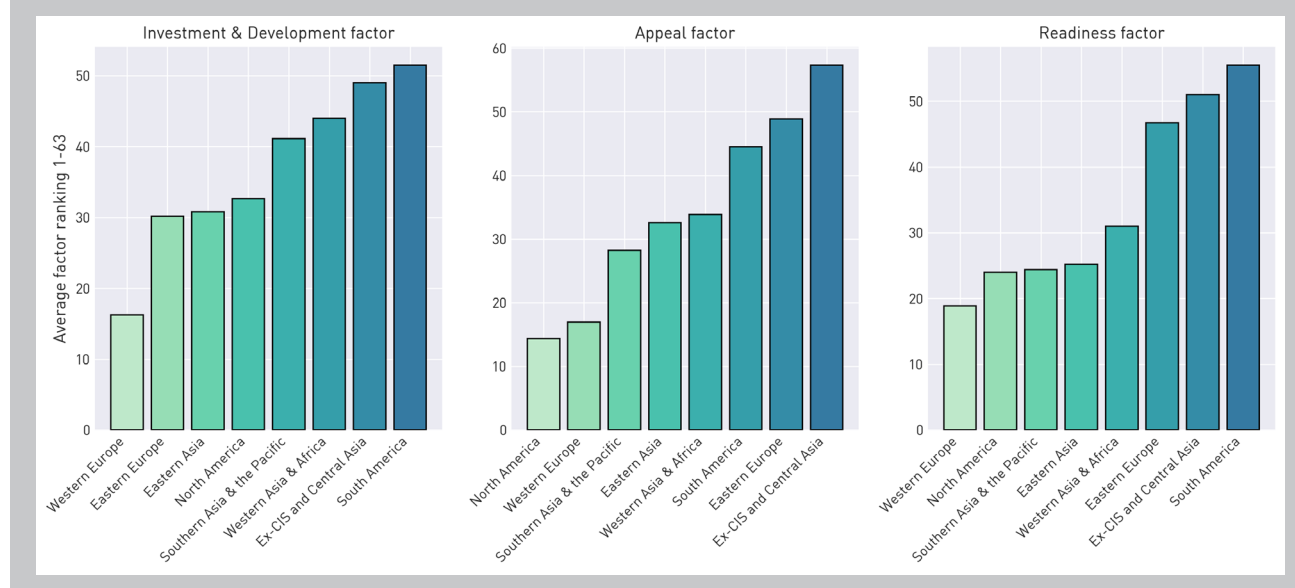
At the factor level (**Figure 3**), while Western Europe firmly keeps the lead in both the Investment & Development and Readiness factors, North America stands out in the Appeal factor, highlighting the important economic attractiveness of both Canada and the United States for foreign highly skilled workers.

The breakdown of Talent competitiveness by factors also reveals asymmetries in performance present in

subregions such as Eastern Europe and Southern Asia and The Pacific. In the first case, (Eastern Europe) economies that belong to the subregion generally excel in education and the development of local talent (Investment and Development factor, 2nd out of 8 subregions) but then they are unable to retain it and/or to attract foreign highly skilled workforce to satisfy the private sector's needs (Appeal factor, 7th; Readiness factor, 6th).

In the second case, as compared to other regions of the world, countries from the Southern Asia and The Pacific subregion underperform in the development of local talent (Investment and Development factor, 5th) but they manage to attract foreign professionals from the international talent pool (Appeal, 3rd) ensuring the skills and competences that their local job market needs (Readiness, 3rd).

Figure 3: Talent Ranking factors performance across regions in 2020



Top 10 countries

Switzerland remains in the top spot as does Denmark in 2nd place. While Luxembourg moves up two places to 3rd, Iceland rises to 4th (from 7th in 2019). Sweden, Austria and Norway drop to 5th, 6th and 7th, respectively. Canada joins the top 10 in 8th place and Singapore moves up to 9th. The Netherlands rounds up the top of the ranking in 10th.

Switzerland maintains a robust performance in the investment and development and appeal factors (1st in both). It leads the ranking in the effective implementation of apprenticeships, 2nd in the total public expenditure on education (per student), in the efficiency of its health infrastructure and in the impact of brain drain in its economy.

In the readiness factor, Switzerland ranks 5th with a drop in the graduates in sciences indicator (percentage of

graduates in ICT, engineering, math and natural sciences) from 26th to 30th, although it remains strong in all measures of the availability of skills and competencies.

Denmark's strongest performance at the factor level is in investment and development (2nd) in which it ranks 1st in the prioritization that the private sector assigns to employee training and 6th in total public expenditure on education (percentage of GDP). In the appeal factor, Denmark ranks 8th but shows substantial achievements at the indicator level. For example, it ranks 1st in the prioritization of the attraction and retainment of talent, the level of worker motivation and the implementation of justice.

Denmark ranks 6th in the readiness factor. Although the availability of particular skills remains strong (e.g., 6th in skilled labor and 2nd in finance skills), it ranks low in

graduates in sciences (39th) despite an improvement from 43rd in 2019.

Luxembourg's increase in the overall talent ranking is partly the result of its performance in the investment and development factor in which moves up from 5th to 3rd. It leads the table in the total public expenditure on education (per student) and in the quality of education in primary school (as measured by pupil-teacher ratio). In appeal, it ranks 5th with solid performances in prioritizing the attracting and retaining of talent (2nd), the availability of foreign highly-skilled personnel (4th) and remuneration in services professions (3rd). In the readiness factor it ranks relatively low (19th) as a result of a negative turn in executive opinions about - for example - the availability of competent senior managers and the effectiveness of its primary and secondary education.

Iceland improves in the investment and development, and readiness factors (from 6th to 4th, and from 18th to 16th, respectively). In appeal, it remains 6th. The country performs strongly in both measures of public expenditure on education (2nd and 3rd), and also in the quality of education in primary school (8th).

Under appeal, Iceland moves up in several indicators including the impact of brain drain in the economy, the level of motivation among workers and the quality of life that it offers. Despite some improvements in the level of attraction for foreign highly-skilled staff, Iceland remains in the lower ranks in that indicator (41st). In readiness, it reached the top of the ranking in the availability of skilled labor and moves up to 4th (from 6th) in the availability of finance skills. In graduates in sciences, however, Iceland drops to a strikingly low position (53rd).

Sweden remains in 7th position in investment and development but drops slightly in appeal and readiness. Its performance in both measures of public expenditure on education remains solid. The quality of education indicators (pupil-teacher ratio), however, rank low with primary school at 26th (down from 19th last year) and secondary school at 34th (up from 39th). The implementation of apprenticeships plummets to 43rd (from 30th). Sweden remains strong in measures of environmental protection, ranking 3rd in exposure to particle pollution (mean population exposure to PM2.5, micrograms per cubic metre). It also ranks among the top (5th up from 8th) in quality of life and the motivation of workers (4th up from 8th). Sweden drops to 23rd (from 17th) in the graduates in sciences measure but improves in PISA educational assessment (PISA survey of 15-year olds) moving up to 15th position (from 25th). It observes a similar trend in the availability of skilled labor, rising to 12th (from 23rd).

Austria drops to 6th (from 4th) in investment and development and in readiness it falls to 12th (down from 10th). In appeal, however, it moves up to 11th (from 13th). Under investment and development, Austria reaches the top position in the effectiveness of its health infrastructure, 2nd in the prioritization of employee training and 3rd in the

implementation of apprenticeships. It remains low in total public expenditure on education (28th) but the quality of education measures (pupil-teacher ratio) rank higher, with primary school at 11th (from 13th) and secondary school stable at 7th.

In appeal, it improves in the brain drain (from 16th to 11th), reaches 1st (from 2nd) in the quality of life indicator, and remains 2nd in worker motivation. In readiness, Austria drops to 27th (from 23rd) in the PISA educational assessment and in the availability of finance skills (38th) and of senior managers with significant international experience (27th). It improves, however, in the effectiveness of its primary and secondary school system (8th).

In investment in development, Norway drops to 5th (from 3rd), in appeal it remains in 10th and in readiness improves from 21st to 20th. Its total public expenditure on education (percentage of GDP, 17th), quality of education (primary school pupil-teacher ratio, 4th), implementation of apprenticeship (7th) and female participation in the workforce (percentage of total labor force, 20th) slightly drop.

Norway performs strongly in exposure to particle pollution at 7th, in the impact of brain drain (4th), and worker motivation (5th) but drops in the prioritization of attracting and retaining talent (20th). Norway's improvement in the readiness factor is mainly driven by advances in the effectiveness of management education (9th, up from 14th), the availability of language skills (10th from 15th) and inbound student mobility (foreign tertiary-level students per 1'000 inhabitants) in which it moves from 38th to 32nd.

Canada's improvement in the talent overall ranking (from 13th to 8th) is the result of its performance across all talent factors. It rises to 19th (from 26th) in investment and development, to 3rd (from 5th) in appeal and 7th (from 15th) in readiness. Canada improves, under investment and development, in apprenticeships and employee training. Its performance remains low in total public expenditure on education (36th) with both measures relating to the quality of education also lacking (primary school at 40th and secondary school at 43rd).

In appeal, it improves in several indicators including attracting and retaining talents (from 24th to 19th), worker motivation (21st to 15th) and brain drain (22nd to 13th). It remains in the 4th rank in the measure of environmental protection (exposure to particle pollution). Under readiness, Canada advances, for example, in the international experience of managers indicator and in the availability of language skills and inbound student mobility. It also remains in a robust position (7th) in the PISA educational assessment.

Singapore improves in investment and development (21st from 25th) within which it advances in several indicators including the implementation of apprenticeship programs, employee training, quality of education (secondary school pupil-teacher ratio) and female participation in the workforce. In the total public expenditure on education

it remains at 61st (but this is because of demographics). In appeal it drops from 20th to 22nd experiencing, at the indicator level, decreases in the quality of life, attracting overseas staff and the pollution measures.

It improves in worker motivation (17th from 20th) and the impact of brain drain (8th from 9th). Singapore remains at the top of the ranking in readiness, observing improvements in several indicators including the availability of skilled labor and finance skills. Singapore sustains its strong performance in readiness despite slight drops in PISA educational assessment, inbound student mobility, availability of language skills and graduates in sciences.

The Netherlands remains in 16th position in investment and development, in 7th in appeal and drops to 8th (from 7th) in readiness. With the exception of the measures of total public expenditure on education (it drops to 24th from 21st as a percentage of GDP, and remains at 13th in the per student

indicator) and the effectiveness of its health infrastructure (it drops to 10th from 7th), all other indicators of investment and development improve, to varying degrees.

In appeal, the Netherlands improves in the prioritization of attracting and retaining talent and it remains in the same position in the remuneration indicators (13th in service professions and 12th in management). It slightly drops but remains at the top of the rankings in worker motivation (6th), brain drain (5th) quality of life (7th), attraction for overseas highly-skilled staff (6th) and the implementation of justice (3rd). Under readiness, it experiences slight decreases in several indicators including the availability of skilled labor (10th) and finance skills (5th), and the PISA assessment (16th). It improves in graduates in sciences (56th from 60th) and inbound student mobility (10th from 11th).

Key trends among highly talent competitive countries

As we stated previously, talent competitive economies carry out their talent development efforts in a holistic manner. That is to say, they target every aspect of the talent-development process, going beyond the purely academic component to encompassing more vocational elements such as apprenticeship programs and continued employee training. **Figure 4** shows five measures related to the talent development process including academic and more vocational aspects. In all of these indicators, the top performers are countries that top the overall talent competitiveness rankings.

It important to note that in the implementation of apprenticeships schemes and the prioritization of employee training, Germany is a top performer. Although the country is not in the top 10 of the ranking, it occupies 11th position and, over time, has developed a robust infrastructure around apprenticeships and employee training.

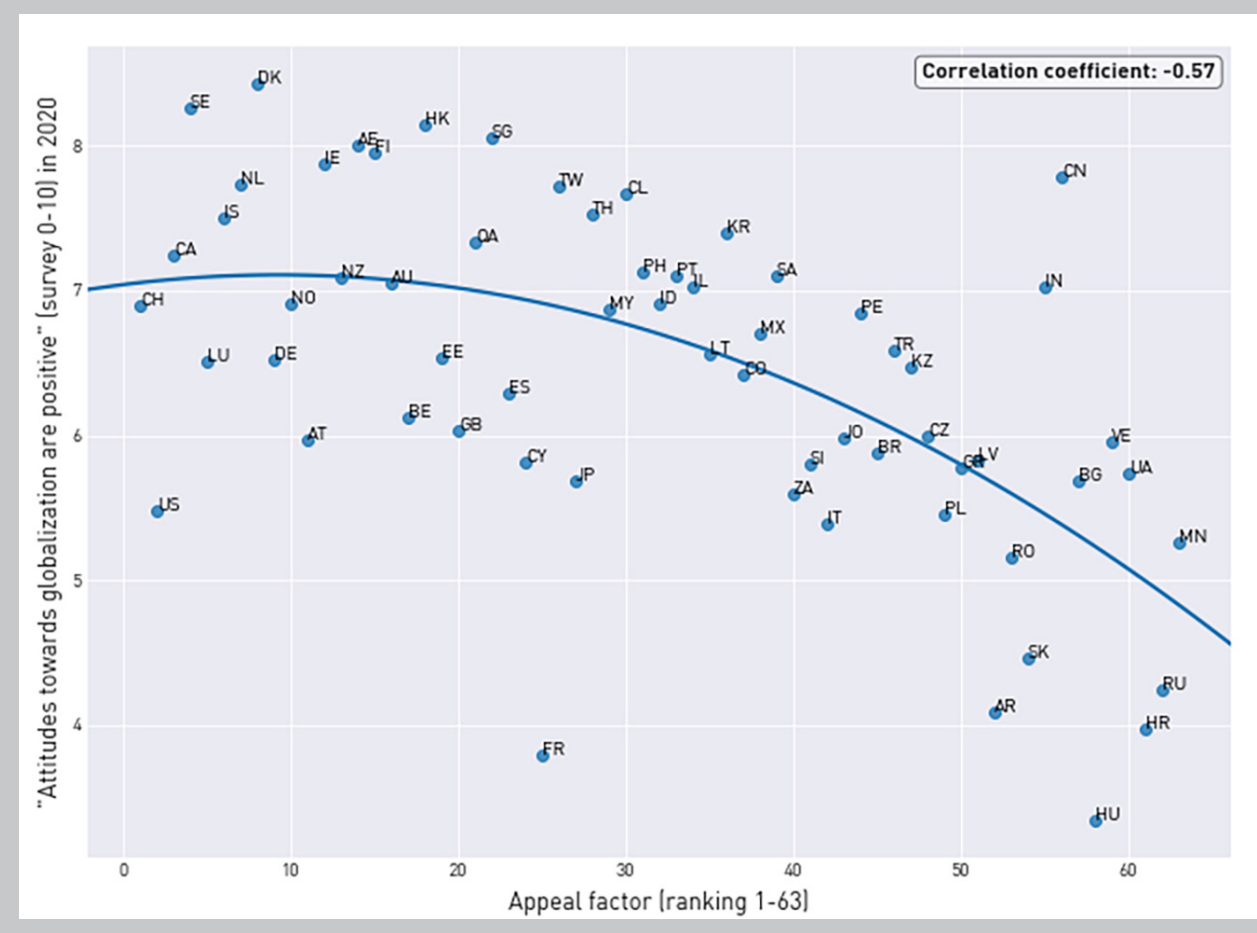
Figure 4 also shows a measure of employee motivation, another key trend among highly talent-competitive economies. Similarly to measures of education, top performers in employee motivation are countries in the top 10 of the rankings.

Another key trend among talent-competitive economies is their openness towards people and ideas. **Figure 5** shows that the relationship between the attitudes that society has towards globalization and the appeal factor. It shows that despite its current somewhat restrictive immigration practices, the USA remains open and attractive for overseas talent and is able to retain the local component of the talent pool. Other talent-competitive countries such as Switzerland, Luxembourg, Germany, Austria and Norway also show positive attitudes towards globalization and high appeal.

Figure 4: Holistic approach to local talent development

Holistic approach to local talent	Top performers			Under performers		
Total public expenditure on education per enrolled student (US\$)	Luxembourg 29'052\$	Switzerland 24'292\$	Iceland 19'007\$	Indonesia 454\$	Philippines 421\$	India 332\$
Apprenticeships are sufficiently implemented (survey 0-10)	Switzerland 8.86	Germany 8.45	Austria 8.25	Croatia 3.13	Romania 3.11	Slovak Republic 2.39
University education meets the need of the economy (survey 0-10)	Switzerland 9.05	Denmark 8.83	Singapore 8.82	Bulgaria 3.82	Slovak Republic 3.30	Mongolia 4.13
Employee training is a high priority in companies (survey 0-10)	Denmark 7.80	Austria 7.67	Germany 7.61	Bulgaria 4.76	Slovak Republic 4.69	Croatia 3.90
Management education meets the needs of the companies (survey 0-10)	Switzerland 8.59	Denmark 8.31	Singapore 8.16	Bulgaria 4.0	Croatia 3.97	Romania 3.94
Worker motivation in companies is high (survey 0-10)	Denmark 8.22	Austria 7.69	Switzerland 7.60	South Africa 4.0	Croatia 3.94	Slovak Republic 3.73

Figure 5: Relationship between openness and Appeal factor in 2020



Largest shifts in the overall talent ranking

Among the **largest increases**, Turkey moves up from 58th to 46th (the greatest improvement this year) due to advances across all talent factors. In investment and development (46th, up from 58th), it improves (to a different extent), or remains in the same position, in most indicators captured by this factor. In appeal (46th, up from 53rd), Turkey improves in all indicators with the exception of the cost of living index, remuneration indicators and pollution in which it remains in the same rank. Under readiness (41st, up from 56th), Turkey's ranking is boosted by advances in all indicators with the exception of labor force growth, which drops to 33rd position.

Estonia improves from 27th to 19th position as a result of advances in all talent factors. In investment and development (10th, up from 21st), it improves in all indicators captured by the factor (to varying degrees). The trend in appeal (19th, up from 23rd) is more balanced, improving in all indicators with the exception of the cost of living index, quality of life, remuneration measures and pollution, in which it remains in the same position as last year.

Under readiness (32nd, up from 35th), Estonia improves in all indicators (to different degrees) with the exception of the availability of competent senior managers, in which it

remains in the same position and graduates in science in which it drops to 18th (from 16th).

The UAE moves up from the 30th to 24th position. This is mainly driven by its improvement in the readiness factor (3rd up from 13th) in which it performs strongly in various indicators including graduates in sciences (17th), availability of skilled labor (2nd), availability of senior managers with significant international experience (2nd), availability of competent senior managers (1st) and inbound student mobility (6th).

This year Chile improves from 46th to 41st in the overall ranking. At the factor level, it improves in investment and development (48th from 50th) and appeal (30th from 34th), but declines in readiness (from 46th to 48th). At the indicator level, Chile advances in several indicators including the implementation of apprenticeship programs, the level of employee training, the level of worker motivation and the PISA educational assessment. It declines in the quality of life it offers and in the effectiveness of its primary and secondary education, among others.

Among the **largest downturns**, Russia experiences the largest decline in our sample dropping from the 47th to

54th position. This down-shift results from declines across all talent factors. Russia decreases from 45th to 47th in the investment and development factor, from 59th to 62nd in appeal and from 36th to 47th in readiness. Under investment and development, all indicators place at the 48th rank or below (except for secondary school pupil-teacher ratio, 27th and female labor participation, 5th). Similarly, in appeal, all indicators drop or remain stagnant at the 51st position or below (with the exception of effective income tax rate, 17th, and the pollution measure at 31st). Russia's performance in readiness is similar with most indicators ranking between the 43rd (effectiveness of primary and secondary education) and 61st (availability of senior managers with significant international experience) positions.

Saudi Arabia declines from 29th to 34th mainly as a result of decreases in investment and development (from 28th to 37th) and readiness (from 22nd to 30th). In the former, the performance of Saudi Arabia slightly deteriorates in both measures of total public expenditure on education. Furthermore, the quality of education at primary school level shows a steep downturn. Under readiness, despite

an upturn in executives' opinion about the availability of specific skills, graduates in sciences drops from 38th to 45th position, student inbound mobility from 30th to 34th and labor force growth from the 1st to 4th rank.

Kazakhstan drops from 38th to 44th position in the overall talent ranking. It declines across all talent factors, sliding from 39th to 41st in the investment and development factor, from 39th to 47th in appeal and from 38th to 50th in readiness. The implementation of apprenticeship programs and employee training drop to 23rd and 21st, respectively. In addition, measures of total public expenditure on education remain low (59th as a percentage of GDP, and 53rd per student) despite some improvement in both. Under appeal, business executives' perceptions about worker motivation plunges to 44th position (from 30th); the prioritization of talent attraction and retention drops to 43rd (from 34th); and the attractiveness of the country for overseas highly-skilled staff slides to 31st (from 23rd). In the readiness factor, most indicators drop (to varying degrees) except for graduates in sciences, which improves two positions to 31st, and student inbound mobility which remains at 50th.

Bottom 10 countries

As discussed in the previous section, Russia drops to 54th position and in so doing it places at the bottom 10 of the overall talent ranking.

Similarly, Bulgaria declines to 55th (from 52nd) entering the bottom of the ranking. Such deterioration results mainly from the readiness factor's performance (dropping from 55th to 57) in which Bulgaria slides in most indicators (to a varying extent) and rank at the 45th position or lower with the effectiveness of university and management education both ranking at 61st.

In investment and development (45th), Bulgaria experiences a decline in secondary school pupil-teacher ratio to 41st (from 36th) and the prioritization of employee training (61st from 55th). Within appeal (57th), it slightly deteriorates in the quality of life ranking at 60th place and in the implementation of justice placing at 54th. Bulgaria's performance in the attraction of foreign highly-skilled personnel, also shows a downturn from 50th to 56th.

Mexico improves from 60th to the 56th but remains at the bottom of the table. The improvements mainly originate in the country's performance in appeal (38th from 40th) and readiness (38th from 47th). In investment and development, Mexico remains in 62nd position. In this factor, the country displays improvements in the implementation of apprenticeship programs (36th from 42nd) and employee training (43rd from 49th) but its performance in measures of total public expenditure on education and the quality of education remain weak with female participation in the labor force remaining at 54th.

The prioritization of attracting and retaining talent improves to the 46th rank (from 54th) and the level of worker

motivation to 33rd (from 42nd) - both contributing to the overall improvement in appeal. The availability of skilled labor (33rd from 38th), finance skills (45th from 53rd) and competent senior managers (38th from 44th) mainly drive the country's performance in readiness. Importantly, Mexico shows a decline in the graduates in sciences indicators (22nd to 26th) and student inbound mobility (54th to 59th).

Romania drops to the 57th rank (from 55th). At the factor level, it declines in appeal (from 52nd to 53rd) and in readiness (from 50th to 55th). A combination of downturn and stagnation in the indicators that measure appeal contributes to its slight drop. Among the indicators that experience a downturn are the prioritization of talent attraction and retention, worker motivation and the impact of brain drain. Among the stagnant indicators are the measures of remuneration (both at 50th) and the implementation of justice (47th). In the case of readiness, declines in the availability of skilled labor, finance skills and managers with significant international experience partially drive Romania's performance in this factor.

Colombia moves down to 58th position (from 54th). It slightly declines in the appeal factor from 36th to 37th but experiences a steeper dip in readiness from 53rd rank to 60th. The downturn in appeal is mainly driven by a pessimistic turn in executives' opinions in terms of the private sectors' prioritization of attracting and retaining talent (55th), workers motivation (48th) and the quality of life (58th).

In the case of readiness, all indicators that capture the availability of skills drop to different degrees; for example, the availability of skilled labor (46th) and of finance skills (49th). Measures of the effectiveness of the educational system also drop or remain stagnant; for example, the

effectiveness of primary and secondary education declines to 51st and graduates in sciences to 34th, while the indicator of how well management education satisfies the demands of the economy remains at 50th.

Brazil displays a slight improvement in the overall talent ranking moving up to the 59th rank (from 61st). This positive shift is mainly driven by its performance in appeal. The improvement in the latter factor is largely the result of increases in indicators including the level of worker motivation, quality of life and the attractiveness of the country for foreign highly-skilled labor (although they continue to rank low: 41st, 56th and 57th). Despite drops in investment and development and readiness, there are some improvements within both factors. Female participation in the workforce (37th) and the effectiveness of the health system (53rd) improve in investment and development. In the case of readiness, graduates in sciences (54th) and PISA educational assessment (54th) slightly improve.

Venezuela advances to 60th position (from 62nd) largely due to a slightly positive turn in executives' opinions. For example, it improves in the implementation of apprenticeship programs (39th), employee training as priority of the private sector (48th), level of worker motivation (59th) and the availability of language skills (58th). While female participation in the labor-force also improves (48th) and the pollution indicator remain at 38th, the effectiveness of the health infrastructure and the quality of life remain at the bottom of the ranking.

The Slovak Republic drops from 57th position to 61st. This down shift results partially from declines in the investment and development factor (from 47th to 49th) and the readiness factor (from 59th to 61st). Although it performs relatively high in measures of public expenditure (43rd as a percentage of GDP and 37th per student) and the quality of the education system (44th in primary education and 40th in secondary), the country's implementation of apprenticeship

schemes ranks 63rd and the prioritization of the workforce training is at 62nd.

Similarly, several measures of appeal rank extremely low including the prioritization of attracting and retaining talent (62nd), worker motivation (63rd) and the impact of brain drain (61st). With few exceptions, measures of readiness slightly drop including the availability of finance skills (61st) and the effectiveness of primary and secondary education (61st). Nevertheless, there are some positive signs in readiness. Graduates in science moves up one rank to 40th position, the availability of language skills goes up to 51st (from 54th) and the PISA educational assessment from 38th to 36th.

India declines to 62nd position (from 59th). It remains at the 63rd rank in investment and appeal, slightly improves in appeal to 55th (from 57th) and remains in 25th place in readiness. Although total public expenditure on education as a percentage of GDP ranks at 35th, expenditure per student - as well as both measures of the quality of education (pupil-teacher ratio in primary and secondary school) - rank at 62nd. The implementation of apprenticeship schemes and employee training decline (35th and 44th, respectively). In addition, while the country's attractiveness for overseas highly-skilled personnel (46th), quality of life (52nd) and the implementation of justice (34th) drop, pollution remains at 61st. The availability of skilled labor drops (22nd) as well as the availability of senior managers with a significant international experience (41st), the effectiveness of university education (45th) and graduates in sciences (6th).

Mongolia remains in 63rd with several indicators ranking below 60th including quality of life (61st), effective personal income tax rate (63rd), the availability of skilled labor (63rd) and of finance skills (62nd). Nevertheless, it experiences some improvements in employee training (9th), the effectiveness of its health infrastructure (54th), female participation in the workforce (26th) and graduates in sciences (28th).

Concluding remarks

Earlier this year, we published the IMD World Digital Ranking in which we pointed out that countries that sustain their digital progress, are those that enjoy the flexibility and adaptability of not only the private sector but also of individuals. Moreover, we indicated that it was such flexibility and adaptability in terms of upcoming technologies that may enable societies to overcome the current crisis. This finding can be echoed in terms of talent.

Companies that are flexible in relation to work practices (e.g., working from home) and are adaptable in how they employ their available talent (e.g. redeploying available skills and competencies to new services such as online) under constantly changing circumstances are coping better in the current context. It is also important to note that such

enterprises are able to sustain a good level of motivation among their staff. The latter is fundamental for maintaining productivity and thus creating a smoother transition to a post-COVID-19 environment.

There is the risk that in a post-crisis context countries decide to turn inwards in their efforts to revitalize their economies. In other words, some countries may experience a downturn in their openness. It is thus essential to note that openness is a fundamental input to talent competitiveness not only for aspects related to the attraction of overseas staff but also retaining local talent. Importantly, talent competitiveness may be a fundamental component for economic recovery in a post-COVID era.

Appendices

Composition of sub-regions and regions.

Western Europe	<ul style="list-style-type: none"> Austria Belgium Cyprus Denmark Finland France Germany Greece Iceland Ireland 	<ul style="list-style-type: none"> Italy Luxembourg Netherlands Norway Portugal Spain Sweden Switzerland United Kingdom 	Europe, Middle East & Africa
Eastern Europe	<ul style="list-style-type: none"> Bulgaria Czech Republic Estonia Croatia Hungary Lithuania 	<ul style="list-style-type: none"> Latvia Poland Romania Slovenia Slovak Republic Ukraine 	
Western Asia & Africa	<ul style="list-style-type: none"> Israel Jordan Qatar Saudi Arabia 	<ul style="list-style-type: none"> South Africa Turkey UAE 	
Ex-CIS & Central Asia	<ul style="list-style-type: none"> Kazakhstan Mongolia 	<ul style="list-style-type: none"> Russia 	
Eastern Asia	<ul style="list-style-type: none"> China Mainland Hong Kong SAR Japan 	<ul style="list-style-type: none"> Korea Rep. Taiwan 	Asia & Pacific
Southern Asia & The Pacific	<ul style="list-style-type: none"> Australia India Indonesia Malaysia 	<ul style="list-style-type: none"> New Zealand Philippines Singapore Thailand 	
North America	<ul style="list-style-type: none"> Canada Mexico 	<ul style="list-style-type: none"> USA 	The Americas
South America	<ul style="list-style-type: none"> Argentina Brazil Chile 	<ul style="list-style-type: none"> Colombia Peru Venezuela 	

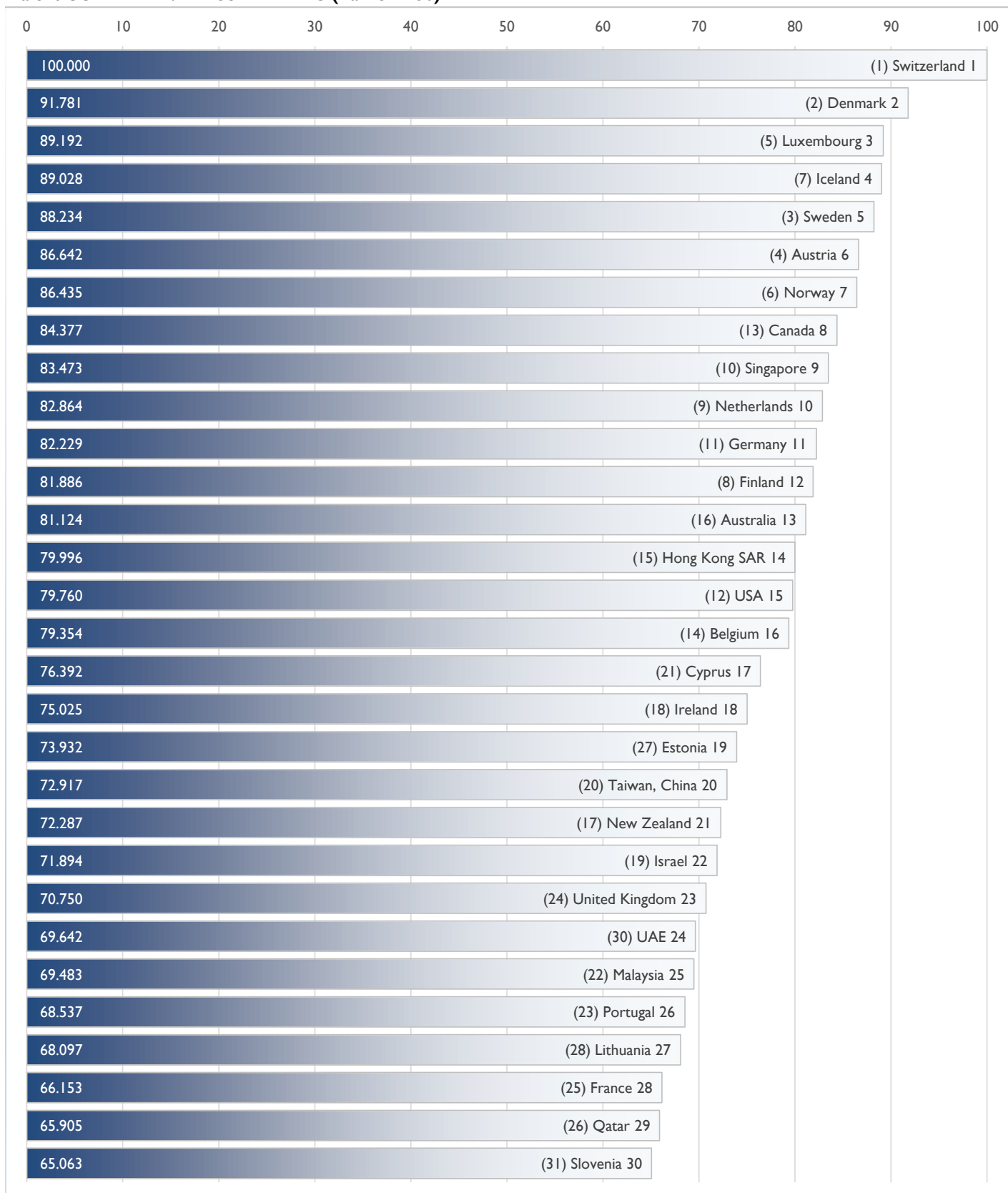
IMD WORLD TALENT RANKING 2020

All data are available from the
World Competitiveness Online.

Visit our eShop
www.wcceshop.org

The 2020 IMD World

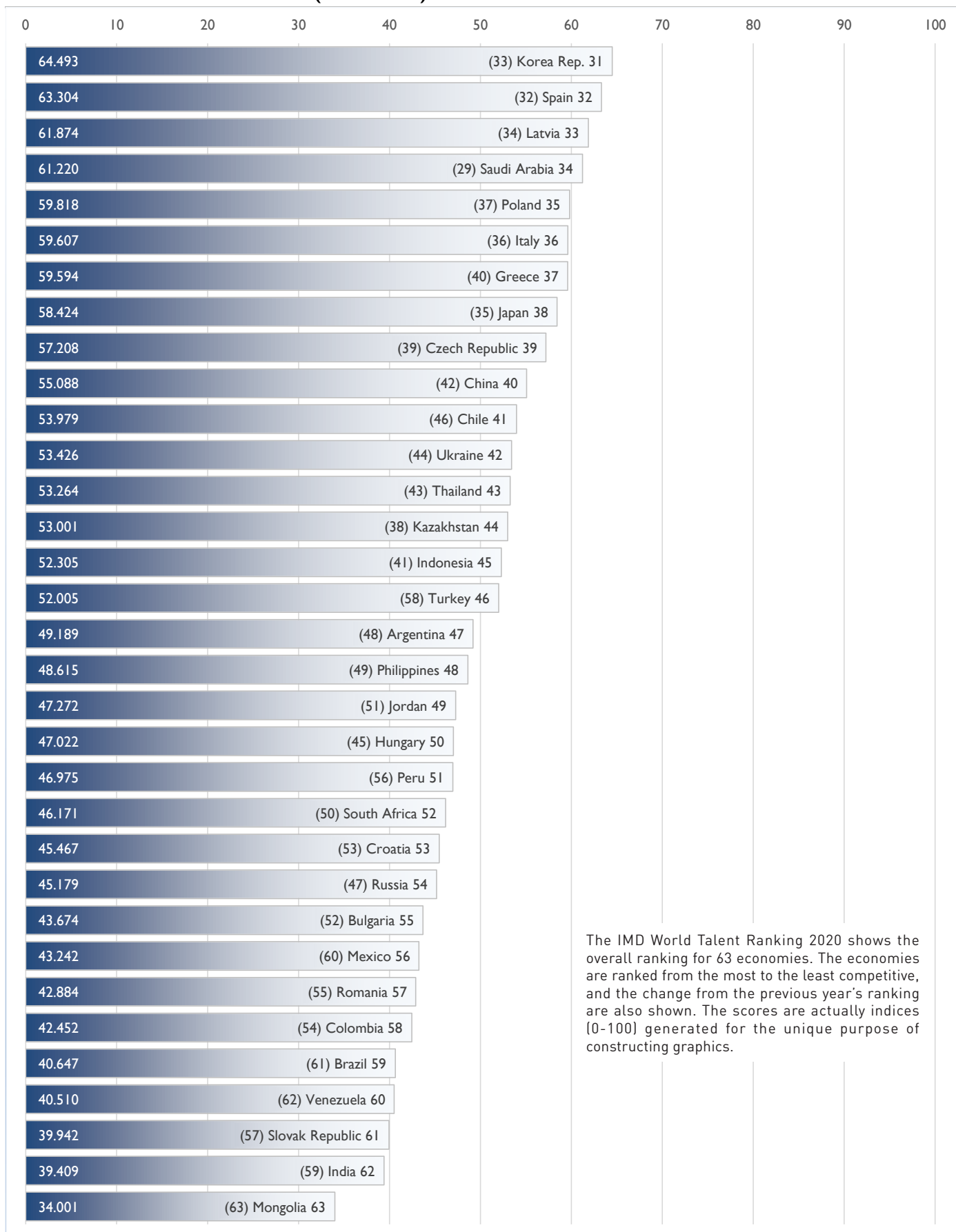
Talent COMPETITIVENESS RANKING (Ranks 1 - 30)



(2019 rankings are in parentheses)

Talent Ranking

Talent COMPETITIVENESS RANKING (Ranks 31 - 63)



The IMD World Talent Ranking 2020 shows the overall ranking for 63 economies. The economies are ranked from the most to the least competitive, and the change from the previous year's ranking are also shown. The scores are actually indices [0-100] generated for the unique purpose of constructing graphics.

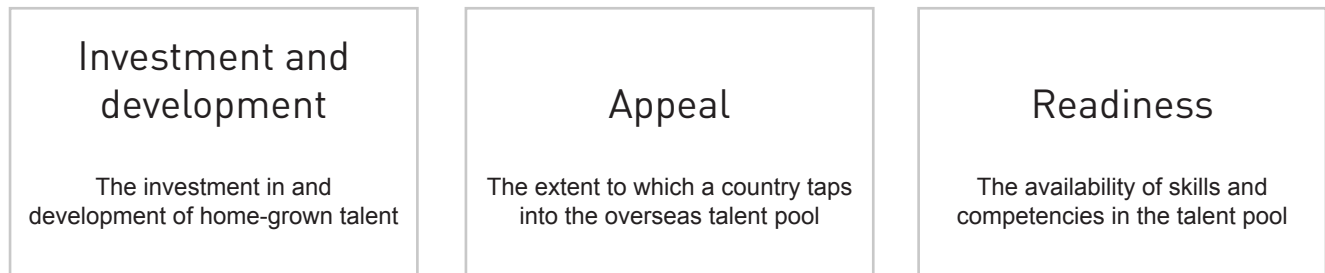
(2019 rankings are in parentheses)

Methodology in a Nutshell

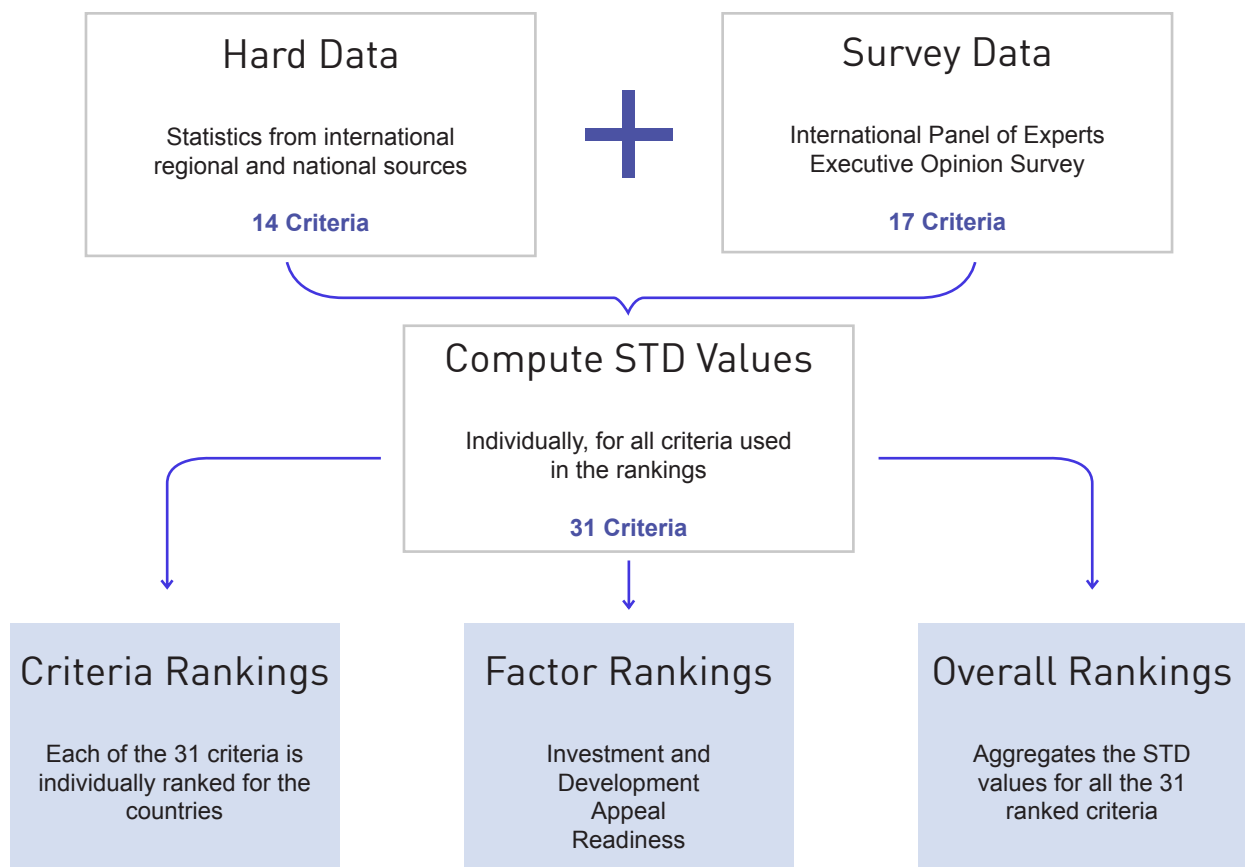
1. The IMD World Talent Ranking (WTR) assesses the status and the development of competencies necessary for enterprises and the economy to achieve long term value creation. It does so by using a set of indicators which measure the development, retention and attraction of a domestic and international highly-skilled workforce.
2. Based on our research, the methodology of the World Talent Ranking defines Talent Competitiveness into three main factors:
 - Investment and Development
 - Appeal
 - Readiness
3. These 3 factors comprise 31 criteria, although each factor does not necessarily have the same number of criteria (for example, it takes more criteria to assess Readiness than to evaluate Investment and Development).
4. Each factor, independently of the number of criteria it contains, has the same weight in the overall consolidation of results that is $1/3$ ($3 \times 33.3 \sim 100$).
5. Criteria can be hard data, which analyze talent development as it can be measured (e.g. Total Public Expenditure on Education) or soft data, which analyze the quality of these investments as they can be perceived (e.g. Management Education).
6. Finally, to compute the overall World Talent Ranking, we aggregate the criteria to calculate the scores of each factor which function as the basis to generate the overall ranking.

What is the IMD World Talent Ranking?

World Talent Ranking Factors

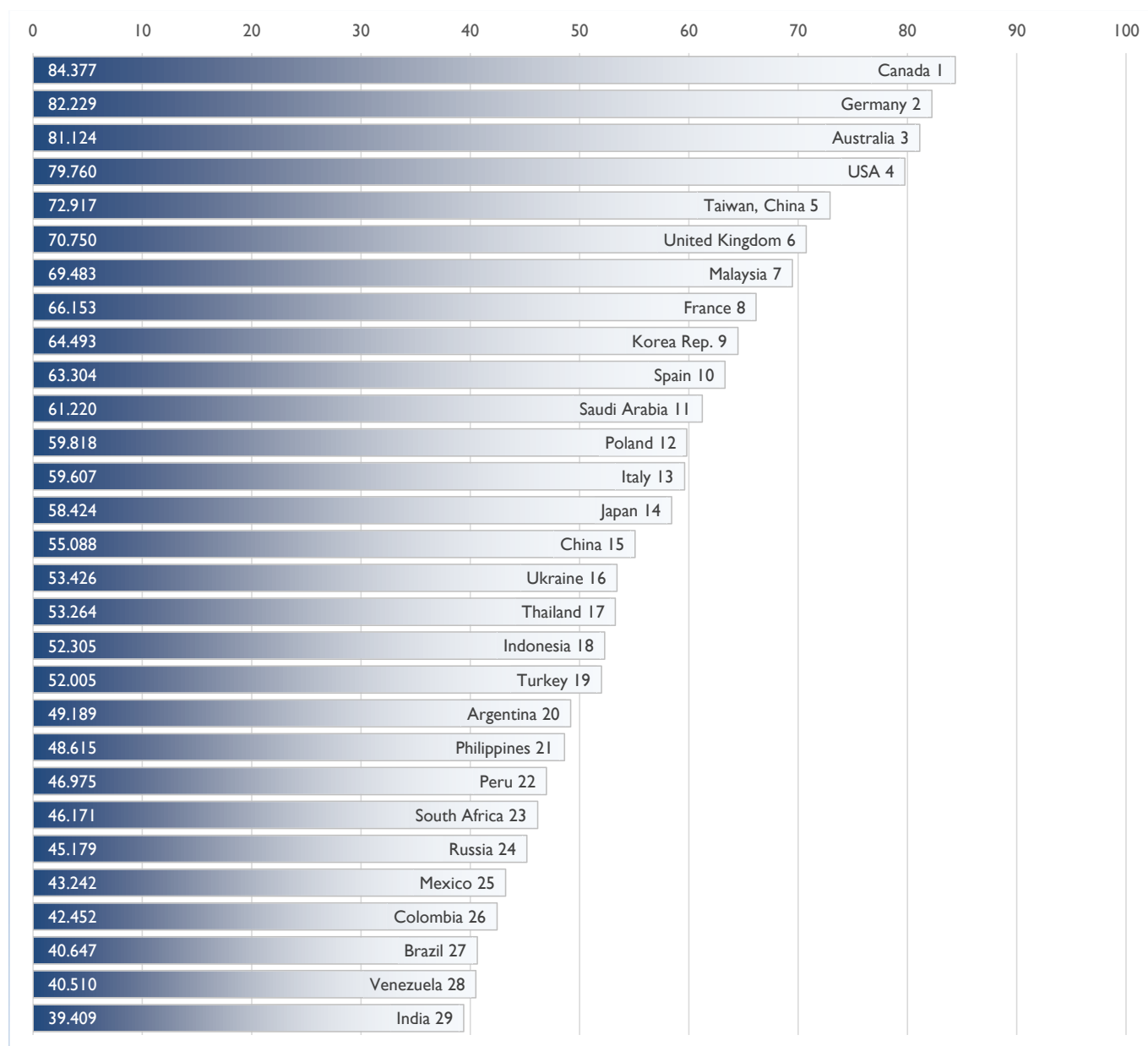


Computing the Rankings

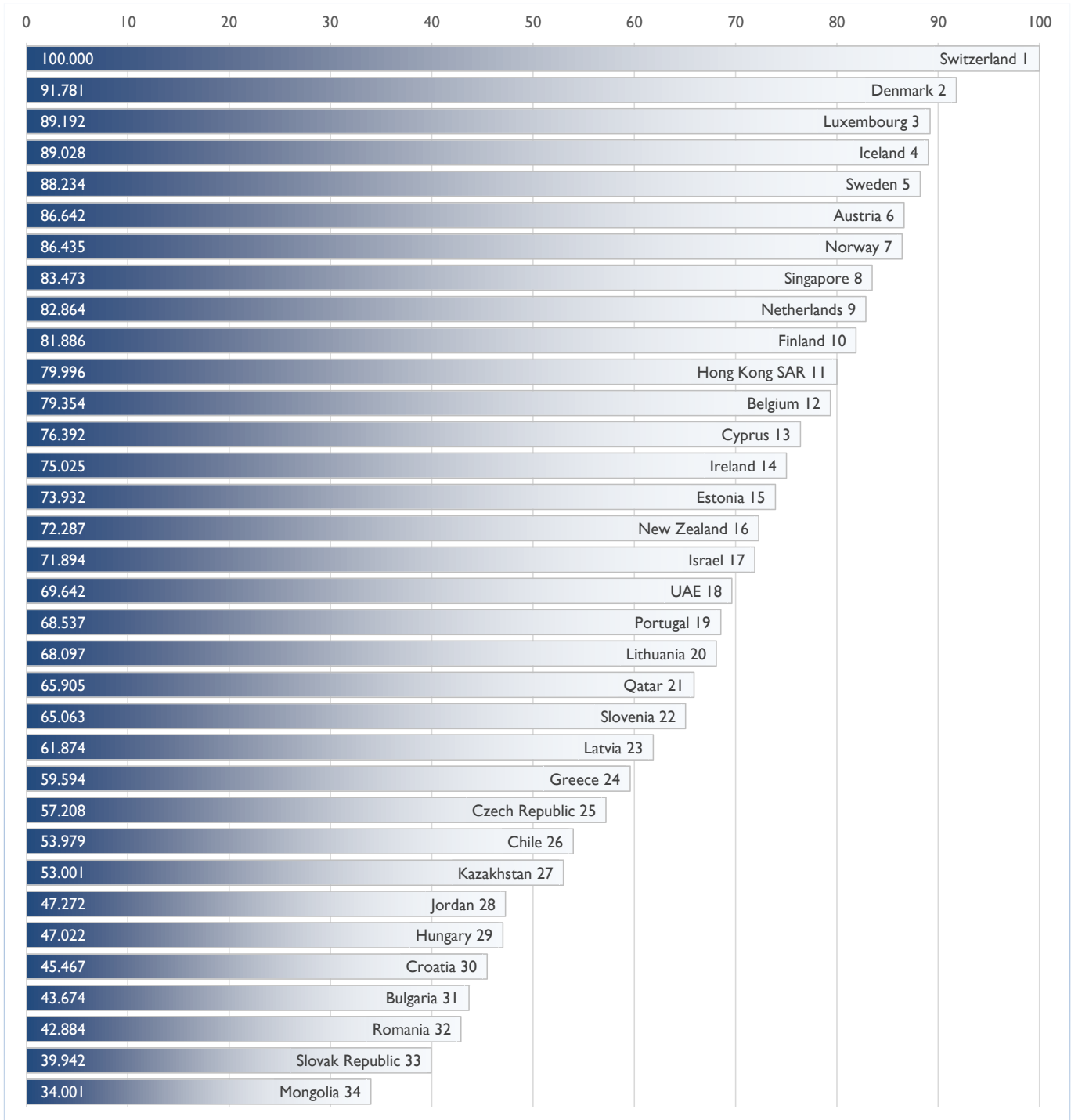


The 2020 IMD World Talent Rankings: Selected Breakdowns

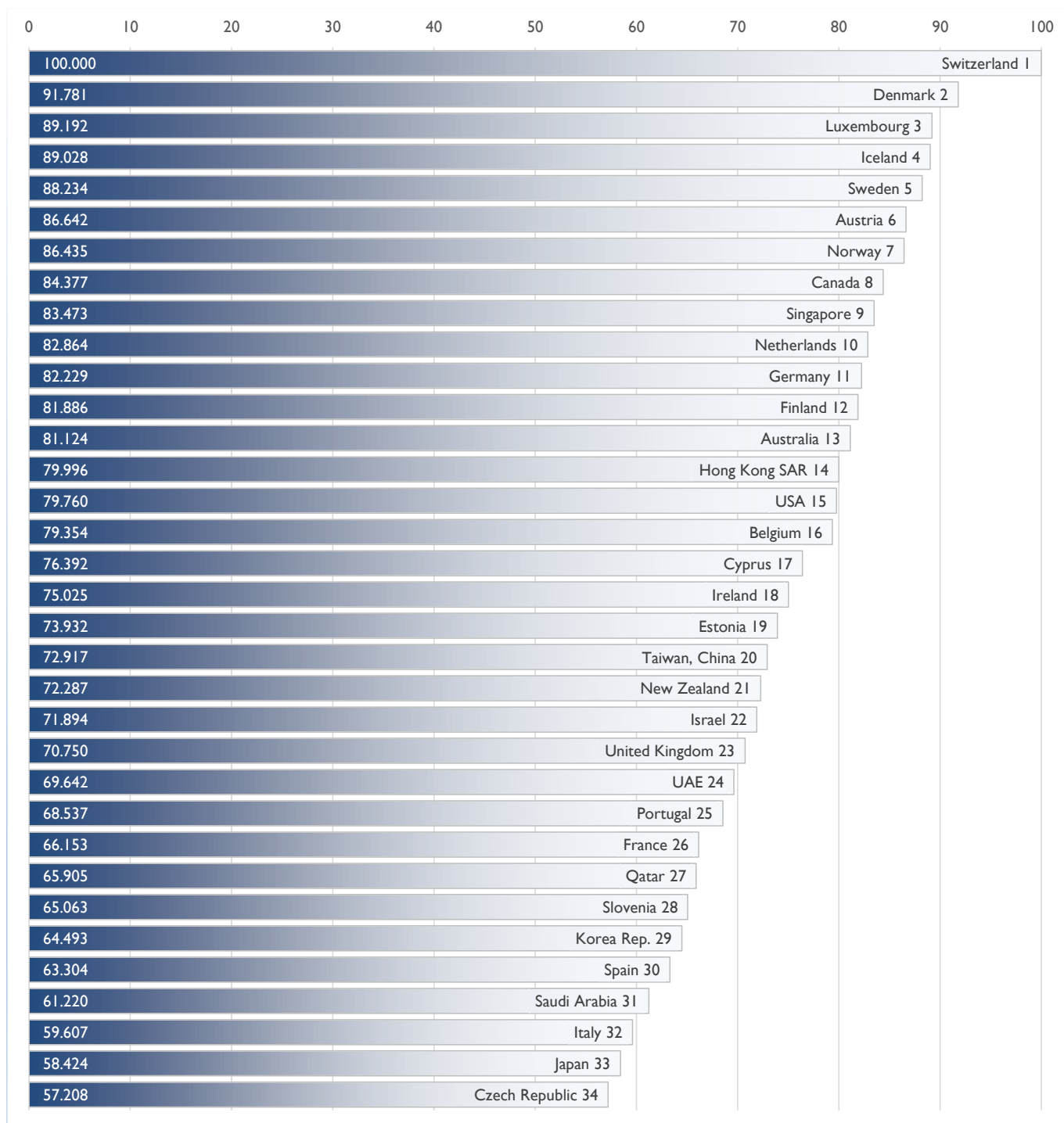
Populations greater than 20 million

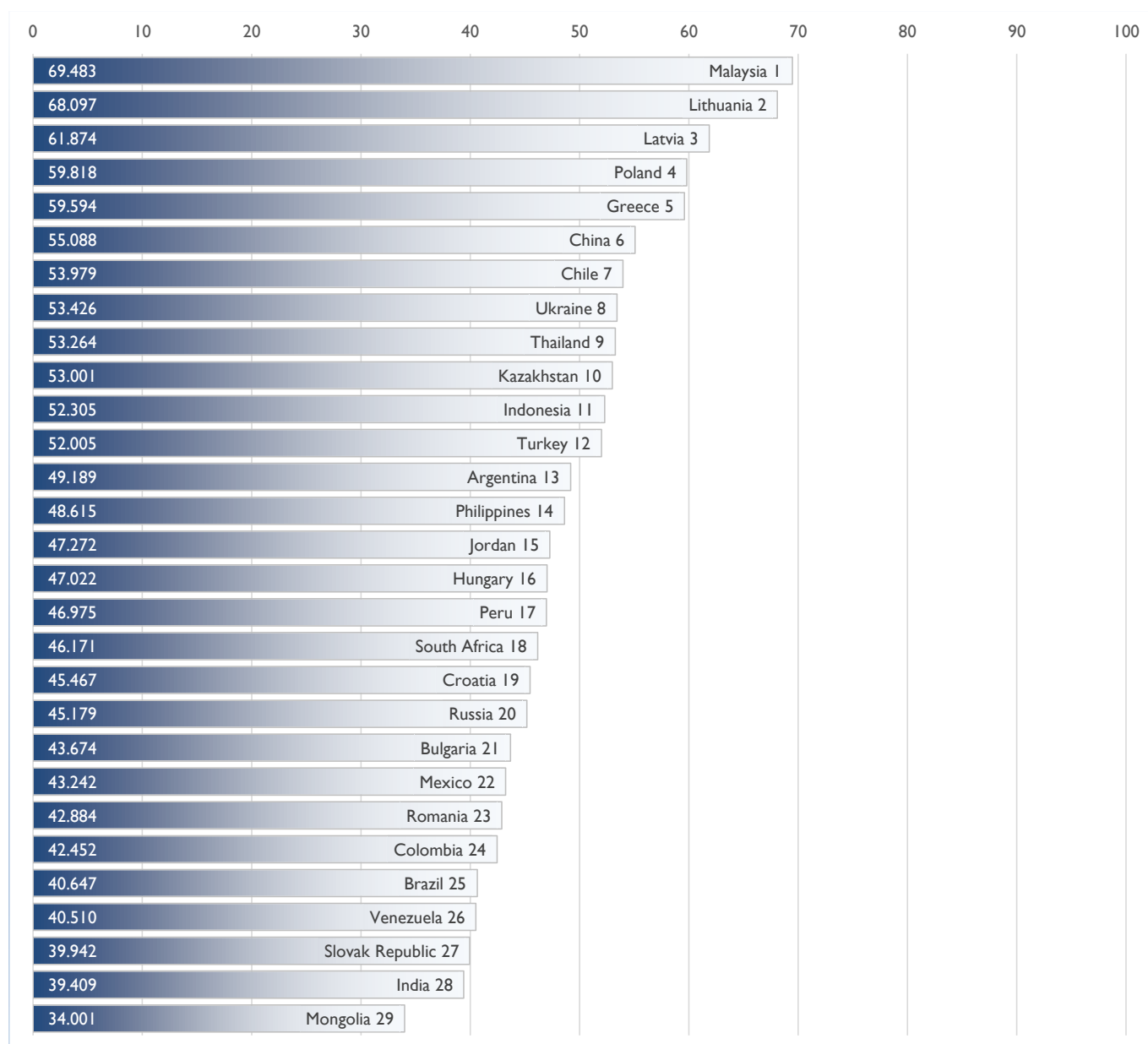


Populations less than 20 million

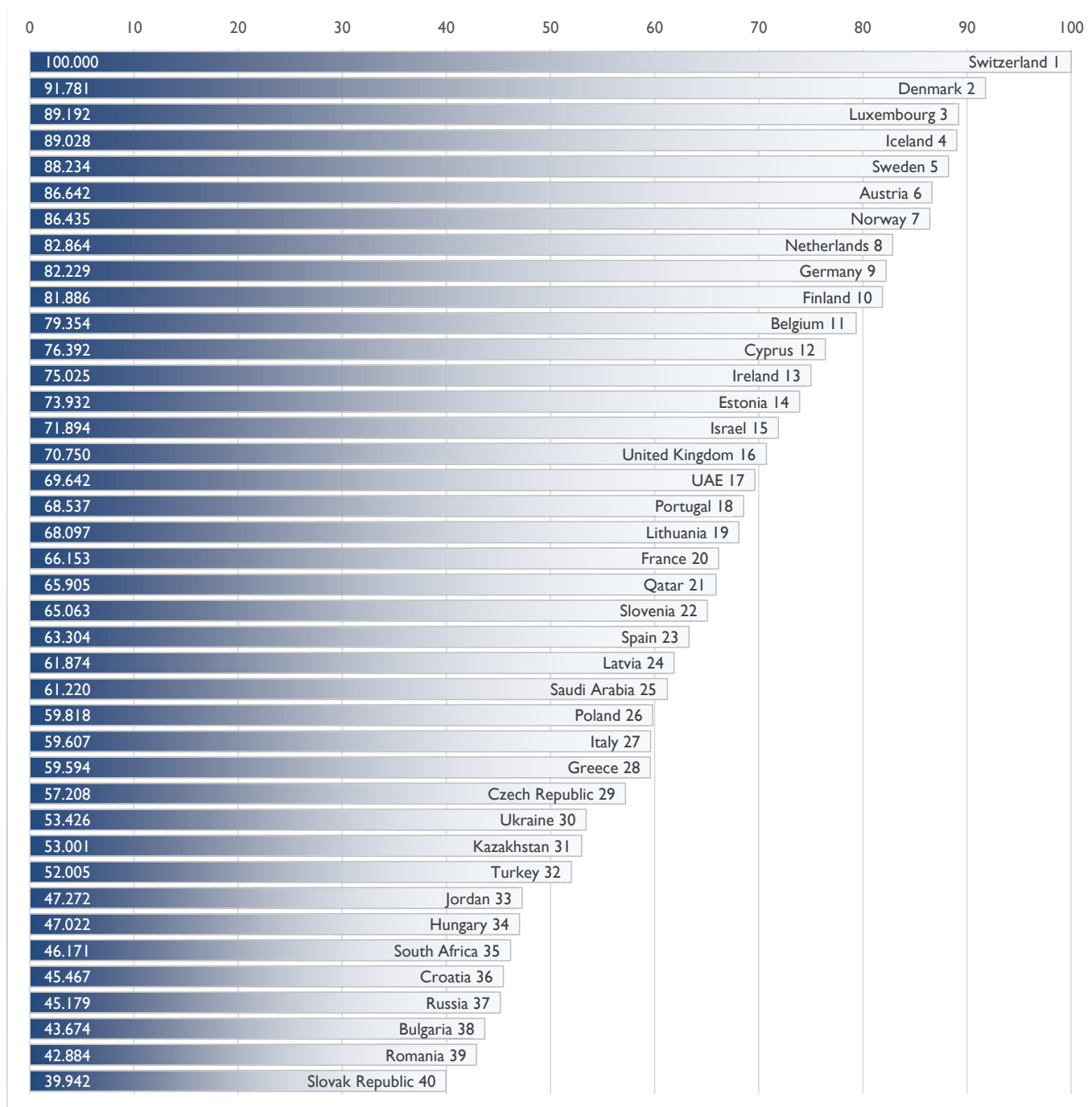


GDP per capita greater than \$20,000

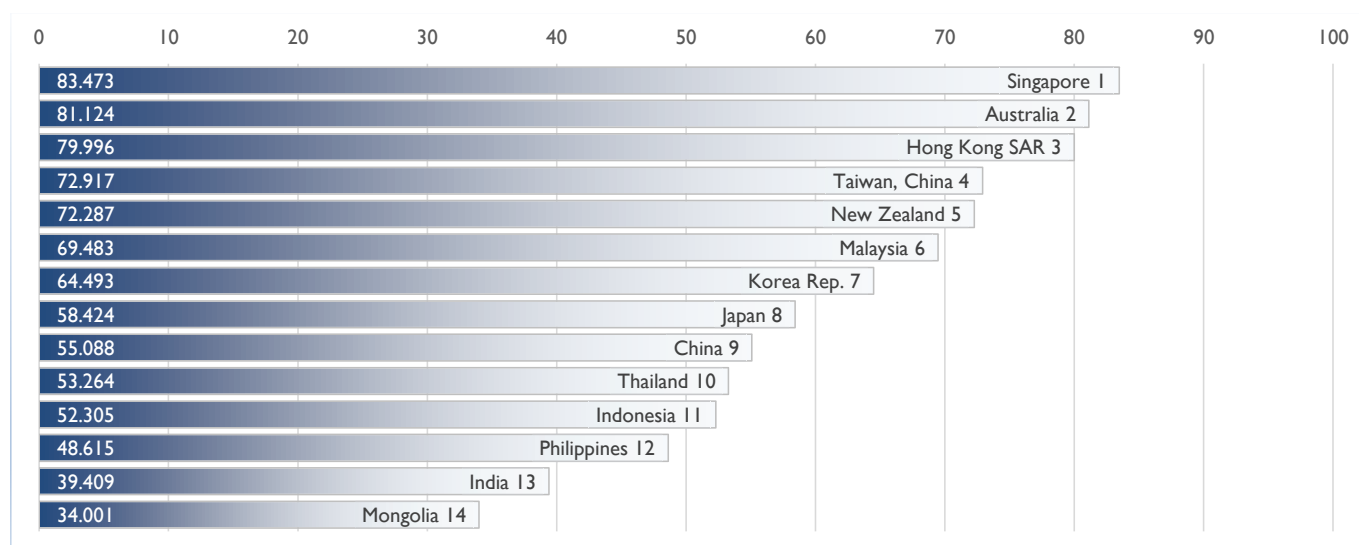




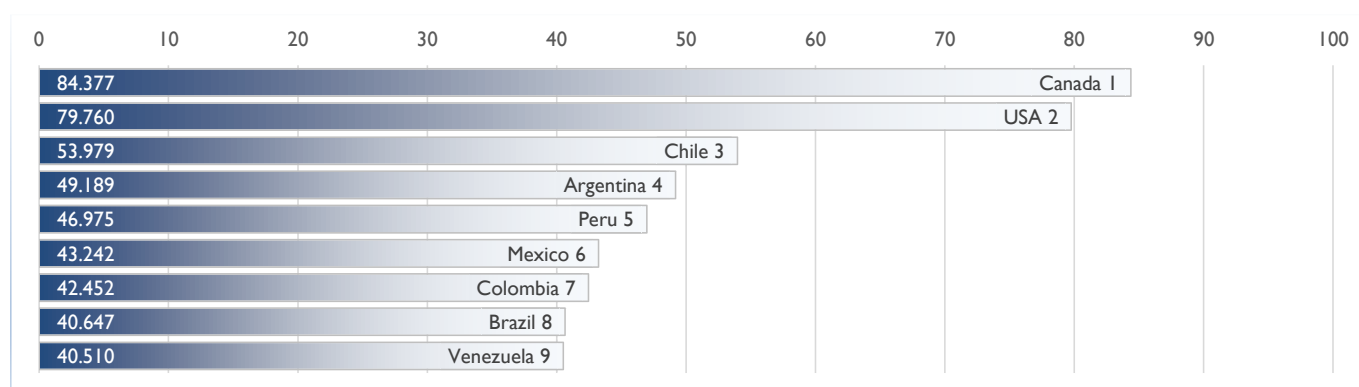
Europe - Middle East - Africa



Asia - Pacific

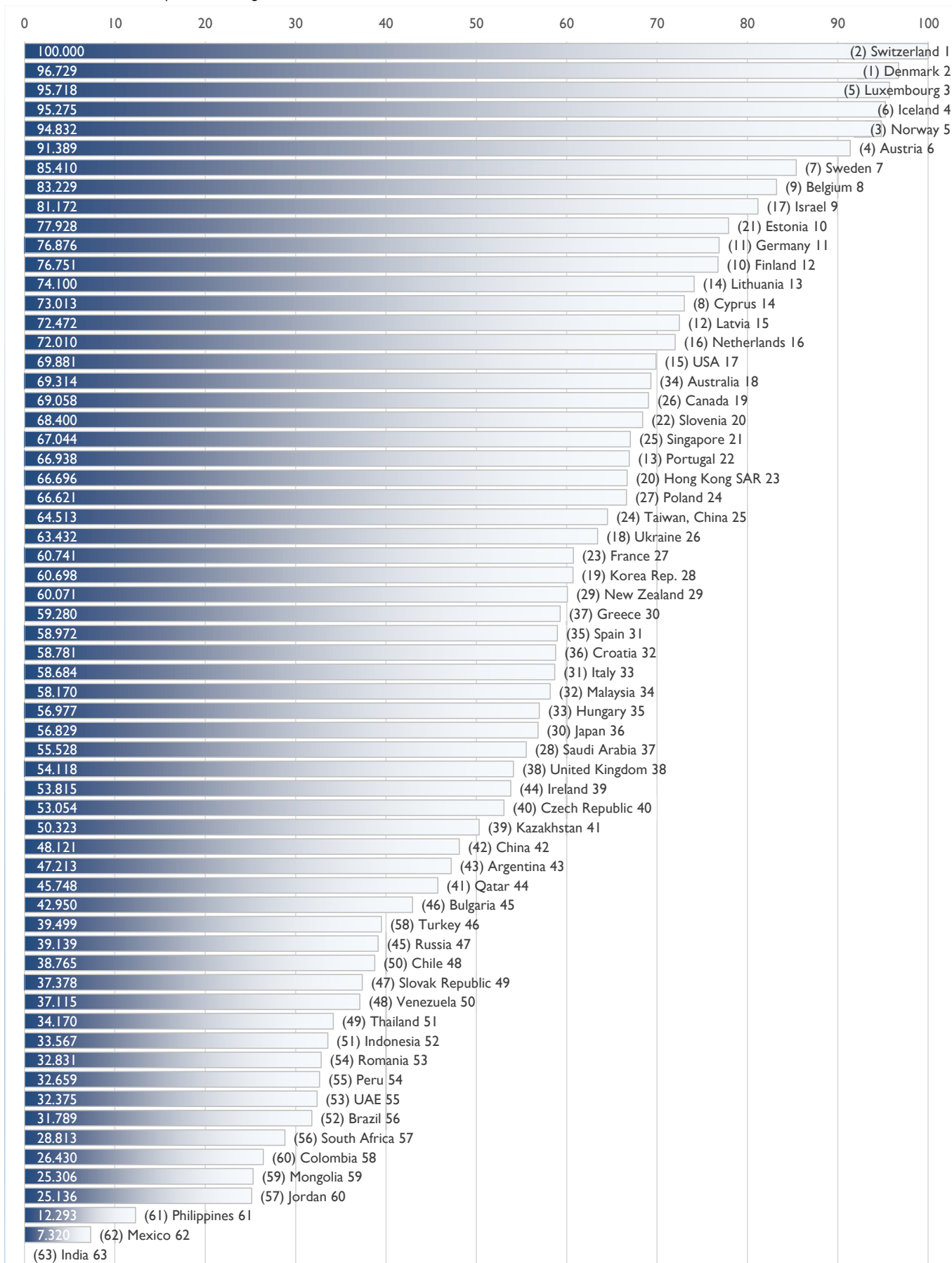


The Americas



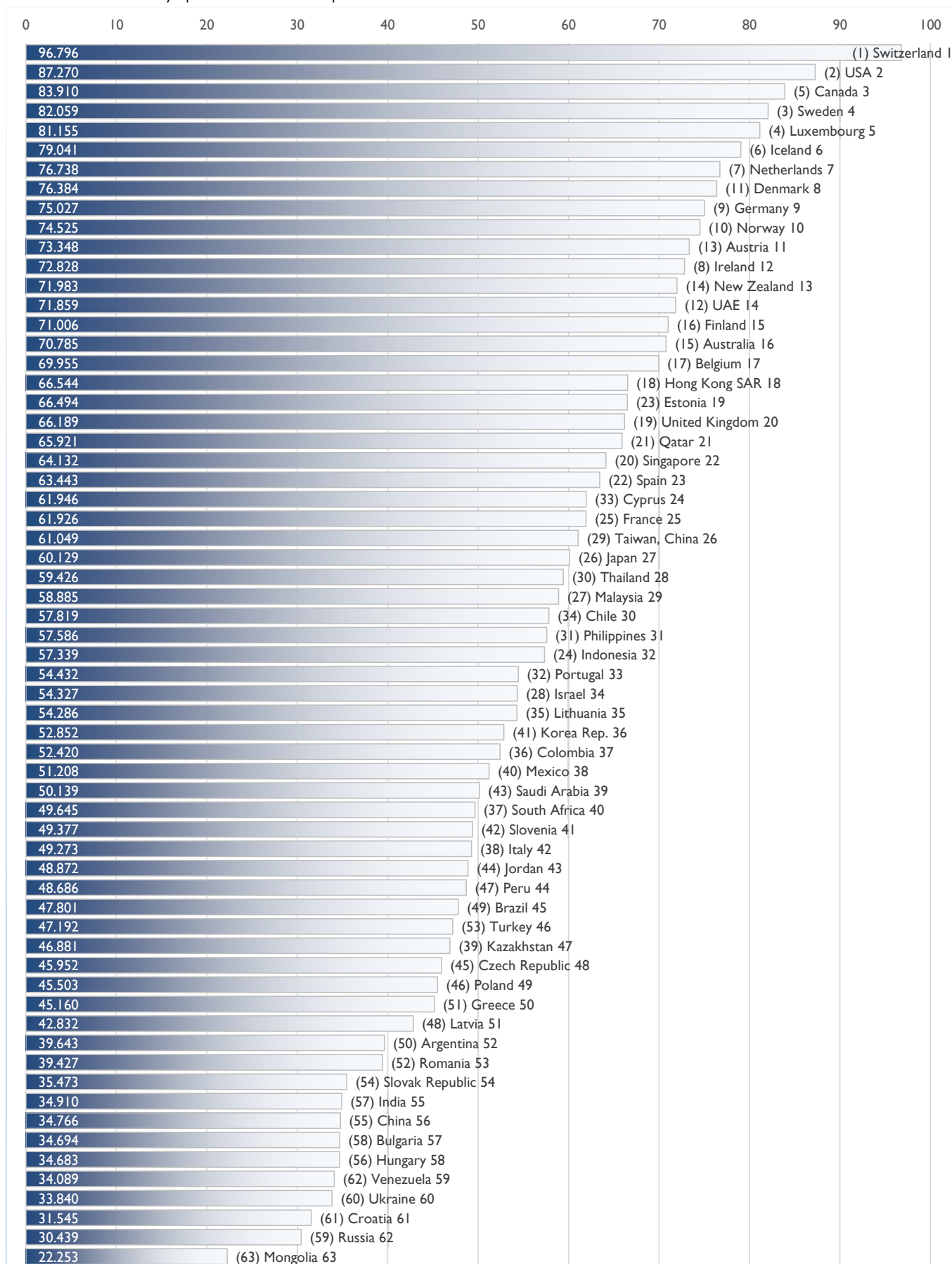
Factor 1: Investment & Development

The investment in and development of home-grown talent



(2019 rankings are in parentheses)

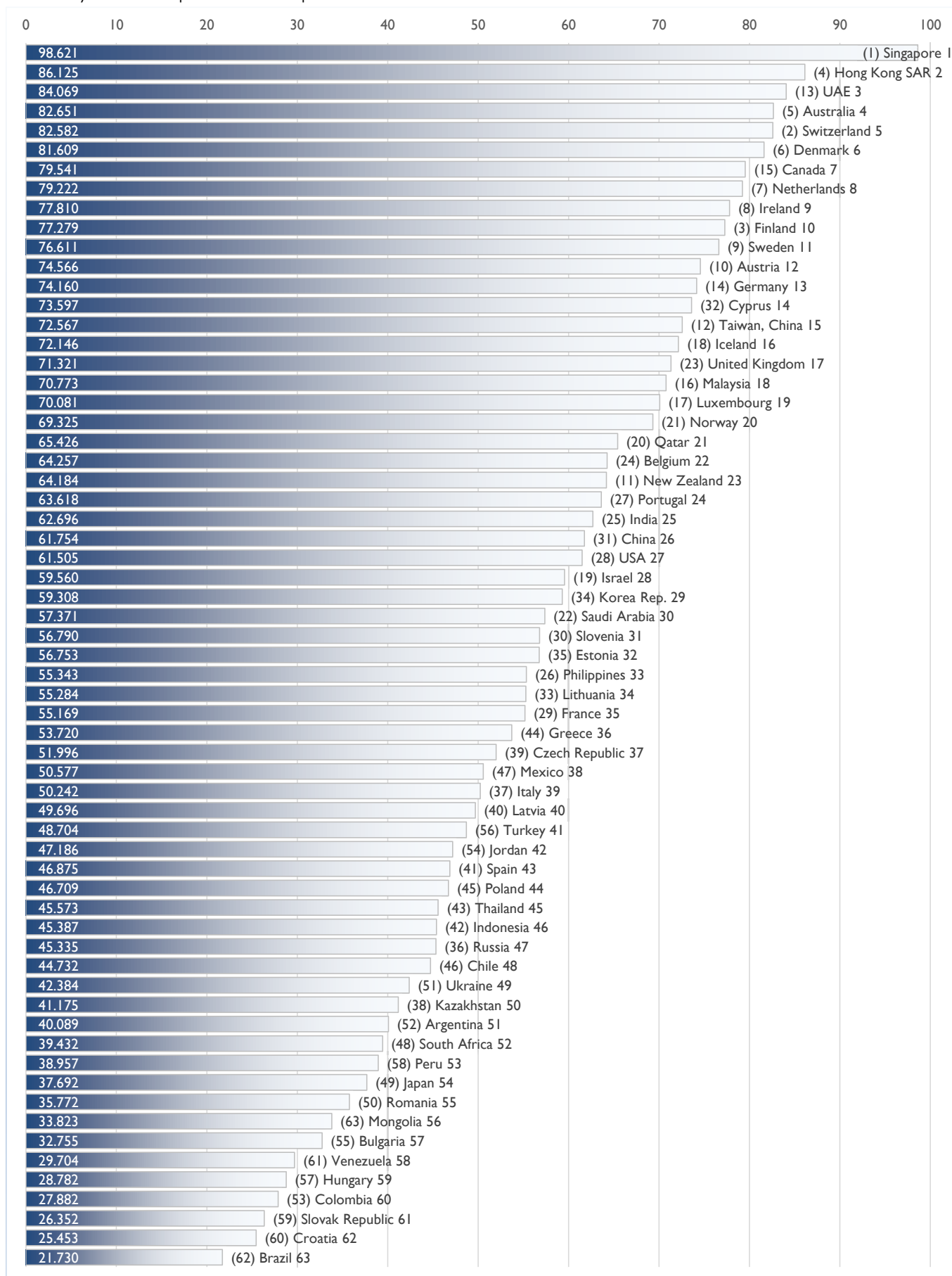
The extent to which a country taps into the overseas talent pool



(2019 rankings are in parentheses)

Factor 3: Readiness

The availability of skills and competencies in the talent pool



(2019 rankings are in parentheses)

	OVERALL					Investment & Development				
	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
Argentina	52	50	47	48	47	51	55	53	43	43
Australia	16	19	14	16	13	29	36	26	34	18
Austria	5	4	4	4	6	3	3	2	4	6
Belgium	3	3	11	14	16	2	2	8	9	8
Brazil	45	52	58	61	59	39	45	49	52	56
Bulgaria	58	58	57	52	55	44	44	45	46	45
Canada	12	11	6	13	8	22	22	19	26	19
Chile	48	44	43	46	41	59	53	55	50	48
China	42	40	39	42	40	45	42	40	42	42
Colombia	57	55	60	54	58	57	59	60	60	58
Croatia	53	60	54	53	53	38	32	39	36	32
Cyprus	-	17	15	21	17	-	8	5	8	14
Czech Republic	33	38	37	39	39	35	39	38	40	40
Denmark	2	2	2	2	2	1	1	1	1	2
Estonia	26	29	28	27	19	13	14	16	21	10
Finland	6	5	7	8	12	4	4	6	10	12
France	28	27	25	25	28	24	20	21	23	27
Germany	10	8	10	11	11	11	10	10	11	11
Greece	35	41	44	40	37	23	31	29	37	30
Hong Kong SAR	9	12	18	15	14	27	24	31	20	23
Hungary	51	54	49	45	50	41	46	41	33	35
Iceland	18	18	16	7	4	12	11	12	6	4
India	54	51	53	59	62	60	62	63	63	63
Indonesia	47	47	45	41	45	55	56	51	51	52
Ireland	17	14	21	18	18	30	34	42	44	39
Israel	19	20	19	19	22	19	17	14	17	9
Italy	32	36	32	36	36	32	33	33	31	33
Japan	31	31	29	35	38	20	18	23	30	36
Jordan	40	49	41	51	49	56	60	50	57	60
Kazakhstan	44	30	40	38	44	34	23	30	39	41
Korea Rep.	38	39	33	33	31	33	38	20	19	28
Latvia	30	35	35	34	33	9	13	11	12	15
Lithuania	24	33	36	28	27	10	12	13	14	13
Luxembourg	11	10	9	5	3	15	16	18	5	3
Malaysia	21	28	22	22	25	17	19	17	32	34
Mexico	50	56	61	60	56	58	61	61	62	62
Mongolia	60	62	62	63	63	49	54	57	59	59
Netherlands	8	6	5	9	10	14	15	15	16	16
New Zealand	14	15	20	17	21	25	28	32	29	29
Norway	7	7	3	6	7	6	6	3	3	5
Peru	59	57	52	56	51	54	50	52	55	54
Philippines	55	45	55	49	48	61	63	62	61	61
Poland	29	34	38	37	35	18	21	24	27	24
Portugal	25	24	17	23	26	8	7	7	13	22
Qatar	22	22	24	26	29	48	47	44	41	44
Romania	56	61	56	55	57	47	51	54	54	53
Russia	41	43	46	47	54	42	40	43	45	47
Saudi Arabia	-	26	34	29	34	-	26	35	28	37
Singapore	15	13	13	10	9	40	41	34	25	21
Slovak Republic	39	46	59	57	61	37	43	47	47	49
Slovenia	36	37	30	31	30	21	27	27	22	20
South Africa	43	48	50	50	52	50	57	56	56	57
Spain	34	32	31	32	32	31	30	36	35	31
Sweden	4	9	8	3	5	7	9	9	7	7
Switzerland	1	1	1	1	1	5	5	4	2	1
Taiwan, China	23	23	27	20	20	28	25	25	24	25
Thailand	37	42	42	43	43	43	48	46	49	51
Turkey	46	53	51	58	46	52	52	58	58	46
UAE	27	25	26	30	24	53	58	59	53	55
Ukraine	49	59	48	44	42	16	35	22	18	26
United Kingdom	20	21	23	24	23	36	37	37	38	38
USA	13	16	12	12	15	26	29	28	15	17
Venezuela	61	63	63	62	60	46	49	48	48	50

Appeal					Readiness					
2016	2017	2018	2019	2020	2016	2017	2018	2019	2020	
52	53	48	50	52	43	46	44	52	51	Argentina
17	18	19	15	16	6	13	6	5	4	Australia
18	15	13	13	11	19	16	18	10	12	Austria
14	16	16	17	17	7	12	14	24	22	Belgium
47	47	53	49	45	54	61	61	62	63	Brazil
57	57	58	58	57	57	59	58	55	57	Bulgaria
7	6	3	5	3	11	9	5	15	7	Canada
28	27	30	34	30	49	43	35	46	48	Chile
55	54	51	55	56	36	30	32	31	26	China
39	39	45	36	37	55	57	59	53	60	Colombia
58	59	60	61	61	58	62	62	60	62	Croatia
-	21	27	33	24	-	25	26	32	14	Cyprus
34	40	35	45	48	30	36	36	39	37	Czech Republic
11	10	7	11	8	4	4	8	6	6	Denmark
35	38	33	23	19	34	35	31	35	32	Estonia
24	24	21	16	15	9	5	7	3	10	Finland
30	29	22	25	25	29	28	28	29	35	France
9	8	6	9	9	18	15	21	14	13	Germany
50	56	54	51	50	35	40	47	44	36	Greece
4	11	14	18	18	5	6	9	4	2	Hong Kong SAR
60	61	59	56	58	53	54	53	57	59	Hungary
20	20	20	6	6	17	21	19	18	16	Iceland
41	43	44	57	55	28	29	30	25	25	India
31	32	34	24	32	45	47	49	42	46	Indonesia
5	5	11	8	12	13	10	12	8	9	Ireland
25	28	23	28	34	22	23	16	19	28	Israel
37	41	36	38	42	33	34	33	37	39	Italy
21	22	28	26	27	51	48	41	49	54	Japan
32	44	39	44	43	25	44	25	54	42	Jordan
54	37	49	39	47	52	32	42	38	50	Kazakhstan
42	42	41	41	36	42	42	34	34	29	Korea Rep.
46	52	52	48	51	41	38	43	40	40	Latvia
36	48	46	35	35	32	45	45	33	34	Lithuania
3	4	4	4	5	16	17	11	17	19	Luxembourg
22	30	26	27	29	26	27	24	16	18	Malaysia
33	33	43	40	38	46	53	54	47	38	Mexico
56	60	62	63	63	56	56	55	63	56	Mongolia
13	7	10	7	7	3	3	3	7	8	Netherlands
12	14	17	14	13	8	8	13	11	23	New Zealand
15	13	12	10	10	14	14	10	21	20	Norway
44	46	47	47	44	60	58	57	58	53	Peru
38	34	38	31	31	23	11	37	26	33	Philippines
45	45	40	46	49	24	33	39	45	44	Poland
40	36	29	32	33	31	31	22	27	24	Portugal
10	9	8	21	21	10	18	20	20	21	Qatar
51	58	55	52	53	47	55	52	50	55	Romania
53	55	57	59	62	38	39	46	36	47	Russia
-	31	31	43	39	-	26	38	22	30	Saudi Arabia
19	17	15	20	22	2	2	2	1	1	Singapore
49	50	56	54	54	39	49	60	59	61	Slovak Republic
48	49	42	42	41	37	37	29	30	31	Slovenia
29	35	37	37	40	50	52	51	48	52	South Africa
27	25	25	22	23	44	41	40	41	43	Spain
6	12	9	3	4	15	19	15	9	11	Sweden
1	1	1	1	1	1	1	1	2	5	Switzerland
26	26	32	29	26	27	22	27	12	15	Taiwan, China
23	23	24	30	28	48	50	50	43	45	Thailand
43	51	50	53	46	40	51	48	56	41	Turkey
8	3	5	12	14	12	7	4	13	3	UAE
59	62	61	60	60	59	60	56	51	49	Ukraine
16	19	18	19	20	20	20	17	23	17	United Kingdom
2	2	2	2	2	21	24	23	28	27	USA
61	63	63	62	59	61	63	63	61	58	Venezuela

TALENT COUNTRY PROFILES

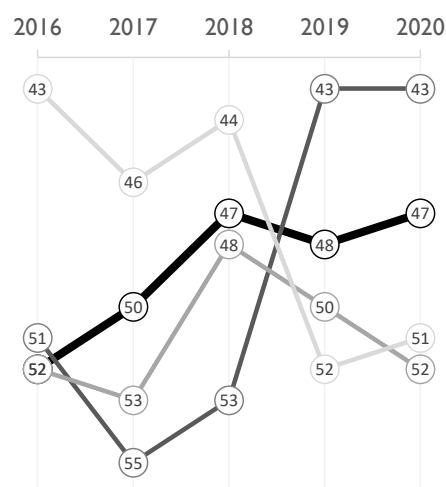
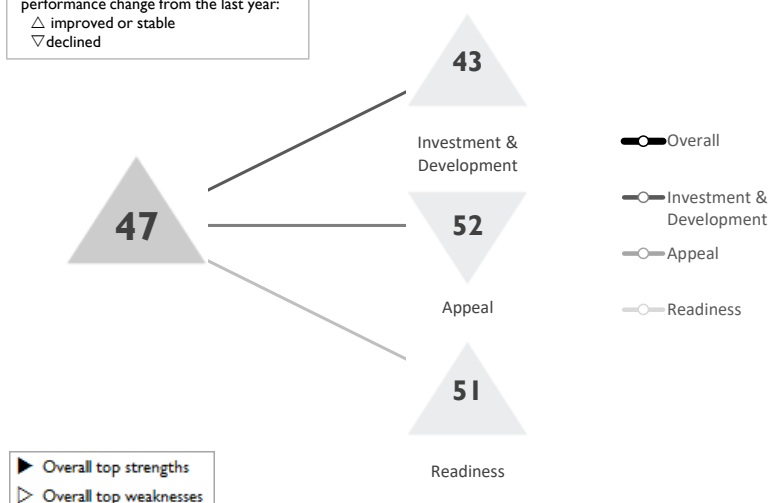
All data are available from the
World Competitiveness Online.

Visit our eShop
www.wcceshop.org

ARGENTINA

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
▶ Total public expenditure on education	Percentage of GDP	5.5 %	16
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	2,472 US\$	44
▶ Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	13.25 ratio	22
Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	17.91 ratio	53
Apprenticeships	are sufficiently implemented	4.49 Survey [0..10]	49
Employee training	is a high priority in companies	5.07 Survey [0..10]	53
Female labor force	Percentage of total labor force	42.00 %	51
Health infrastructure	meets the needs of society	4.58 Survey [0..10]	47

Appeal

		Value	2020 Rank
Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	78.80 index	30
Attracting and retaining talents	is a priority in companies	6.31 Survey [0..10]	44
▷ Worker motivation	in companies is high	4.76 Survey [0..10]	56
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	4.04 Survey [0..10]	47
Quality of life	is high	4.91 Survey [0..10]	49
▷ Foreign highly-skilled personnel	are attracted to your country's business environment	2.74 Survey [0..10]	60
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	12,539 US\$	45
▷ Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	63,282 US\$	56
▶ Effective personal income tax rate	Percentage of an income equal to GDP per capita	12.45 %	19
▷ Justice	is fairly administered	2.26 Survey [0..10]	60
▶ Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	14.23 micrograms	27

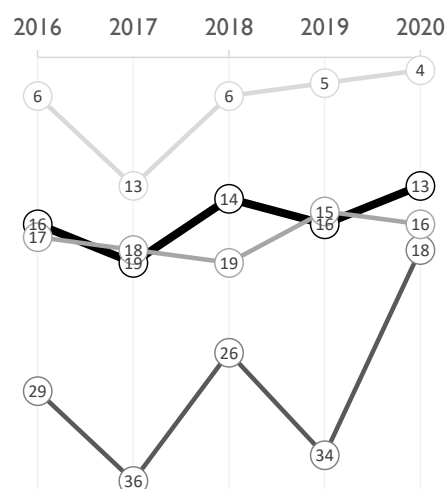
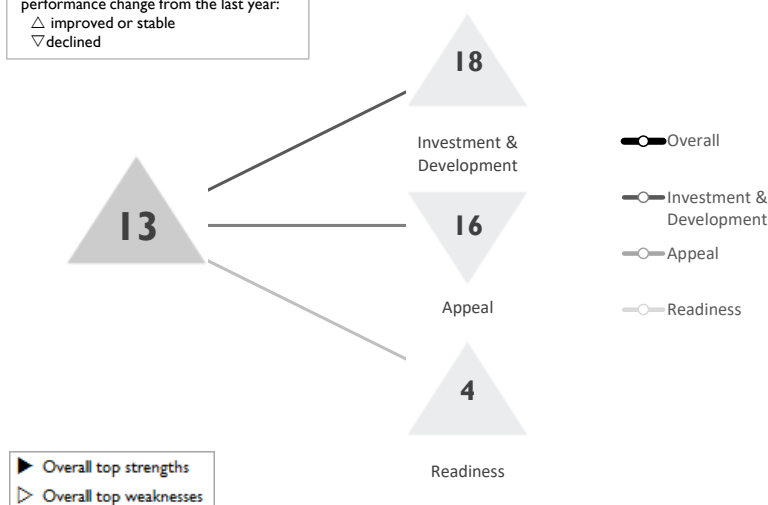
Readiness

		Value	2020 Rank
Labor force growth	Percentage change	0.90 %	30
Skilled labor	is readily available	5.70 Survey [0..10]	37
▶ Finance skills	are readily available	6.98 Survey [0..10]	20
International experience	of senior managers is generally significant	5.82 Survey [0..10]	30
Competent senior managers	are readily available	5.55 Survey [0..10]	40
Primary and secondary education	meets the needs of a competitive economy	4.17 Survey [0..10]	53
▷ Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	16.14 %	59
University education	meets the needs of a competitive economy	5.96 Survey [0..10]	39
Management education	meets the needs of the business community	6.30 Survey [0..10]	40
Language skills	are meeting the needs of enterprises	5.87 Survey [0..10]	41
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	2.02 number	37
Educational assessment - PISA	PISA survey of 15-year olds	395 Average	55

AUSTRALIA

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
Total public expenditure on education	Percentage of GDP	5.2 %	20
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	10,468 US\$	15
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	14.93 ratio	29
Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	11.89 ratio	28
▷ Apprenticeships	are sufficiently implemented	4.49 Survey [0..10]	50
▷ Employee training	is a high priority in companies	5.72 Survey [0..10]	38
Female labor force	Percentage of total labor force	47.29 %	17
Health infrastructure	meets the needs of society	7.52 Survey [0..10]	21

Appeal

		Value	2020 Rank
▷ Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	89.20 index	47
Attracting and retaining talents	is a priority in companies	7.81 Survey [0..10]	10
Worker motivation	in companies is high	6.30 Survey [0..10]	21
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	5.91 Survey [0..10]	23
▶ Quality of life	is high	9.14 Survey [0..10]	8
▶ Foreign highly-skilled personnel	are attracted to your country's business environment	7.56 Survey [0..10]	9
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	46,494 US\$	10
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	166,659 US\$	30
▷ Effective personal income tax rate	Percentage of an income equal to GDP per capita	22.12 %	43
▶ Justice	is fairly administered	8.43 Survey [0..10]	5
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	8.52 micrograms	11

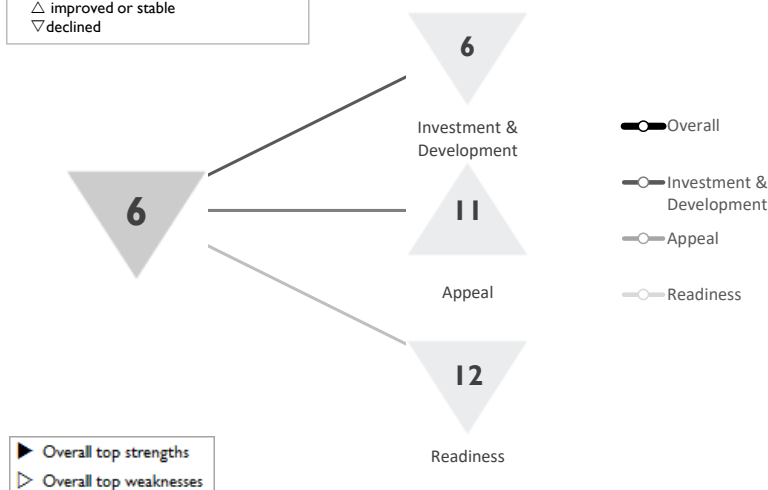
Readiness

		Value	2020 Rank
Labor force growth	Percentage change	2.13 %	10
Skilled labor	is readily available	6.50 Survey [0..10]	15
▶ Finance skills	are readily available	7.75 Survey [0..10]	6
International experience	of senior managers is generally significant	5.59 Survey [0..10]	37
Competent senior managers	are readily available	6.18 Survey [0..10]	22
Primary and secondary education	meets the needs of a competitive economy	7.31 Survey [0..10]	20
▷ Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	17.40 %	57
University education	meets the needs of a competitive economy	7.24 Survey [0..10]	22
Management education	meets the needs of the business community	6.85 Survey [0..10]	26
Language skills	are meeting the needs of enterprises	6.36 Survey [0..10]	31
▶ Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	17.79 number	1
Educational assessment - PISA	PISA survey of 15-year olds	499 Average	20

AUSTRIA

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
Total public expenditure on education	Percentage of GDP	4.8 %	28
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	12,570 US\$	10
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	11.55 ratio	11
Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	9.13 ratio	7
▶ Apprenticeships	are sufficiently implemented	8.25 Survey [0..10]	3
▶ Employee training	is a high priority in companies	7.67 Survey [0..10]	2
Female labor force	Percentage of total labor force	46.81 %	23
▶ Health infrastructure	meets the needs of society	9.17 Survey [0..10]	1

Appeal

		Value	2020 Rank
▷ Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	87.20 index	43
Attracting and retaining talents	is a priority in companies	7.89 Survey [0..10]	7
▶ Worker motivation	in companies is high	7.69 Survey [0..10]	2
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	6.75 Survey [0..10]	11
▶ Quality of life	is high	9.81 Survey [0..10]	1
Foreign highly-skilled personnel	are attracted to your country's business environment	6.61 Survey [0..10]	17
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	46,305 US\$	12
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	287,910 US\$	5
▷ Effective personal income tax rate	Percentage of an income equal to GDP per capita	29.67 %	62
Justice	is fairly administered	7.97 Survey [0..10]	13
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	12.69 micrograms	22

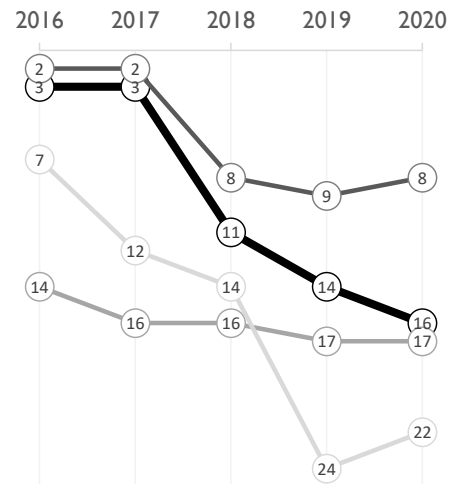
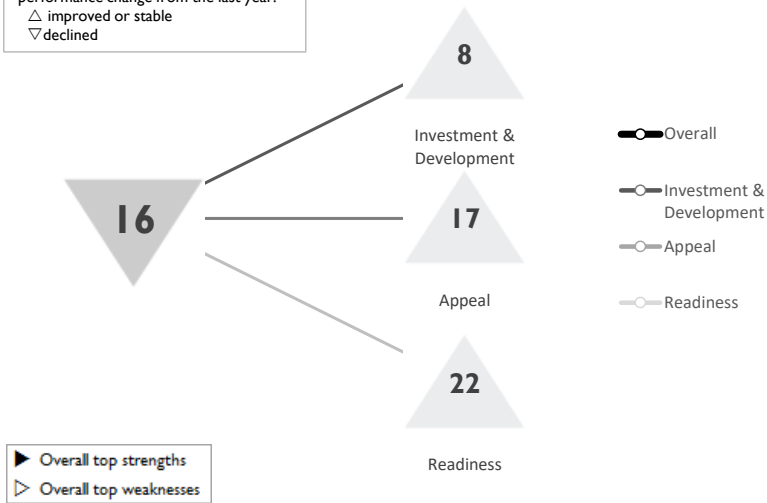
Readiness

		Value	2020 Rank
▷ Labor force growth	Percentage change	0.46 %	39
▷ Skilled labor	is readily available	5.17 Survey [0..10]	47
▷ Finance skills	are readily available	6.36 Survey [0..10]	38
International experience	of senior managers is generally significant	5.94 Survey [0..10]	27
Competent senior managers	are readily available	5.92 Survey [0..10]	29
Primary and secondary education	meets the needs of a competitive economy	8.19 Survey [0..10]	8
Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	31.03 %	8
University education	meets the needs of a competitive economy	8.19 Survey [0..10]	6
Management education	meets the needs of the business community	7.33 Survey [0..10]	17
Language skills	are meeting the needs of enterprises	7.53 Survey [0..10]	22
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	8.52 number	5
Educational assessment - PISA	PISA survey of 15-year olds	491 Average	27

BELGIUM

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
▶ Total public expenditure on education	Percentage of GDP	6.2 %	7
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	11,162 US\$	12
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	12.82 ratio	19
▶ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	9.35 ratio	10
▷ Apprenticeships	are sufficiently implemented	4.91 Survey [0..10]	38
Employee training	is a high priority in companies	6.31 Survey [0..10]	26
Female labor force	Percentage of total labor force	46.83 %	22
▶ Health infrastructure	meets the needs of society	8.62 Survey [0..10]	6

Appeal

		Value	2020 Rank
Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	80.80 index	33
▶ Attracting and retaining talents	is a priority in companies	7.82 Survey [0..10]	9
Worker motivation	in companies is high	6.77 Survey [0..10]	18
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	5.97 Survey [0..10]	21
Quality of life	is high	8.77 Survey [0..10]	11
Foreign highly-skilled personnel	are attracted to your country's business environment	5.74 Survey [0..10]	27
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	38,108 US\$	18
▶ Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	266,075 US\$	10
▷ Effective personal income tax rate	Percentage of an income equal to GDP per capita	22.28 %	45
Justice	is fairly administered	6.34 Survey [0..10]	25
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	13.10 micrograms	24

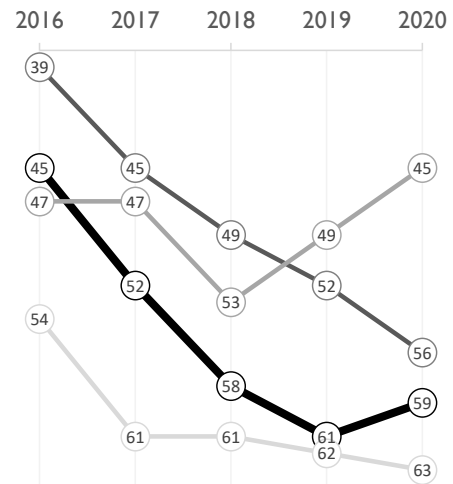
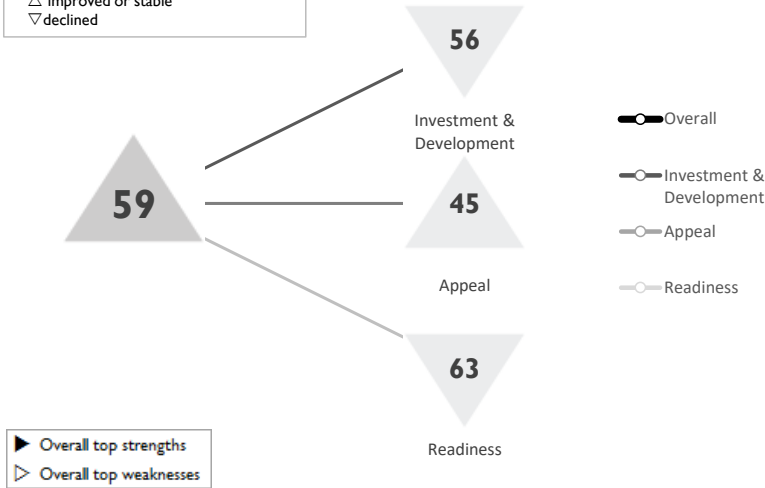
Readiness

		Value	2020 Rank
Labor force growth	Percentage change	0.88 %	32
▷ Skilled labor	is readily available	5.66 Survey [0..10]	38
Finance skills	are readily available	7.00 Survey [0..10]	19
International experience	of senior managers is generally significant	6.53 Survey [0..10]	12
Competent senior managers	are readily available	6.09 Survey [0..10]	25
Primary and secondary education	meets the needs of a competitive economy	7.60 Survey [0..10]	16
▷ Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	16.99 %	58
University education	meets the needs of a competitive economy	7.69 Survey [0..10]	16
Management education	meets the needs of the business community	7.66 Survey [0..10]	13
Language skills	are meeting the needs of enterprises	7.85 Survey [0..10]	17
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	4.71 number	15
Educational assessment - PISA	PISA survey of 15-year olds	500 Average	19

BRAZIL

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
▶ Total public expenditure on education	Percentage of GDP	6.0 %	9
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	2,110 US\$	46
▷ Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	23.91 ratio	57
Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	24.41 ratio	56
Apprenticeships	are sufficiently implemented	4.61 Survey [0..10]	45
▷ Employee training	is a high priority in companies	4.85 Survey [0..10]	59
▶ Female labor force	Percentage of total labor force	45.17 %	37
Health infrastructure	meets the needs of society	3.21 Survey [0..10]	53

Appeal

		Value	2020 Rank
Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	82.40 index	35
Attracting and retaining talents	is a priority in companies	6.25 Survey [0..10]	45
Worker motivation	in companies is high	5.58 Survey [0..10]	41
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	4.49 Survey [0..10]	41
Quality of life	is high	4.49 Survey [0..10]	56
Foreign highly-skilled personnel	are attracted to your country's business environment	3.29 Survey [0..10]	57
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	15,916 US\$	36
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	100,107 US\$	48
▶ Effective personal income tax rate	Percentage of an income equal to GDP per capita	9.02 %	14
Justice	is fairly administered	3.40 Survey [0..10]	51
▶ Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	12.83 micrograms	23

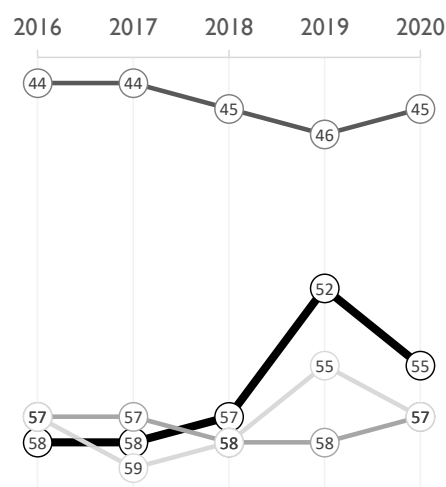
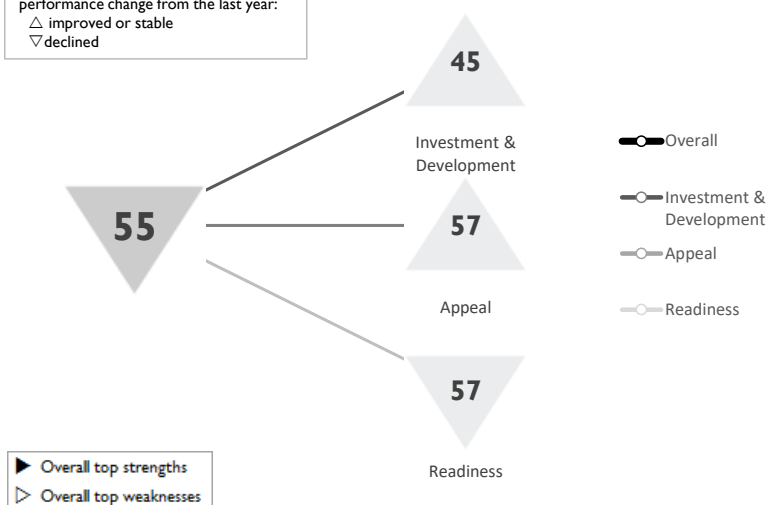
Readiness

		Value	2020 Rank
Labor force growth	Percentage change	- %	-
Skilled labor	is readily available	4.12 Survey [0..10]	54
Finance skills	are readily available	4.97 Survey [0..10]	56
International experience	of senior managers is generally significant	4.57 Survey [0..10]	56
Competent senior managers	are readily available	4.87 Survey [0..10]	50
▷ Primary and secondary education	meets the needs of a competitive economy	2.74 Survey [0..10]	62
Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	18.37 %	54
▷ University education	meets the needs of a competitive economy	4.25 Survey [0..10]	58
Management education	meets the needs of the business community	4.76 Survey [0..10]	56
▷ Language skills	are meeting the needs of enterprises	2.99 Survey [0..10]	63
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	0.10 number	57
Educational assessment - PISA	PISA survey of 15-year olds	400 Average	54

BULGARIA

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
Total public expenditure on education	Percentage of GDP	3.5 %	47
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	1,930 US\$	49
► Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	15.21 ratio	30
► Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	13.00 ratio	41
Apprenticeships	are sufficiently implemented	4.55 Survey [0..10]	47
▷ Employee training	is a high priority in companies	4.76 Survey [0..10]	61
► Female labor force	Percentage of total labor force	46.25 %	29
Health infrastructure	meets the needs of society	3.69 Survey [0..10]	51

Appeal

		Value	2020 Rank
► Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	62.10 index	4
Attracting and retaining talents	is a priority in companies	5.64 Survey [0..10]	58
Worker motivation	in companies is high	4.89 Survey [0..10]	55
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	3.36 Survey [0..10]	52
▷ Quality of life	is high	3.64 Survey [0..10]	60
Foreign highly-skilled personnel	are attracted to your country's business environment	3.38 Survey [0..10]	56
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	9,351 US\$	52
▷ Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	49,907 US\$	58
Effective personal income tax rate	Percentage of an income equal to GDP per capita	19.89 %	36
Justice	is fairly administered	2.93 Survey [0..10]	54
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	20.29 micrograms	45

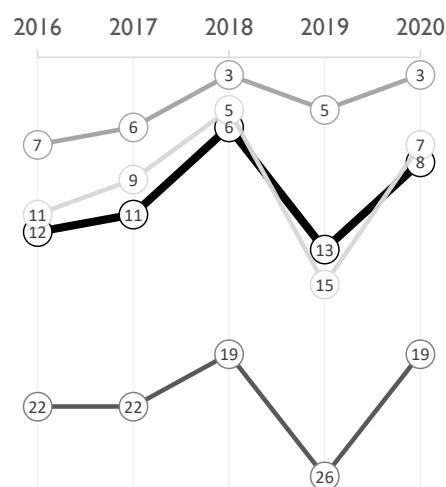
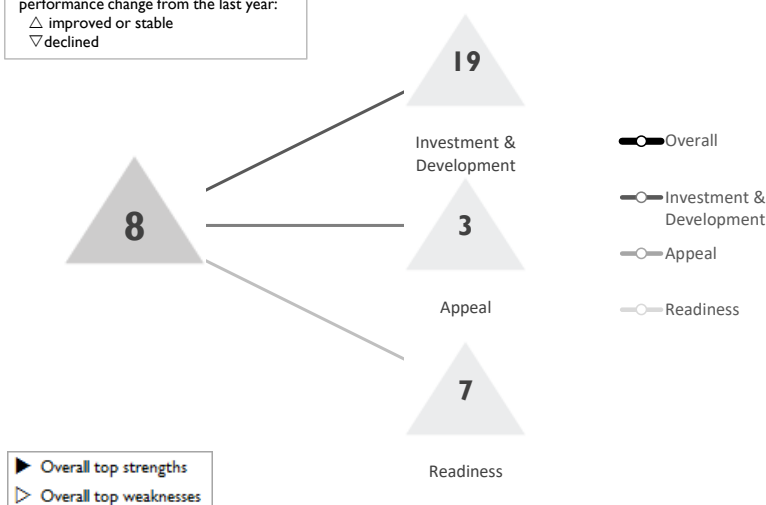
Readiness

		Value	2020 Rank
► Labor force growth	Percentage change	1.50 %	17
Skilled labor	is readily available	4.86 Survey [0..10]	51
Finance skills	are readily available	4.67 Survey [0..10]	58
International experience	of senior managers is generally significant	4.86 Survey [0..10]	52
Competent senior managers	are readily available	4.18 Survey [0..10]	55
Primary and secondary education	meets the needs of a competitive economy	4.04 Survey [0..10]	55
Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	19.28 %	50
▷ University education	meets the needs of a competitive economy	3.82 Survey [0..10]	61
▷ Management education	meets the needs of the business community	4.00 Survey [0..10]	61
Language skills	are meeting the needs of enterprises	5.33 Survey [0..10]	45
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	2.15 number	35
Educational assessment - PISA	PISA survey of 15-year olds	427 Average	46

CANADA

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
▶ Total public expenditure on education	Percentage of GDP	4.4 %	36
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	11,265 US\$	11
▶ Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	16.69 ratio	40
Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	13.25 ratio	43
Apprenticeships	are sufficiently implemented	6.16 Survey [0..10]	9
Employee training	is a high priority in companies	6.62 Survey [0..10]	20
Female labor force	Percentage of total labor force	47.39 %	15
Health infrastructure	meets the needs of society	7.54 Survey [0..10]	19

Appeal

		Value	2020 Rank
Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	73.30 index	23
Attracting and retaining talents	is a priority in companies	7.57 Survey [0..10]	19
Worker motivation	in companies is high	6.97 Survey [0..10]	15
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	6.59 Survey [0..10]	13
Quality of life	is high	8.68 Survey [0..10]	14
Foreign highly-skilled personnel	are attracted to your country's business environment	7.35 Survey [0..10]	11
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	46,489 US\$	11
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	204,269 US\$	20
Effective personal income tax rate	Percentage of an income equal to GDP per capita	14.44 %	27
Justice	is fairly administered	7.89 Survey [0..10]	16
▶ Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	6.46 micrograms	4

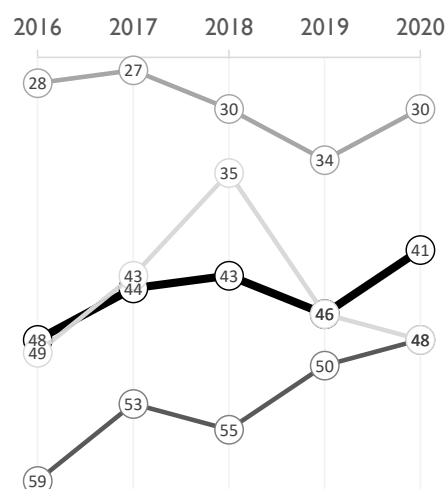
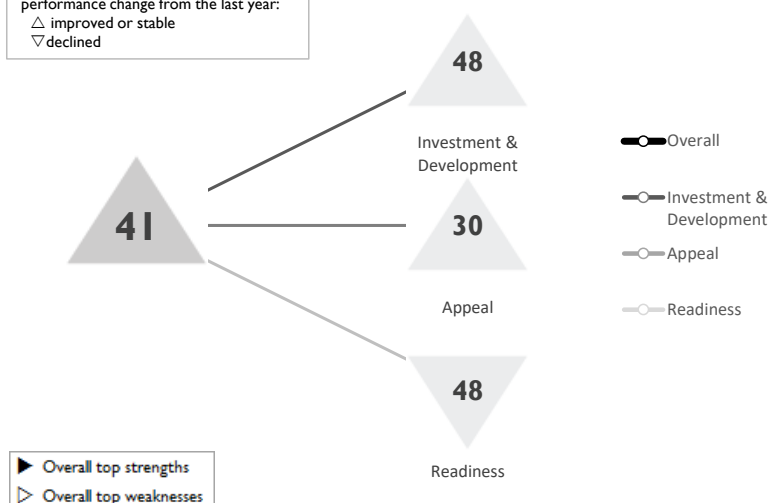
Readiness

		Value	2020 Rank
Labor force growth	Percentage change	1.95 %	13
▶ Skilled labor	is readily available	7.19 Survey [0..10]	5
Finance skills	are readily available	7.37 Survey [0..10]	15
International experience	of senior managers is generally significant	6.30 Survey [0..10]	17
Competent senior managers	are readily available	6.78 Survey [0..10]	9
Primary and secondary education	meets the needs of a competitive economy	7.78 Survey [0..10]	14
▶ Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	22.38 %	37
University education	meets the needs of a competitive economy	7.86 Survey [0..10]	13
▶ Management education	meets the needs of the business community	7.84 Survey [0..10]	8
Language skills	are meeting the needs of enterprises	8.08 Survey [0..10]	15
▶ Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	6.08 number	9
▶ Educational assessment - PISA	PISA survey of 15-year olds	517 Average	7

CHILE

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
▶ Total public expenditure on education	Percentage of GDP	5.4 %	18
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	3,070 US\$	43
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	19.41 ratio	50
▷ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	20.44 ratio	55
Apprenticeships	are sufficiently implemented	4.61 Survey [0..10]	46
Employee training	is a high priority in companies	5.19 Survey [0..10]	47
Female labor force	Percentage of total labor force	42.07 %	50
Health infrastructure	meets the needs of society	4.60 Survey [0..10]	46

Appeal

		Value	2020 Rank
Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	80.60 index	32
Attracting and retaining talents	is a priority in companies	6.82 Survey [0..10]	30
Worker motivation	in companies is high	5.41 Survey [0..10]	47
▶ Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	6.87 Survey [0..10]	9
Quality of life	is high	6.26 Survey [0..10]	40
▶ Foreign highly-skilled personnel	are attracted to your country's business environment	7.77 Survey [0..10]	8
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	23,844 US\$	29
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	195,050 US\$	22
Effective personal income tax rate	Percentage of an income equal to GDP per capita	16.97 %	32
Justice	is fairly administered	5.57 Survey [0..10]	35
▷ Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	22.14 micrograms	51

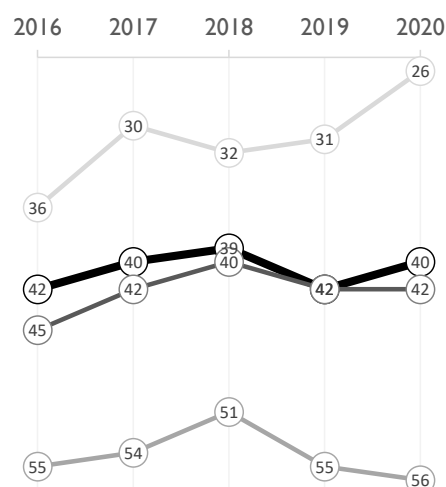
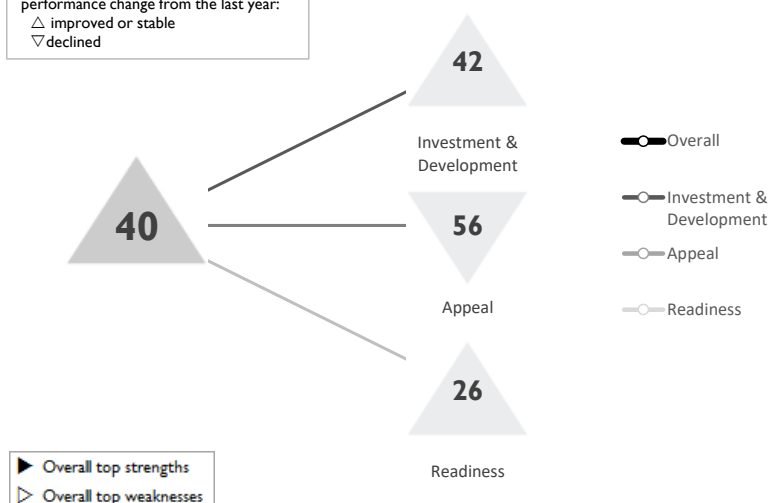
Readiness

		Value	2020 Rank
▶ Labor force growth	Percentage change	1.36 %	19
Skilled labor	is readily available	5.10 Survey [0..10]	49
Finance skills	are readily available	6.50 Survey [0..10]	29
International experience	of senior managers is generally significant	6.23 Survey [0..10]	19
▶ Competent senior managers	are readily available	6.32 Survey [0..10]	18
▷ Primary and secondary education	meets the needs of a competitive economy	3.68 Survey [0..10]	57
Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	20.95 %	46
University education	meets the needs of a competitive economy	5.71 Survey [0..10]	42
Management education	meets the needs of the business community	6.99 Survey [0..10]	23
▷ Language skills	are meeting the needs of enterprises	3.30 Survey [0..10]	61
▷ Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	0.30 number	54
Educational assessment - PISA	PISA survey of 15-year olds	438 Average	42

CHINA

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
▷ Total public expenditure on education	Percentage of GDP	3.5 %	49
▷ Total public exp. on education per student	Spending per enrolled pupil/student, all levels	1,755 US\$	50
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	16.43 ratio	38
Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	13.26 ratio	44
Apprenticeships	are sufficiently implemented	5.51 Survey [0..10]	27
▶ Employee training	is a high priority in companies	6.64 Survey [0..10]	19
Female labor force	Percentage of total labor force	- %	-
Health infrastructure	meets the needs of society	6.43 Survey [0..10]	31

Appeal

		Value	2020 Rank
▷ Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	108.60 index	55
Attracting and retaining talents	is a priority in companies	6.86 Survey [0..10]	29
▶ Worker motivation	in companies is high	6.97 Survey [0..10]	16
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	4.94 Survey [0..10]	33
Quality of life	is high	6.54 Survey [0..10]	36
Foreign highly-skilled personnel	are attracted to your country's business environment	5.45 Survey [0..10]	32
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	11,684 US\$	48
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	155,675 US\$	34
Effective personal income tax rate	Percentage of an income equal to GDP per capita	20.14 %	38
Justice	is fairly administered	5.83 Survey [0..10]	32
▷ Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	53.45 micrograms	59

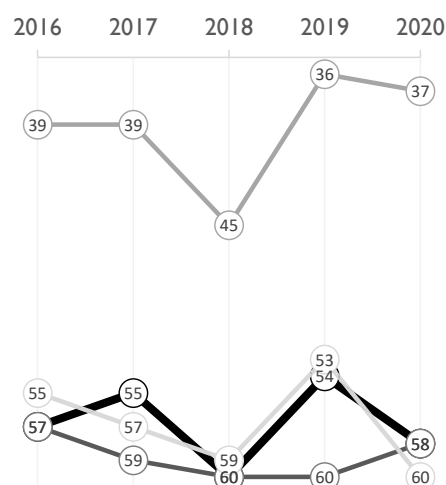
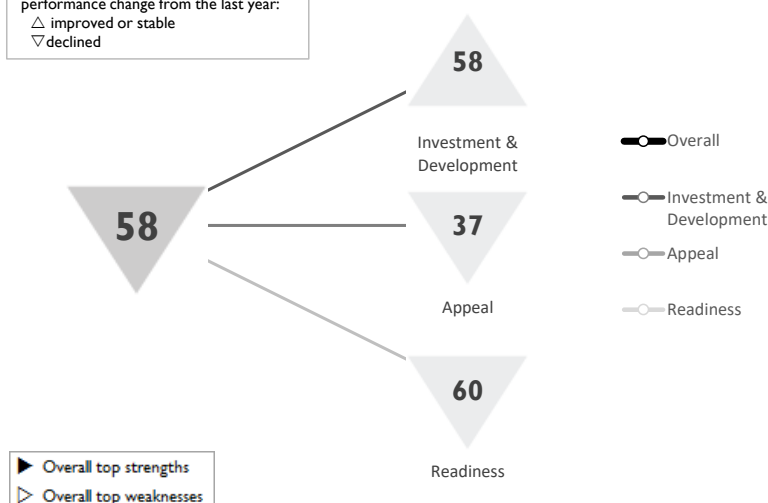
Readiness

		Value	2020 Rank
Labor force growth	Percentage change	-0.05 %	48
▶ Skilled labor	is readily available	6.60 Survey [0..10]	14
Finance skills	are readily available	6.46 Survey [0..10]	31
International experience	of senior managers is generally significant	5.22 Survey [0..10]	44
Competent senior managers	are readily available	5.76 Survey [0..10]	35
▶ Primary and secondary education	meets the needs of a competitive economy	7.56 Survey [0..10]	18
Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	- %	-
University education	meets the needs of a competitive economy	7.05 Survey [0..10]	24
Management education	meets the needs of the business community	6.72 Survey [0..10]	29
Language skills	are meeting the needs of enterprises	5.85 Survey [0..10]	42
▷ Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	0.13 number	55
▶ Educational assessment - PISA	PISA survey of 15-year olds	579 Average	1

COLOMBIA

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
Total public expenditure on education	Percentage of GDP	4.5 %	32
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	1,119 US\$	55
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	23.30 ratio	56
▷ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	25.91 ratio	58
▶ Apprenticeships	are sufficiently implemented	6.03 Survey [0..10]	11
Employee training	is a high priority in companies	6.00 Survey [0..10]	34
Female labor force	Percentage of total labor force	42.83 %	46
Health infrastructure	meets the needs of society	3.19 Survey [0..10]	55

Appeal

		Value	2020 Rank
▶ Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	63.70 index	6
Attracting and retaining talents	is a priority in companies	5.69 Survey [0..10]	55
Worker motivation	in companies is high	5.40 Survey [0..10]	48
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	4.88 Survey [0..10]	35
▷ Quality of life	is high	4.42 Survey [0..10]	58
Foreign highly-skilled personnel	are attracted to your country's business environment	5.43 Survey [0..10]	33
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	12,241 US\$	47
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	140,782 US\$	40
▶ Effective personal income tax rate	Percentage of an income equal to GDP per capita	8.29 %	12
▷ Justice	is fairly administered	2.40 Survey [0..10]	59
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	16.92 micrograms	37

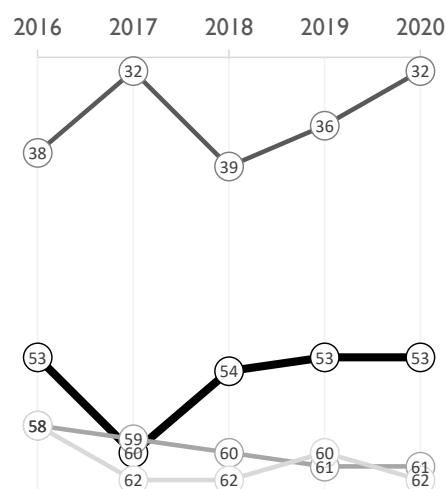
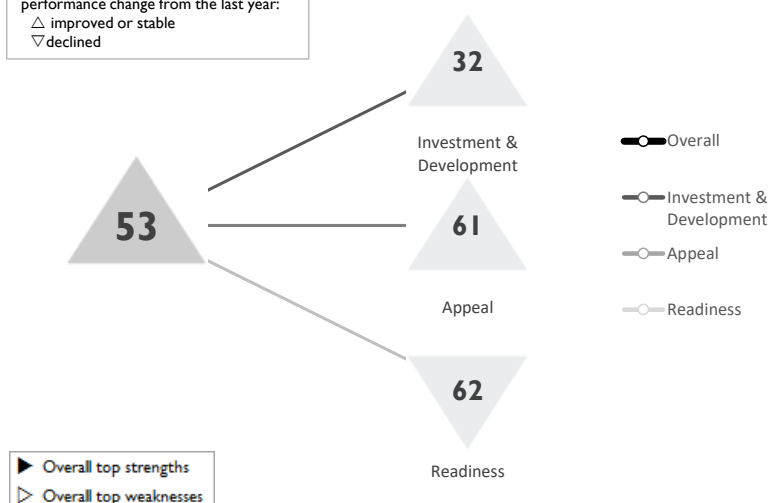
Readiness

		Value	2020 Rank
Labor force growth	Percentage change	-0.79 %	57
Skilled labor	is readily available	5.24 Survey [0..10]	46
Finance skills	are readily available	5.58 Survey [0..10]	49
International experience	of senior managers is generally significant	4.92 Survey [0..10]	51
Competent senior managers	are readily available	4.62 Survey [0..10]	53
Primary and secondary education	meets the needs of a competitive economy	4.22 Survey [0..10]	51
Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	23.13 %	34
University education	meets the needs of a competitive economy	5.21 Survey [0..10]	49
Management education	meets the needs of the business community	5.36 Survey [0..10]	50
▷ Language skills	are meeting the needs of enterprises	3.75 Survey [0..10]	59
▷ Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	0.10 number	58
Educational assessment - PISA	PISA survey of 15-year olds	406 Average	51

CROATIA

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
▶ Total public expenditure on education	Percentage of GDP	5.3 %	19
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	4,183 US\$	38
▶ Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	10.90 ratio	7
▶ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	8.76 ratio	6
Apprenticeships	are sufficiently implemented	3.13 Survey [0..10]	61
▷ Employee training	is a high priority in companies	3.90 Survey [0..10]	63
Female labor force	Percentage of total labor force	46.19 %	30
Health infrastructure	meets the needs of society	4.83 Survey [0..10]	42

Appeal

		Value	2020 Rank
▶ Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	69.70 index	15
▷ Attracting and retaining talents	is a priority in companies	4.84 Survey [0..10]	63
Worker motivation	in companies is high	3.94 Survey [0..10]	62
▷ Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	1.87 Survey [0..10]	63
Quality of life	is high	5.65 Survey [0..10]	44
Foreign highly-skilled personnel	are attracted to your country's business environment	1.94 Survey [0..10]	62
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	14,350 US\$	40
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	91,668 US\$	51
Effective personal income tax rate	Percentage of an income equal to GDP per capita	19.45 %	35
Justice	is fairly administered	2.43 Survey [0..10]	58
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	17.72 micrograms	39

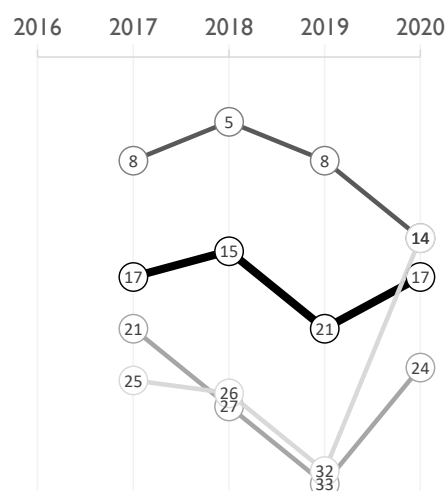
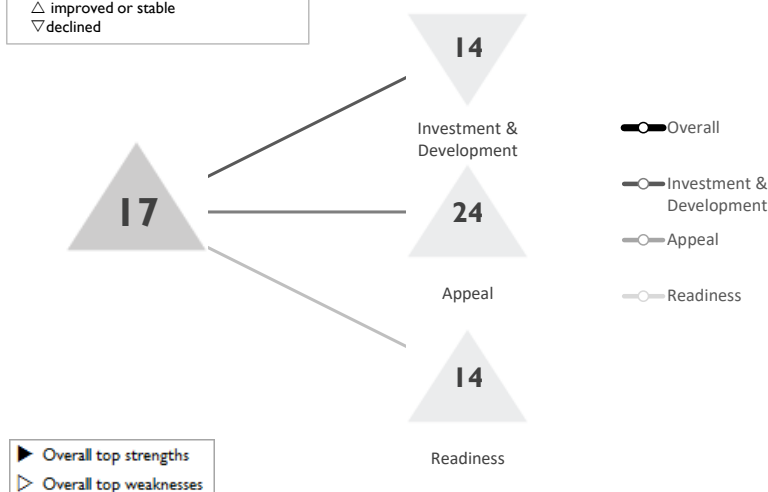
Readiness

		Value	2020 Rank
Labor force growth	Percentage change	-0.50 %	53
Skilled labor	is readily available	3.08 Survey [0..10]	62
▷ Finance skills	are readily available	3.32 Survey [0..10]	63
International experience	of senior managers is generally significant	3.00 Survey [0..10]	62
▷ Competent senior managers	are readily available	2.65 Survey [0..10]	63
Primary and secondary education	meets the needs of a competitive economy	4.06 Survey [0..10]	54
▶ Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	27.01 %	20
University education	meets the needs of a competitive economy	4.19 Survey [0..10]	59
Management education	meets the needs of the business community	3.97 Survey [0..10]	62
Language skills	are meeting the needs of enterprises	6.19 Survey [0..10]	34
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	1.23 number	48
Educational assessment - PISA	PISA survey of 15-year olds	472 Average	35

CYPRUS

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
Total public expenditure on education	Percentage of GDP	5.2 %	21
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	7,119 US\$	25
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	12.04 ratio	15
▶ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	8.31 ratio	4
Apprenticeships	are sufficiently implemented	5.00 Survey [0..10]	33
Employee training	is a high priority in companies	5.92 Survey [0..10]	36
Female labor force	Percentage of total labor force	47.36 %	16
Health infrastructure	meets the needs of society	6.04 Survey [0..10]	34

Appeal

		Value	2020 Rank
▶ Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	66.40 index	10
Attracting and retaining talents	is a priority in companies	6.54 Survey [0..10]	40
▷ Worker motivation	in companies is high	5.46 Survey [0..10]	45
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	5.58 Survey [0..10]	27
Quality of life	is high	7.81 Survey [0..10]	25
Foreign highly-skilled personnel	are attracted to your country's business environment	5.65 Survey [0..10]	30
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	27,374 US\$	26
▷ Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	88,845 US\$	52
▶ Effective personal income tax rate	Percentage of an income equal to GDP per capita	7.31 %	10
Justice	is fairly administered	5.76 Survey [0..10]	33
▷ Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	17.75 micrograms	40

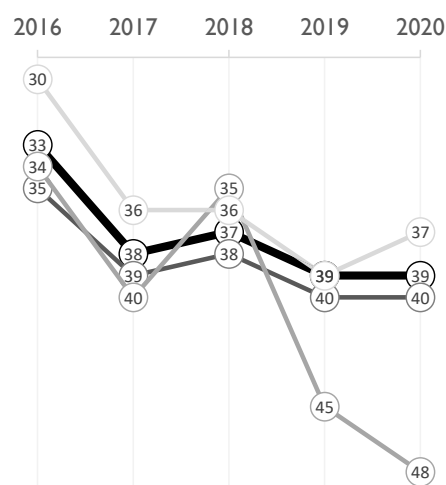
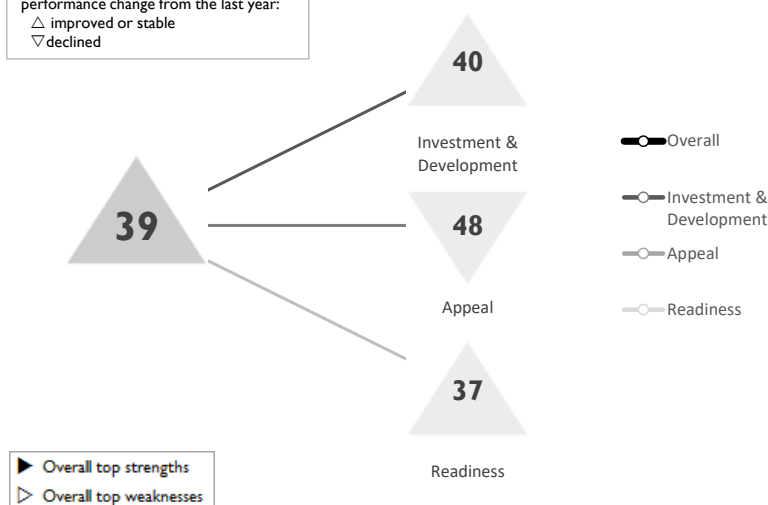
Readiness

		Value	2020 Rank
▶ Labor force growth	Percentage change	2.52 %	6
Skilled labor	is readily available	5.77 Survey [0..10]	35
Finance skills	are readily available	7.46 Survey [0..10]	12
International experience	of senior managers is generally significant	6.42 Survey [0..10]	13
Competent senior managers	are readily available	6.31 Survey [0..10]	19
Primary and secondary education	meets the needs of a competitive economy	7.06 Survey [0..10]	22
▷ Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	15.15 %	60
University education	meets the needs of a competitive economy	7.54 Survey [0..10]	19
Management education	meets the needs of the business community	7.23 Survey [0..10]	18
Language skills	are meeting the needs of enterprises	8.19 Survey [0..10]	13
▶ Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	12.96 number	2
▷ Educational assessment - PISA	PISA survey of 15-year olds	438 Average	41

CZECH REPUBLIC

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
Total public expenditure on education	Percentage of GDP	4.6 %	29
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	5,464 US\$	32
▷ Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	19.20 ratio	48
▶ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	11.90 ratio	29
▷ Apprenticeships	are sufficiently implemented	4.15 Survey [0..10]	55
Employee training	is a high priority in companies	5.96 Survey [0..10]	35
Female labor force	Percentage of total labor force	44.45 %	42
Health infrastructure	meets the needs of society	6.45 Survey [0..10]	30

Appeal

		Value	2020 Rank
▶ Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	78.10 index	28
▷ Attracting and retaining talents	is a priority in companies	6.00 Survey [0..10]	51
Worker motivation	in companies is high	5.77 Survey [0..10]	38
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	5.25 Survey [0..10]	29
Quality of life	is high	7.21 Survey [0..10]	30
Foreign highly-skilled personnel	are attracted to your country's business environment	4.72 Survey [0..10]	42
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	15,563 US\$	37
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	110,667 US\$	44
Effective personal income tax rate	Percentage of an income equal to GDP per capita	22.04 %	42
Justice	is fairly administered	4.94 Survey [0..10]	42
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	16.21 micrograms	32

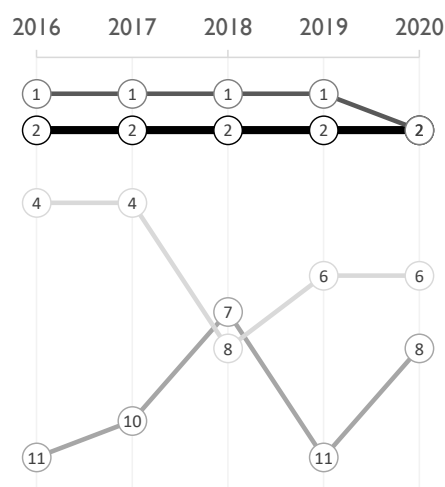
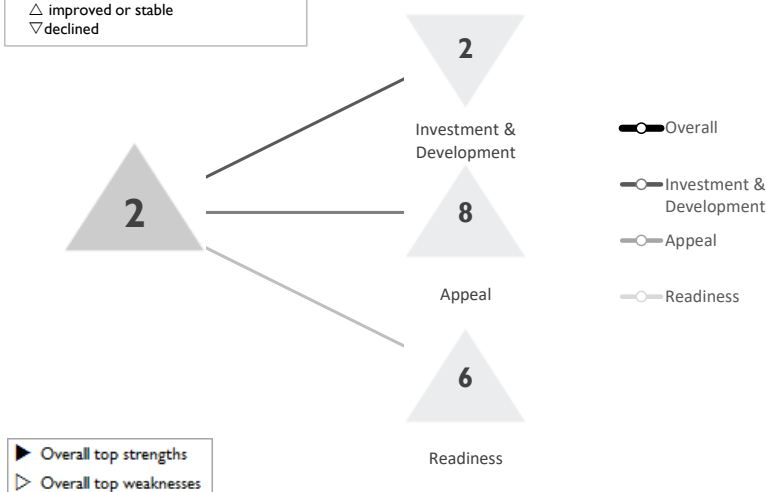
Readiness

		Value	2020 Rank
Labor force growth	Percentage change	0.11 %	46
▷ Skilled labor	is readily available	4.75 Survey [0..10]	52
Finance skills	are readily available	5.58 Survey [0..10]	48
International experience	of senior managers is generally significant	5.77 Survey [0..10]	33
▷ Competent senior managers	are readily available	4.45 Survey [0..10]	54
Primary and secondary education	meets the needs of a competitive economy	5.92 Survey [0..10]	37
▶ Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	26.12 %	25
University education	meets the needs of a competitive economy	5.85 Survey [0..10]	40
Management education	meets the needs of the business community	5.89 Survey [0..10]	46
Language skills	are meeting the needs of enterprises	6.04 Survey [0..10]	39
▶ Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	4.21 number	19
▶ Educational assessment - PISA	PISA survey of 15-year olds	495 Average	23

DENMARK

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
Total public expenditure on education	Percentage of GDP	6.4 %	6
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	15,346 US\$	6
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	11.91 ratio	13
Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	11.31 ratio	25
Apprenticeships	are sufficiently implemented	6.90 Survey [0..10]	4
Employee training	is a high priority in companies	7.80 Survey [0..10]	1
Female labor force	Percentage of total labor force	47.63 %	13
Health infrastructure	meets the needs of society	8.88 Survey [0..10]	3

Appeal

		Value	2020 Rank
Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	97.30 index	53
Attracting and retaining talents	is a priority in companies	8.32 Survey [0..10]	1
Worker motivation	in companies is high	8.22 Survey [0..10]	1
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	8.09 Survey [0..10]	1
Quality of life	is high	9.78 Survey [0..10]	2
Foreign highly-skilled personnel	are attracted to your country's business environment	6.58 Survey [0..10]	19
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	58,896 US\$	5
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	227,770 US\$	16
Effective personal income tax rate	Percentage of an income equal to GDP per capita	29.43 %	61
Justice	is fairly administered	9.15 Survey [0..10]	1
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	10.35 micrograms	14

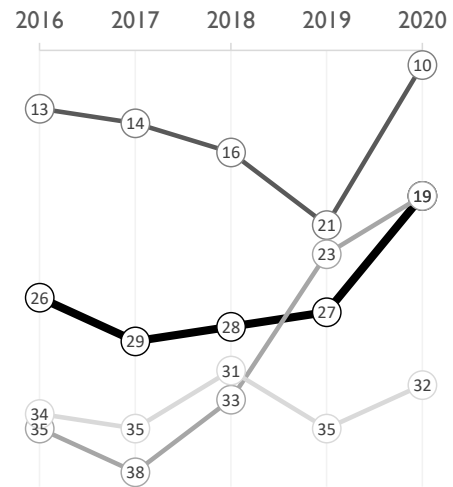
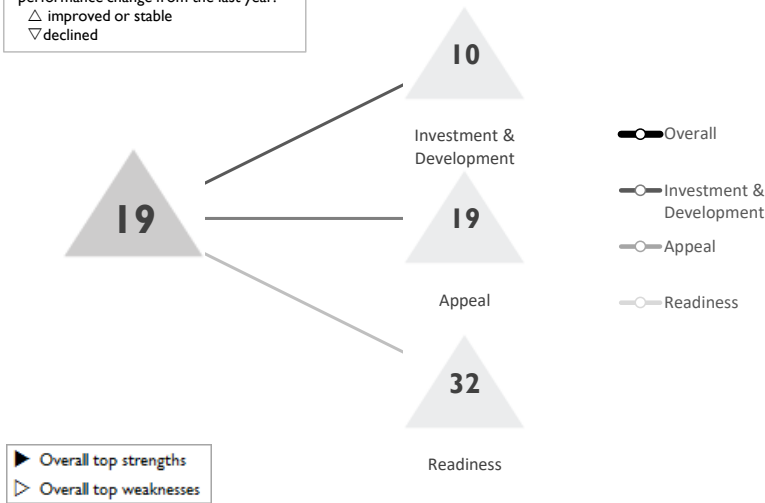
Readiness

		Value	2020 Rank
Labor force growth	Percentage change	1.31 %	21
Skilled labor	is readily available	7.14 Survey [0..10]	6
Finance skills	are readily available	8.10 Survey [0..10]	2
International experience	of senior managers is generally significant	6.69 Survey [0..10]	10
Competent senior managers	are readily available	7.29 Survey [0..10]	4
Primary and secondary education	meets the needs of a competitive economy	8.71 Survey [0..10]	4
Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	22.20 %	39
University education	meets the needs of a competitive economy	8.83 Survey [0..10]	2
Management education	meets the needs of the business community	8.31 Survey [0..10]	2
Language skills	are meeting the needs of enterprises	9.19 Survey [0..10]	1
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	5.76 number	11
Educational assessment - PISA	PISA survey of 15-year olds	501 Average	17

ESTONIA

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
Total public expenditure on education	Percentage of GDP	6.2 %	8
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	6,850 US\$	26
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	13.15 ratio	21
Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	12.66 ratio	35
Apprenticeships	are sufficiently implemented	5.63 Survey [0..10]	20
Employee training	is a high priority in companies	7.32 Survey [0..10]	5
Female labor force	Percentage of total labor force	48.62 %	6
Health infrastructure	meets the needs of society	6.50 Survey [0..10]	29

Appeal

		Value	2020 Rank
Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	69.40 index	14
Attracting and retaining talents	is a priority in companies	8.13 Survey [0..10]	3
Worker motivation	in companies is high	6.33 Survey [0..10]	20
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	4.53 Survey [0..10]	40
Quality of life	is high	6.88 Survey [0..10]	34
Foreign highly-skilled personnel	are attracted to your country's business environment	5.67 Survey [0..10]	29
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	15,532 US\$	38
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	101,547 US\$	47
Effective personal income tax rate	Percentage of an income equal to GDP per capita	12.95 %	22
Justice	is fairly administered	7.23 Survey [0..10]	21
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	6.84 micrograms	6

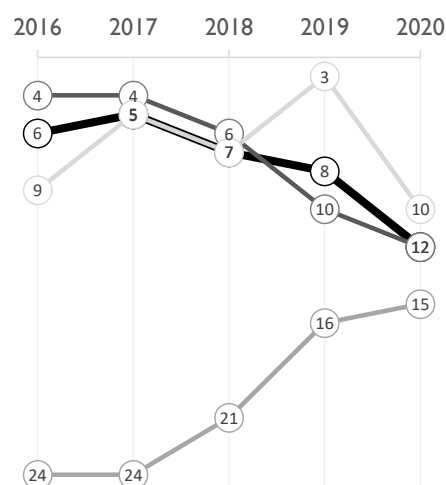
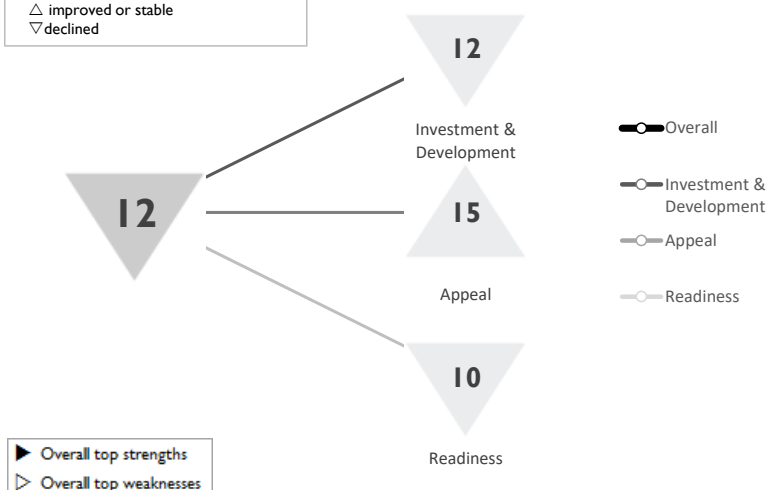
Readiness

		Value	2020 Rank
Labor force growth	Percentage change	0.14 %	45
Skilled labor	is readily available	3.27 Survey [0..10]	58
Finance skills	are readily available	5.10 Survey [0..10]	55
International experience	of senior managers is generally significant	5.17 Survey [0..10]	45
Competent senior managers	are readily available	3.80 Survey [0..10]	57
Primary and secondary education	meets the needs of a competitive economy	7.87 Survey [0..10]	12
Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	27.73 %	18
University education	meets the needs of a competitive economy	7.43 Survey [0..10]	20
Management education	meets the needs of the business community	6.95 Survey [0..10]	24
Language skills	are meeting the needs of enterprises	7.53 Survey [0..10]	21
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	3.32 number	25
Educational assessment - PISA	PISA survey of 15-year olds	526 Average	4

FINLAND

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
Total public expenditure on education	Percentage of GDP	5.5 %	15
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	10,535 US\$	14
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	13.59 ratio	24
▷ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	13.77 ratio	45
Apprenticeships	are sufficiently implemented	4.93 Survey [0..10]	37
Employee training	is a high priority in companies	7.16 Survey [0..10]	8
Female labor force	Percentage of total labor force	48.00 %	9
Health infrastructure	meets the needs of society	8.52 Survey [0..10]	7

Appeal

		Value	2020 Rank
▷ Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	83.50 index	38
Attracting and retaining talents	is a priority in companies	7.76 Survey [0..10]	13
Worker motivation	in companies is high	7.19 Survey [0..10]	9
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	6.00 Survey [0..10]	20
Quality of life	is high	9.38 Survey [0..10]	6
▷ Foreign highly-skilled personnel	are attracted to your country's business environment	4.95 Survey [0..10]	39
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	40,528 US\$	16
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	186,568 US\$	24
▷ Effective personal income tax rate	Percentage of an income equal to GDP per capita	27.74 %	60
▶ Justice	is fairly administered	9.08 Survey [0..10]	2
▶ Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	5.91 micrograms	1

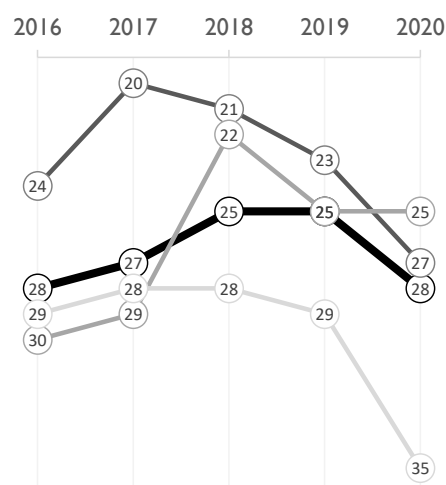
Readiness

		Value	2020 Rank
▷ Labor force growth	Percentage change	0.29 %	44
Skilled labor	is readily available	6.45 Survey [0..10]	18
Finance skills	are readily available	7.48 Survey [0..10]	11
International experience	of senior managers is generally significant	6.31 Survey [0..10]	16
Competent senior managers	are readily available	6.36 Survey [0..10]	17
▶ Primary and secondary education	meets the needs of a competitive economy	9.31 Survey [0..10]	1
Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	28.12 %	14
▶ University education	meets the needs of a competitive economy	8.76 Survey [0..10]	4
▶ Management education	meets the needs of the business community	8.02 Survey [0..10]	6
Language skills	are meeting the needs of enterprises	8.43 Survey [0..10]	9
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	4.30 number	18
Educational assessment - PISA	PISA survey of 15-year olds	516 Average	9

FRANCE

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
Total public expenditure on education	Percentage of GDP	5.1 %	22
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	9,124 US\$	19
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	19.15 ratio	47
Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	13.01 ratio	42
▷ Apprenticeships	are sufficiently implemented	4.40 Survey [0..10]	52
Employee training	is a high priority in companies	5.17 Survey [0..10]	50
▶ Female labor force	Percentage of total labor force	48.48 %	8
Health infrastructure	meets the needs of society	7.52 Survey [0..10]	20

Appeal

		Value	2020 Rank
Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	88.50 index	44
Attracting and retaining talents	is a priority in companies	6.75 Survey [0..10]	33
▷ Worker motivation	in companies is high	5.07 Survey [0..10]	54
▶ Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	6.12 Survey [0..10]	17
Quality of life	is high	8.10 Survey [0..10]	21
Foreign highly-skilled personnel	are attracted to your country's business environment	5.72 Survey [0..10]	28
▶ Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	37,845 US\$	19
▶ Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	269,516 US\$	8
Effective personal income tax rate	Percentage of an income equal to GDP per capita	23.27 %	48
Justice	is fairly administered	6.35 Survey [0..10]	24
▶ Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	11.96 micrograms	19

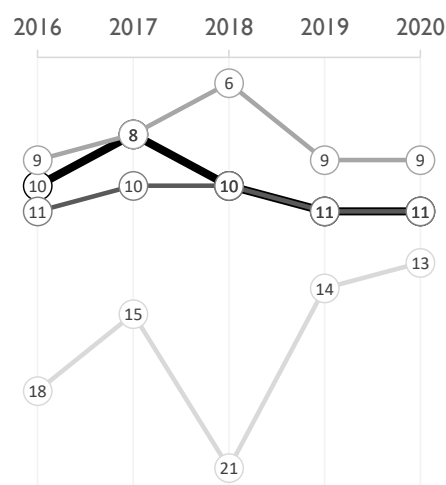
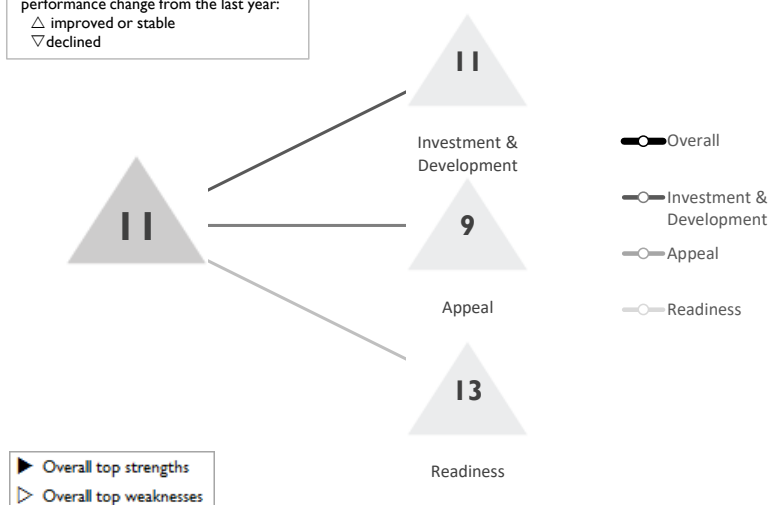
Readiness

		Value	2020 Rank
▷ Labor force growth	Percentage change	-0.21 %	51
Skilled labor	is readily available	5.95 Survey [0..10]	32
Finance skills	are readily available	6.82 Survey [0..10]	23
▷ International experience	of senior managers is generally significant	4.67 Survey [0..10]	54
Competent senior managers	are readily available	5.81 Survey [0..10]	34
Primary and secondary education	meets the needs of a competitive economy	6.92 Survey [0..10]	24
Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	25.39 %	27
University education	meets the needs of a competitive economy	6.87 Survey [0..10]	28
Management education	meets the needs of the business community	7.12 Survey [0..10]	20
▷ Language skills	are meeting the needs of enterprises	4.12 Survey [0..10]	55
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	3.43 number	24
Educational assessment - PISA	PISA survey of 15-year olds	494 Average	25

GERMANY

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
▷ Total public expenditure on education	Percentage of GDP	4.2 %	40
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	10,166 US\$	16
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	15.27 ratio	34
Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	12.89 ratio	38
▶ Apprenticeships	are sufficiently implemented	8.45 Survey [0..10]	2
▶ Employee training	is a high priority in companies	7.61 Survey [0..10]	3
Female labor force	Percentage of total labor force	46.45 %	27
▶ Health infrastructure	meets the needs of society	8.44 Survey [0..10]	8

Appeal

		Value	2020 Rank
▷ Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	82.70 index	36
Attracting and retaining talents	is a priority in companies	7.47 Survey [0..10]	22
Worker motivation	in companies is high	7.10 Survey [0..10]	13
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	6.05 Survey [0..10]	19
Quality of life	is high	9.00 Survey [0..10]	9
Foreign highly-skilled personnel	are attracted to your country's business environment	6.32 Survey [0..10]	20
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	46,639 US\$	9
▶ Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	318,208 US\$	3
▷ Effective personal income tax rate	Percentage of an income equal to GDP per capita	25.85 %	55
Justice	is fairly administered	8.23 Survey [0..10]	12
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	12.09 micrograms	21

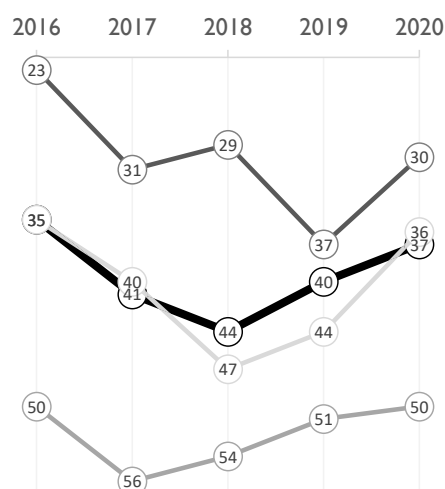
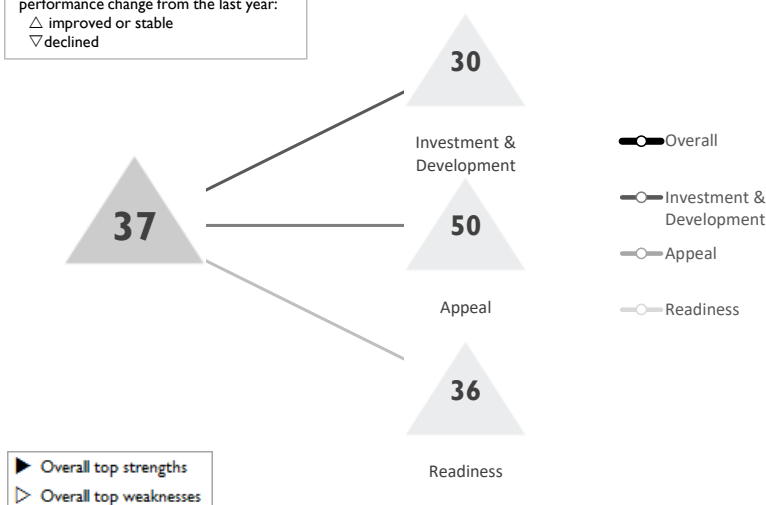
Readiness

		Value	2020 Rank
Labor force growth	Percentage change	0.89 %	31
▷ Skilled labor	is readily available	5.36 Survey [0..10]	44
Finance skills	are readily available	6.84 Survey [0..10]	22
International experience	of senior managers is generally significant	6.39 Survey [0..10]	14
Competent senior managers	are readily available	5.69 Survey [0..10]	37
Primary and secondary education	meets the needs of a competitive economy	7.86 Survey [0..10]	13
▶ Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	35.31 %	3
University education	meets the needs of a competitive economy	7.96 Survey [0..10]	12
Management education	meets the needs of the business community	7.07 Survey [0..10]	21
Language skills	are meeting the needs of enterprises	7.02 Survey [0..10]	26
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	3.76 number	23
Educational assessment - PISA	PISA survey of 15-year olds	500 Average	18

GREECE

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
Total public expenditure on education	Percentage of GDP	3.9 %	44
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	3,668 US\$	41
► Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	9.22 ratio	2
► Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	8.63 ratio	5
Apprenticeships	are sufficiently implemented	4.77 Survey [0..10]	41
▷ Employee training	is a high priority in companies	4.99 Survey [0..10]	56
Female labor force	Percentage of total labor force	44.30 %	44
Health infrastructure	meets the needs of society	5.28 Survey [0..10]	40

Appeal

		Value	2020 Rank
► Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	72.80 index	22
▷ Attracting and retaining talents	is a priority in companies	5.88 Survey [0..10]	54
▷ Worker motivation	in companies is high	5.16 Survey [0..10]	50
▷ Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	2.73 Survey [0..10]	57
Quality of life	is high	6.59 Survey [0..10]	35
▷ Foreign highly-skilled personnel	are attracted to your country's business environment	2.95 Survey [0..10]	58
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	20,159 US\$	33
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	187,489 US\$	23
Effective personal income tax rate	Percentage of an income equal to GDP per capita	22.15 %	44
Justice	is fairly administered	4.67 Survey [0..10]	44
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	16.48 micrograms	34

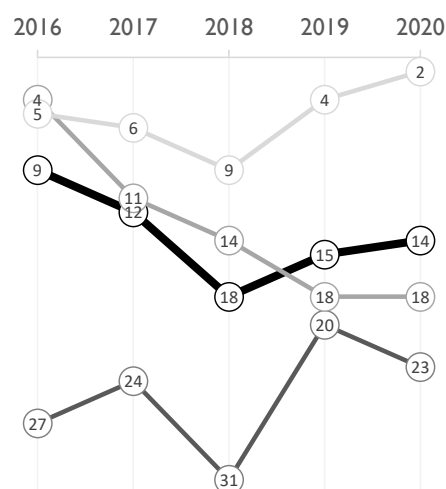
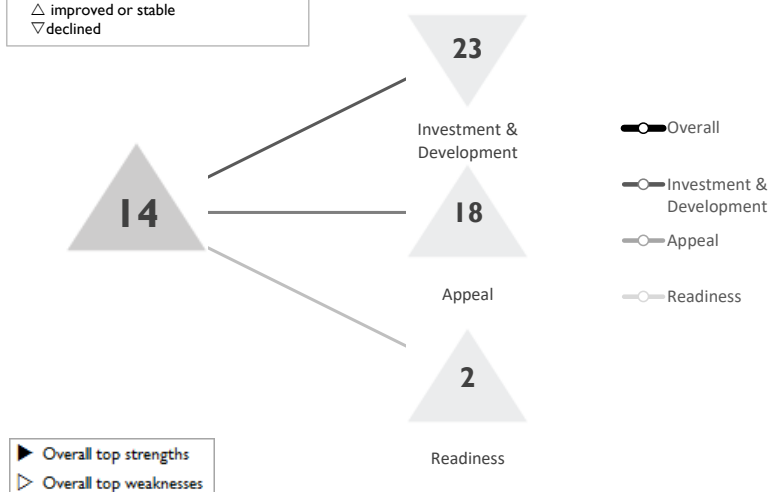
Readiness

		Value	2020 Rank
Labor force growth	Percentage change	0.34 %	42
Skilled labor	is readily available	6.12 Survey [0..10]	26
Finance skills	are readily available	6.50 Survey [0..10]	29
International experience	of senior managers is generally significant	5.06 Survey [0..10]	47
Competent senior managers	are readily available	5.21 Survey [0..10]	43
Primary and secondary education	meets the needs of a competitive economy	5.68 Survey [0..10]	40
► Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	28.27 %	13
University education	meets the needs of a competitive economy	5.68 Survey [0..10]	43
Management education	meets the needs of the business community	5.95 Survey [0..10]	45
► Language skills	are meeting the needs of enterprises	8.10 Survey [0..10]	14
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	2.45 number	31
Educational assessment - PISA	PISA survey of 15-year olds	453 Average	40

HONG KONG SAR

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
▷ Total public expenditure on education	Percentage of GDP	3.1 %	53
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	9,291 US\$	18
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	13.35 ratio	23
Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	11.22 ratio	21
Apprenticeships	are sufficiently implemented	5.52 Survey [0..10]	26
Employee training	is a high priority in companies	6.19 Survey [0..10]	30
▶ Female labor force	Percentage of total labor force	50.09 %	2
Health infrastructure	meets the needs of society	7.67 Survey [0..10]	16

Appeal

		Value	2020 Rank
▷ Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	125.20 index	60
Attracting and retaining talents	is a priority in companies	7.71 Survey [0..10]	15
Worker motivation	in companies is high	7.16 Survey [0..10]	11
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	5.87 Survey [0..10]	24
Quality of life	is high	7.13 Survey [0..10]	32
Foreign highly-skilled personnel	are attracted to your country's business environment	7.02 Survey [0..10]	14
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	32,983 US\$	22
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	283,328 US\$	6
Effective personal income tax rate	Percentage of an income equal to GDP per capita	4.71 %	7
Justice	is fairly administered	8.36 Survey [0..10]	8
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	- micrograms	-

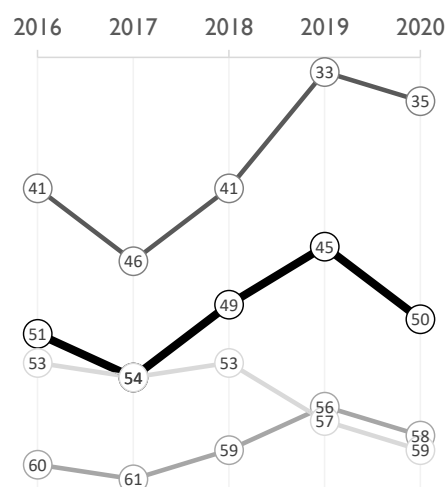
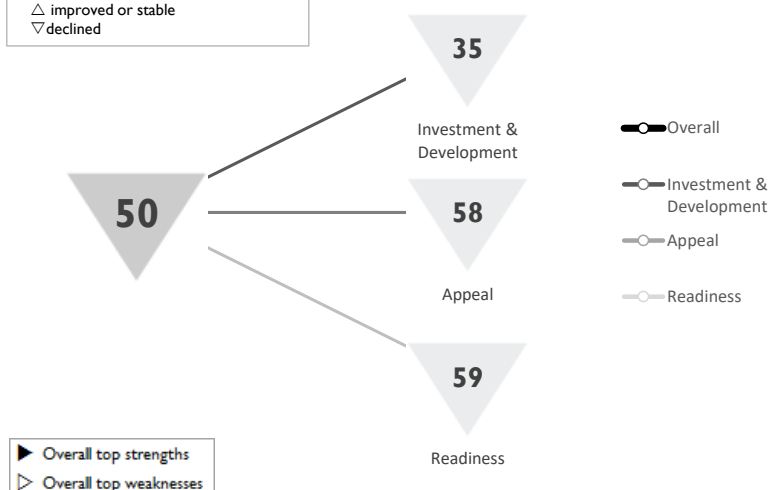
Readiness

		Value	2020 Rank
▷ Labor force growth	Percentage change	-0.32 %	52
Skilled labor	is readily available	6.76 Survey [0..10]	9
▶ Finance skills	are readily available	8.41 Survey [0..10]	1
International experience	of senior managers is generally significant	7.75 Survey [0..10]	4
▶ Competent senior managers	are readily available	7.31 Survey [0..10]	3
Primary and secondary education	meets the needs of a competitive economy	7.56 Survey [0..10]	17
▶ Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	40.59 %	2
University education	meets the needs of a competitive economy	7.70 Survey [0..10]	15
Management education	meets the needs of the business community	7.70 Survey [0..10]	11
Language skills	are meeting the needs of enterprises	7.13 Survey [0..10]	25
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	5.01 number	14
▶ Educational assessment - PISA	PISA survey of 15-year olds	531 Average	3

HUNGARY

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
▶ Total public expenditure on education	Percentage of GDP	5.1 %	23
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	4,361 US\$	36
▶ Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	10.18 ratio	5
▶ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	11.42 ratio	26
Apprenticeships	are sufficiently implemented	3.50 Survey [0..10]	58
Employee training	is a high priority in companies	5.13 Survey [0..10]	52
Female labor force	Percentage of total labor force	45.12 %	38
Health infrastructure	meets the needs of society	2.91 Survey [0..10]	58

Appeal

		Value	2020 Rank
▶ Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	67.00 index	11
Attracting and retaining talents	is a priority in companies	5.89 Survey [0..10]	53
Worker motivation	in companies is high	4.59 Survey [0..10]	58
▷ Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	2.26 Survey [0..10]	60
Quality of life	is high	4.71 Survey [0..10]	54
Foreign highly-skilled personnel	are attracted to your country's business environment	3.89 Survey [0..10]	50
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	12,322 US\$	46
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	85,503 US\$	53
▷ Effective personal income tax rate	Percentage of an income equal to GDP per capita	27.56 %	59
Justice	is fairly administered	4.49 Survey [0..10]	45
▶ Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	16.08 micrograms	30

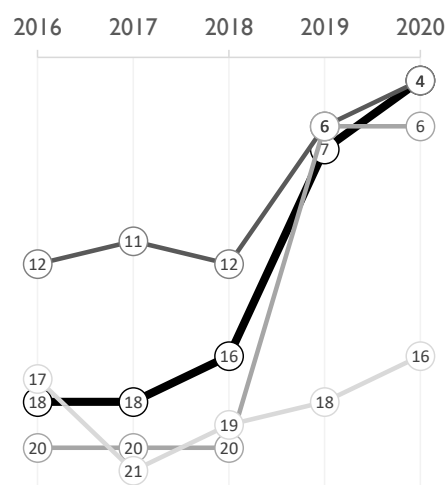
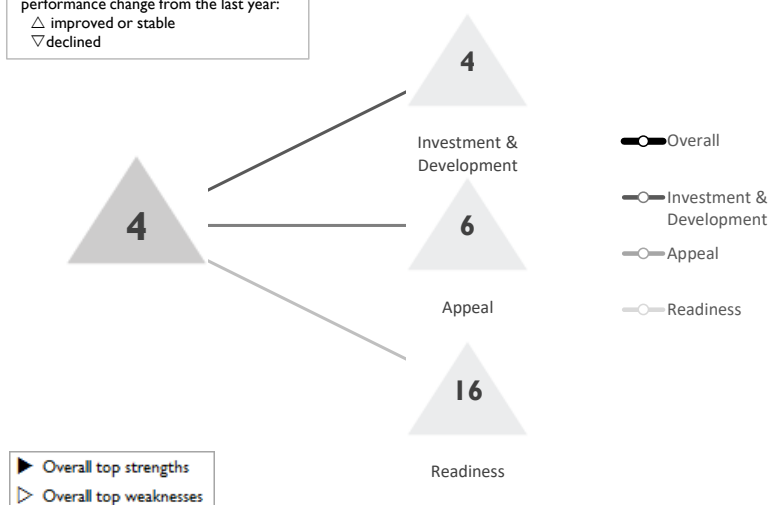
Readiness

		Value	2020 Rank
Labor force growth	Percentage change	-1.01 %	58
▷ Skilled labor	is readily available	3.10 Survey [0..10]	61
Finance skills	are readily available	4.93 Survey [0..10]	57
International experience	of senior managers is generally significant	5.01 Survey [0..10]	49
▷ Competent senior managers	are readily available	2.75 Survey [0..10]	62
Primary and secondary education	meets the needs of a competitive economy	4.26 Survey [0..10]	50
Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	22.52 %	36
University education	meets the needs of a competitive economy	4.97 Survey [0..10]	51
Management education	meets the needs of the business community	4.65 Survey [0..10]	58
▷ Language skills	are meeting the needs of enterprises	3.57 Survey [0..10]	60
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	3.31 number	26
Educational assessment - PISA	PISA survey of 15-year olds	479 Average	32

ICELAND

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
▶ Total public expenditure on education	Percentage of GDP	7.4 %	2
▶ Total public exp. on education per student	Spending per enrolled pupil/student, all levels	19,007 US\$	3
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	11.02 ratio	8
Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	10.13 ratio	15
Apprenticeships	are sufficiently implemented	4.79 Survey [0..10]	40
Employee training	is a high priority in companies	6.27 Survey [0..10]	27
Female labor force	Percentage of total labor force	46.00 %	32
Health infrastructure	meets the needs of society	7.64 Survey [0..10]	17

Appeal

		Value	2020 Rank
Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	- index	-
Attracting and retaining talents	is a priority in companies	7.79 Survey [0..10]	12
Worker motivation	in companies is high	7.21 Survey [0..10]	7
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	7.27 Survey [0..10]	6
Quality of life	is high	9.61 Survey [0..10]	4
▷ Foreign highly-skilled personnel	are attracted to your country's business environment	4.85 Survey [0..10]	41
▶ Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	70,973 US\$	2
▷ Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	97,700 US\$	49
▷ Effective personal income tax rate	Percentage of an income equal to GDP per capita	21.32 %	41
Justice	is fairly administered	7.60 Survey [0..10]	19
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	6.78 micrograms	5

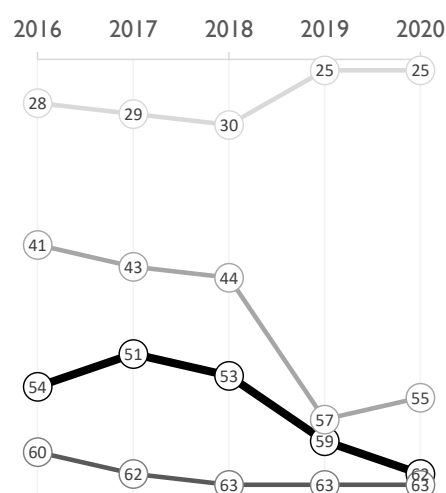
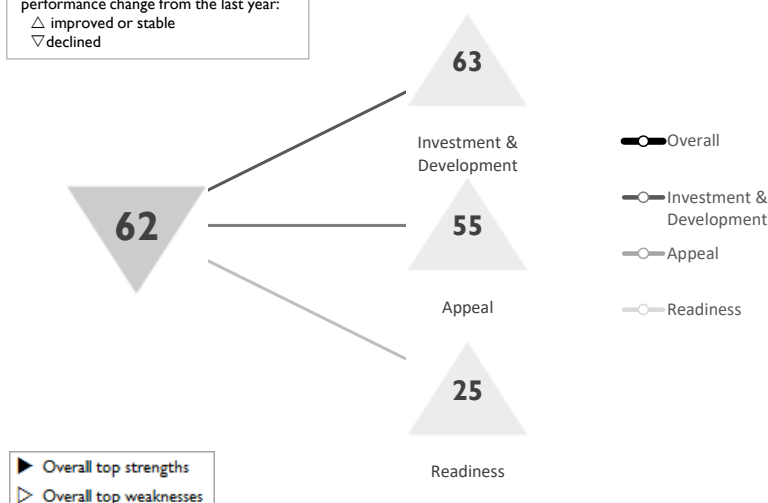
Readiness

		Value	2020 Rank
Labor force growth	Percentage change	2.21 %	9
▶ Skilled labor	is readily available	7.55 Survey [0..10]	1
Finance skills	are readily available	8.00 Survey [0..10]	4
▷ International experience	of senior managers is generally significant	5.22 Survey [0..10]	43
Competent senior managers	are readily available	6.55 Survey [0..10]	14
Primary and secondary education	meets the needs of a competitive economy	7.97 Survey [0..10]	10
▷ Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	18.59 %	53
University education	meets the needs of a competitive economy	8.12 Survey [0..10]	8
Management education	meets the needs of the business community	8.06 Survey [0..10]	5
▶ Language skills	are meeting the needs of enterprises	8.83 Survey [0..10]	3
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	4.10 number	21
Educational assessment - PISA	PISA survey of 15-year olds	481 Average	29

INDIA

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
Total public expenditure on education	Percentage of GDP	4.4 %	35
▷ Total public exp. on education per student	Spending per enrolled pupil/student, all levels	332 US\$	62
▷ Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	36.66 ratio	62
▷ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	28.52 ratio	62
Apprenticeships	are sufficiently implemented	4.99 Survey [0..10]	35
Employee training	is a high priority in companies	5.46 Survey [0..10]	44
Female labor force	Percentage of total labor force	- %	-
Health infrastructure	meets the needs of society	4.71 Survey [0..10]	45

Appeal

		Value	2020 Rank
Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	82.90 index	37
Attracting and retaining talents	is a priority in companies	6.59 Survey [0..10]	37
Worker motivation	in companies is high	5.73 Survey [0..10]	39
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	4.91 Survey [0..10]	34
Quality of life	is high	4.74 Survey [0..10]	52
Foreign highly-skilled personnel	are attracted to your country's business environment	4.62 Survey [0..10]	46
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	6,508 US\$	57
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	104,387 US\$	45
▶ Effective personal income tax rate	Percentage of an income equal to GDP per capita	11.14 %	16
Justice	is fairly administered	5.68 Survey [0..10]	34
▷ Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	90.25 micrograms	61

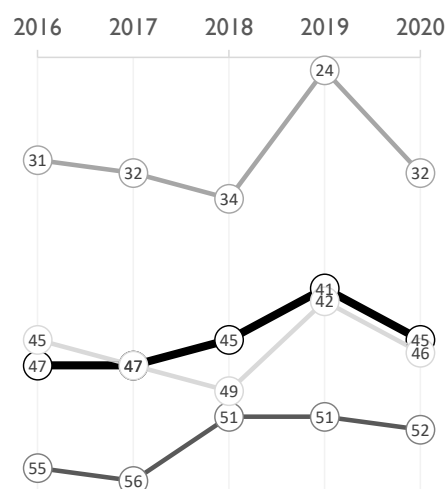
Readiness

		Value	2020 Rank
▶ Labor force growth	Percentage change	1.82 %	14
▶ Skilled labor	is readily available	6.25 Survey [0..10]	22
▶ Finance skills	are readily available	6.78 Survey [0..10]	25
International experience	of senior managers is generally significant	5.39 Survey [0..10]	41
Competent senior managers	are readily available	5.88 Survey [0..10]	30
Primary and secondary education	meets the needs of a competitive economy	5.66 Survey [0..10]	41
▶ Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	32.65 %	6
University education	meets the needs of a competitive economy	5.51 Survey [0..10]	45
Management education	meets the needs of the business community	6.42 Survey [0..10]	35
Language skills	are meeting the needs of enterprises	6.94 Survey [0..10]	27
▷ Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	0.03 number	60
Educational assessment - PISA	PISA survey of 15-year olds	- Average	-

INDONESIA

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
▷ Total public expenditure on education	Percentage of GDP	3.0 %	58
▷ Total public exp. on education per student	Spending per enrolled pupil/student, all levels	454 US\$	60
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	19.02 ratio	46
Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	15.21 ratio	49
▶ Apprenticeships	are sufficiently implemented	5.65 Survey [0..10]	19
Employee training	is a high priority in companies	6.09 Survey [0..10]	32
Female labor force	Percentage of total labor force	37.58 %	56
Health infrastructure	meets the needs of society	5.66 Survey [0..10]	38

Appeal

		Value	2020 Rank
▶ Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	71.90 index	19
Attracting and retaining talents	is a priority in companies	6.57 Survey [0..10]	38
Worker motivation	in companies is high	6.04 Survey [0..10]	30
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	5.76 Survey [0..10]	25
Quality of life	is high	5.72 Survey [0..10]	43
Foreign highly-skilled personnel	are attracted to your country's business environment	6.00 Survey [0..10]	24
▷ Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	5,788 US\$	58
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	82,139 US\$	54
▶ Effective personal income tax rate	Percentage of an income equal to GDP per capita	1.85 %	4
Justice	is fairly administered	5.02 Survey [0..10]	41
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	16.71 micrograms	36

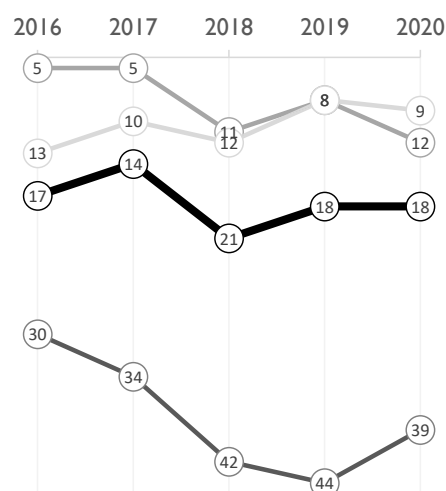
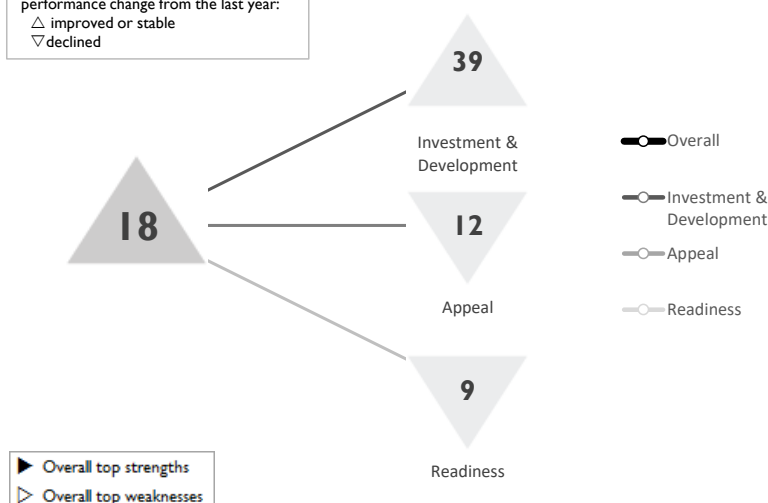
Readiness

		Value	2020 Rank
▶ Labor force growth	Percentage change	2.25 %	7
Skilled labor	is readily available	5.59 Survey [0..10]	41
Finance skills	are readily available	5.72 Survey [0..10]	46
▶ International experience	of senior managers is generally significant	6.17 Survey [0..10]	23
Competent senior managers	are readily available	6.00 Survey [0..10]	26
Primary and secondary education	meets the needs of a competitive economy	5.94 Survey [0..10]	36
Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	19.42 %	49
University education	meets the needs of a competitive economy	6.32 Survey [0..10]	31
Management education	meets the needs of the business community	6.34 Survey [0..10]	37
Language skills	are meeting the needs of enterprises	6.11 Survey [0..10]	37
▷ Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	0.03 number	61
▷ Educational assessment - PISA	PISA survey of 15-year olds	382 Average	57

IRELAND

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
▷ Total public expenditure on education	Percentage of GDP	3.1 %	54
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	8,301 US\$	22
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	15.25 ratio	33
Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	12.89 ratio	37
Apprenticeships	are sufficiently implemented	4.75 Survey [0..10]	42
Employee training	is a high priority in companies	6.38 Survey [0..10]	24
Female labor force	Percentage of total labor force	45.99 %	33
▷ Health infrastructure	meets the needs of society	4.79 Survey [0..10]	44

Appeal

		Value	2020 Rank
▷ Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	88.90 index	46
Attracting and retaining talents	is a priority in companies	7.46 Survey [0..10]	23
Worker motivation	in companies is high	7.17 Survey [0..10]	10
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	6.47 Survey [0..10]	15
Quality of life	is high	8.29 Survey [0..10]	19
Foreign highly-skilled personnel	are attracted to your country's business environment	7.46 Survey [0..10]	10
▶ Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	46,792 US\$	8
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	217,567 US\$	18
▷ Effective personal income tax rate	Percentage of an income equal to GDP per capita	23.61 %	49
Justice	is fairly administered	7.71 Survey [0..10]	18
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	8.27 micrograms	10

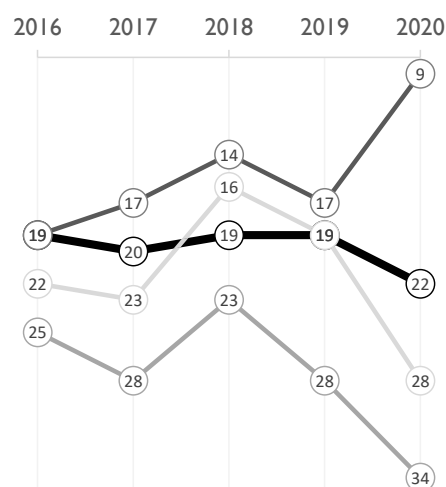
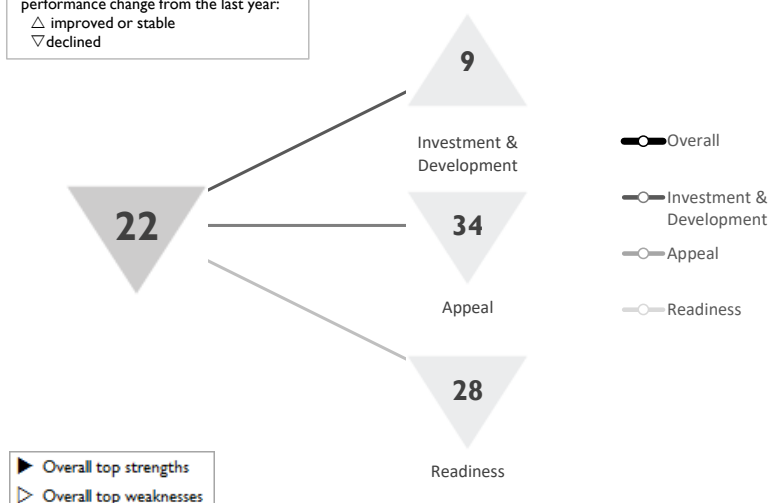
Readiness

		Value	2020 Rank
▶ Labor force growth	Percentage change	2.53 %	5
Skilled labor	is readily available	6.71 Survey [0..10]	11
▶ Finance skills	are readily available	7.63 Survey [0..10]	8
▶ International experience	of senior managers is generally significant	6.88 Survey [0..10]	9
Competent senior managers	are readily available	6.71 Survey [0..10]	12
▶ Primary and secondary education	meets the needs of a competitive economy	8.21 Survey [0..10]	7
Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	24.10 %	33
University education	meets the needs of a competitive economy	8.00 Survey [0..10]	11
Management education	meets the needs of the business community	7.50 Survey [0..10]	15
▷ Language skills	are meeting the needs of enterprises	5.25 Survey [0..10]	46
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	4.59 number	16
Educational assessment - PISA	PISA survey of 15-year olds	505 Average	11

ISRAEL

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
▶ Total public expenditure on education	Percentage of GDP	7.1 %	3
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	9,763 US\$	17
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	15.43 ratio	35
▶ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	10.40 ratio	17
▶ Apprenticeships	are sufficiently implemented	5.85 Survey [0..10]	16
Employee training	is a high priority in companies	6.20 Survey [0..10]	29
▶ Female labor force	Percentage of total labor force	47.88 %	11
Health infrastructure	meets the needs of society	5.90 Survey [0..10]	36

Appeal

		Value	2020 Rank
▷ Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	96.50 index	52
▷ Attracting and retaining talents	is a priority in companies	6.49 Survey [0..10]	42
Worker motivation	in companies is high	6.24 Survey [0..10]	23
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	5.95 Survey [0..10]	22
Quality of life	is high	6.51 Survey [0..10]	37
Foreign highly-skilled personnel	are attracted to your country's business environment	5.75 Survey [0..10]	26
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	35,783 US\$	21
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	178,295 US\$	28
Effective personal income tax rate	Percentage of an income equal to GDP per capita	16.13 %	30
Justice	is fairly administered	6.29 Survey [0..10]	26
▷ Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	20.81 micrograms	47

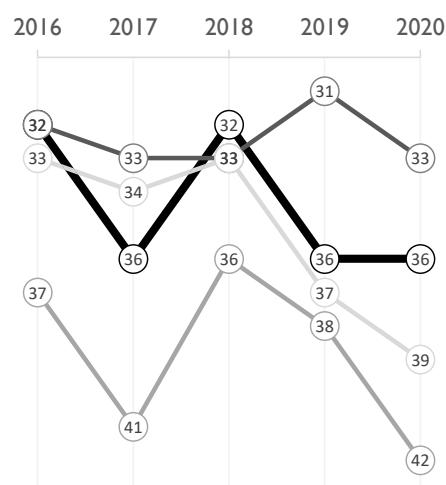
Readiness

		Value	2020 Rank
Labor force growth	Percentage change	1.38 %	18
▶ Skilled labor	is readily available	6.80 Survey [0..10]	8
Finance skills	are readily available	6.39 Survey [0..10]	35
International experience	of senior managers is generally significant	6.20 Survey [0..10]	20
Competent senior managers	are readily available	5.85 Survey [0..10]	33
Primary and secondary education	meets the needs of a competitive economy	6.05 Survey [0..10]	35
Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	- %	-
University education	meets the needs of a competitive economy	6.93 Survey [0..10]	25
Management education	meets the needs of the business community	6.49 Survey [0..10]	33
Language skills	are meeting the needs of enterprises	7.22 Survey [0..10]	24
▷ Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	1.28 number	47
▷ Educational assessment - PISA	PISA survey of 15-year olds	465 Average	37

ITALY

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
Total public expenditure on education	Percentage of GDP	4.0 %	42
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	7,574 US\$	24
▶ Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	11.53 ratio	10
▶ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	10.60 ratio	18
Apprenticeships	are sufficiently implemented	4.54 Survey [0..10]	48
▷ Employee training	is a high priority in companies	4.77 Survey [0..10]	60
Female labor force	Percentage of total labor force	42.81 %	47
Health infrastructure	meets the needs of society	7.13 Survey [0..10]	25

Appeal

		Value	2020 Rank
Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	88.70 index	45
▷ Attracting and retaining talents	is a priority in companies	5.55 Survey [0..10]	60
Worker motivation	in companies is high	5.52 Survey [0..10]	42
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	4.05 Survey [0..10]	46
Quality of life	is high	7.59 Survey [0..10]	27
▷ Foreign highly-skilled personnel	are attracted to your country's business environment	3.73 Survey [0..10]	52
▶ Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	32,932 US\$	23
▶ Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	269,124 US\$	9
▷ Effective personal income tax rate	Percentage of an income equal to GDP per capita	23.85 %	50
Justice	is fairly administered	3.98 Survey [0..10]	49
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	16.50 micrograms	35

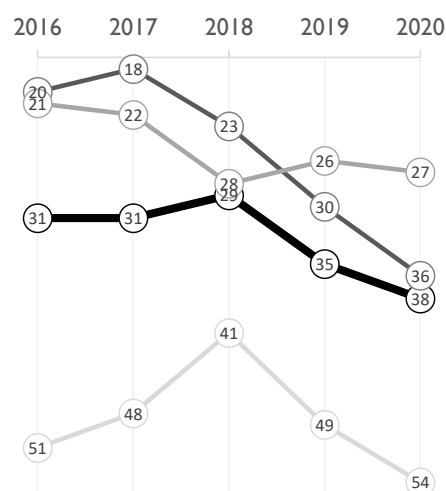
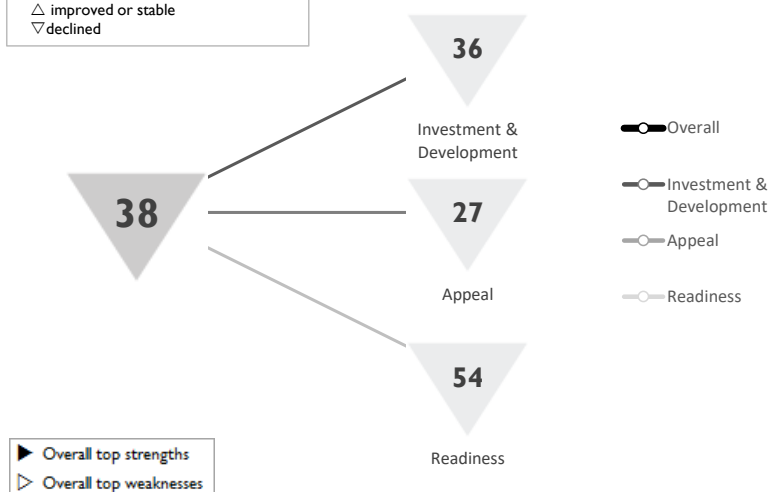
Readiness

		Value	2020 Rank
Labor force growth	Percentage change	-0.11 %	49
Skilled labor	is readily available	6.11 Survey [0..10]	27
Finance skills	are readily available	5.69 Survey [0..10]	47
▷ International experience	of senior managers is generally significant	4.96 Survey [0..10]	50
Competent senior managers	are readily available	5.66 Survey [0..10]	39
Primary and secondary education	meets the needs of a competitive economy	6.91 Survey [0..10]	25
Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	24.20 %	32
▶ University education	meets the needs of a competitive economy	7.14 Survey [0..10]	23
Management education	meets the needs of the business community	6.61 Survey [0..10]	32
Language skills	are meeting the needs of enterprises	4.93 Survey [0..10]	49
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	1.76 number	39
Educational assessment - PISA	PISA survey of 15-year olds	477 Average	33

JAPAN

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
Total public expenditure on education	Percentage of GDP	3.1 %	52
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	7,704 US\$	23
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	16.17 ratio	36
Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	12.30 ratio	33
► Apprenticeships	are sufficiently implemented	5.93 Survey [0..10]	12
Employee training	is a high priority in companies	6.24 Survey [0..10]	28
Female labor force	Percentage of total labor force	44.40 %	43
Health infrastructure	meets the needs of society	7.26 Survey [0..10]	24

Appeal

		Value	2020 Rank
▷ Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	114.70 index	59
► Attracting and retaining talents	is a priority in companies	7.76 Survey [0..10]	14
Worker motivation	in companies is high	5.83 Survey [0..10]	37
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	4.79 Survey [0..10]	36
Quality of life	is high	7.54 Survey [0..10]	28
Foreign highly-skilled personnel	are attracted to your country's business environment	3.50 Survey [0..10]	54
► Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	45,806 US\$	14
► Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	265,052 US\$	11
Effective personal income tax rate	Percentage of an income equal to GDP per capita	14.33 %	26
Justice	is fairly administered	6.72 Survey [0..10]	22
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	11.86 micrograms	17

Readiness

		Value	2020 Rank
Labor force growth	Percentage change	0.82 %	34
Skilled labor	is readily available	5.13 Survey [0..10]	48
Finance skills	are readily available	5.28 Survey [0..10]	53
▷ International experience	of senior managers is generally significant	2.75 Survey [0..10]	63
▷ Competent senior managers	are readily available	3.16 Survey [0..10]	61
Primary and secondary education	meets the needs of a competitive economy	6.09 Survey [0..10]	33
Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	21.71 %	42
University education	meets the needs of a competitive economy	4.89 Survey [0..10]	52
▷ Management education	meets the needs of the business community	4.65 Survey [0..10]	57
▷ Language skills	are meeting the needs of enterprises	2.99 Survey [0..10]	62
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	1.44 number	45
► Educational assessment - PISA	PISA survey of 15-year olds	520 Average	5

JORDAN

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
Total public expenditure on education	Percentage of GDP	3.0 %	55
▷ Total public exp. on education per student	Spending per enrolled pupil/student, all levels	540 US\$	59
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	18.54 ratio	45
Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	12.26 ratio	32
▶ Apprenticeships	are sufficiently implemented	5.88 Survey [0..10]	14
Employee training	is a high priority in companies	6.48 Survey [0..10]	23
▷ Female labor force	Percentage of total labor force	20.09 %	59
Health infrastructure	meets the needs of society	6.05 Survey [0..10]	33

Appeal

		Value	2020 Rank
Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	75.80 index	24
Attracting and retaining talents	is a priority in companies	6.54 Survey [0..10]	39
Worker motivation	in companies is high	5.65 Survey [0..10]	40
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	4.22 Survey [0..10]	45
Quality of life	is high	5.42 Survey [0..10]	47
Foreign highly-skilled personnel	are attracted to your country's business environment	5.23 Survey [0..10]	36
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	- US\$	-
▷ Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	52,311 US\$	57
▶ Effective personal income tax rate	Percentage of an income equal to GDP per capita	7.39 %	11
Justice	is fairly administered	6.13 Survey [0..10]	28
▷ Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	32.75 micrograms	56

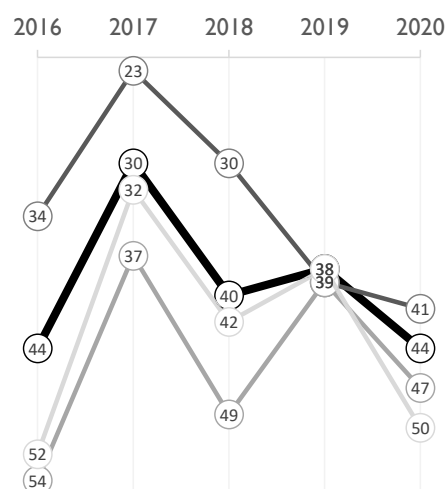
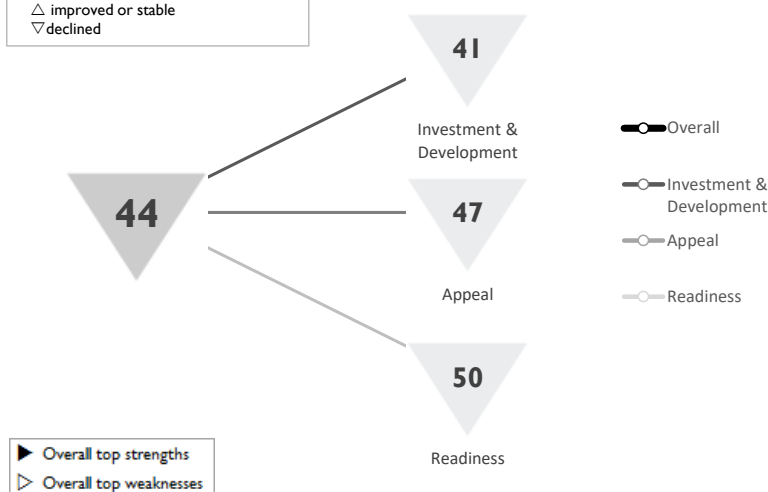
Readiness

		Value	2020 Rank
▷ Labor force growth	Percentage change	-1.85 %	61
▶ Skilled labor	is readily available	6.49 Survey [0..10]	16
Finance skills	are readily available	6.45 Survey [0..10]	32
International experience	of senior managers is generally significant	6.15 Survey [0..10]	24
▶ Competent senior managers	are readily available	6.69 Survey [0..10]	13
Primary and secondary education	meets the needs of a competitive economy	6.07 Survey [0..10]	34
Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	26.36 %	24
University education	meets the needs of a competitive economy	6.10 Survey [0..10]	37
Management education	meets the needs of the business community	6.03 Survey [0..10]	44
Language skills	are meeting the needs of enterprises	6.54 Survey [0..10]	30
▶ Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	4.35 number	17
Educational assessment - PISA	PISA survey of 15-year olds	416 Average	48

KAZAKHSTAN

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
▶ Total public expenditure on education	Percentage of GDP	2.6 %	59
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	1,150 US\$	53
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	19.64 ratio	51
▶ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	6.96 ratio	1
▶ Apprenticeships	are sufficiently implemented	5.59 Survey [0..10]	23
▶ Employee training	is a high priority in companies	6.60 Survey [0..10]	21
▶ Female labor force	Percentage of total labor force	48.60 %	7
Health infrastructure	meets the needs of society	4.34 Survey [0..10]	48

Appeal

		Value	2020 Rank
▶ Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	57.40 index	1
Attracting and retaining talents	is a priority in companies	6.38 Survey [0..10]	43
Worker motivation	in companies is high	5.47 Survey [0..10]	44
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	3.26 Survey [0..10]	53
Quality of life	is high	4.77 Survey [0..10]	51
Foreign highly-skilled personnel	are attracted to your country's business environment	5.54 Survey [0..10]	31
▶ Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	6,878 US\$	56
▶ Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	17,332 US\$	62
Effective personal income tax rate	Percentage of an income equal to GDP per capita	15.96 %	29
Justice	is fairly administered	5.51 Survey [0..10]	36
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	13.97 micrograms	25

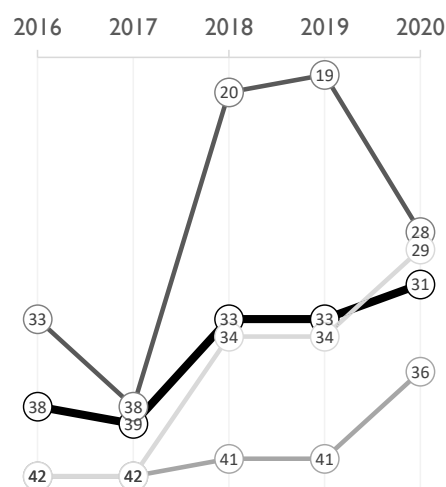
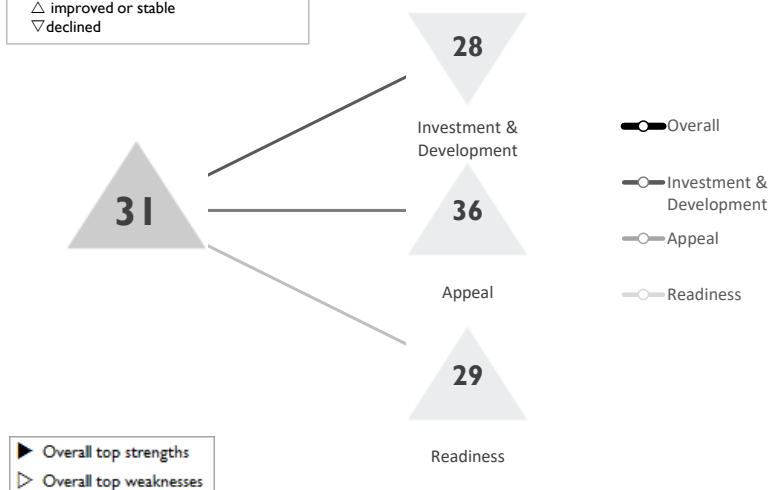
Readiness

		Value	2020 Rank
Labor force growth	Percentage change	0.90 %	29
Skilled labor	is readily available	5.55 Survey [0..10]	42
Finance skills	are readily available	6.42 Survey [0..10]	34
International experience	of senior managers is generally significant	5.61 Survey [0..10]	36
Competent senior managers	are readily available	5.88 Survey [0..10]	31
Primary and secondary education	meets the needs of a competitive economy	5.01 Survey [0..10]	48
Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	24.84 %	31
▶ University education	meets the needs of a competitive economy	4.63 Survey [0..10]	54
▶ Management education	meets the needs of the business community	4.91 Survey [0..10]	55
Language skills	are meeting the needs of enterprises	4.96 Survey [0..10]	48
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	0.79 number	50
Educational assessment - PISA	PISA survey of 15-year olds	402 Average	52

KOREA REP.

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
Total public expenditure on education	Percentage of GDP	4.3 %	37
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	6,230 US\$	29
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	16.51 ratio	39
Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	12.78 ratio	36
Apprenticeships	are sufficiently implemented	5.67 Survey [0..10]	18
Employee training	is a high priority in companies	6.84 Survey [0..10]	15
Female labor force	Percentage of total labor force	42.92 %	45
Health infrastructure	meets the needs of society	8.00 Survey [0..10]	15

Appeal

		Value	2020 Rank
Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	109.40 index	56
Attracting and retaining talents	is a priority in companies	7.81 Survey [0..10]	11
Worker motivation	in companies is high	5.48 Survey [0..10]	43
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	5.46 Survey [0..10]	28
Quality of life	is high	6.43 Survey [0..10]	39
Foreign highly-skilled personnel	are attracted to your country's business environment	4.70 Survey [0..10]	43
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	24,963 US\$	28
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	249,586 US\$	14
Effective personal income tax rate	Percentage of an income equal to GDP per capita	8.43 %	13
Justice	is fairly administered	5.04 Survey [0..10]	40
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	25.14 micrograms	53

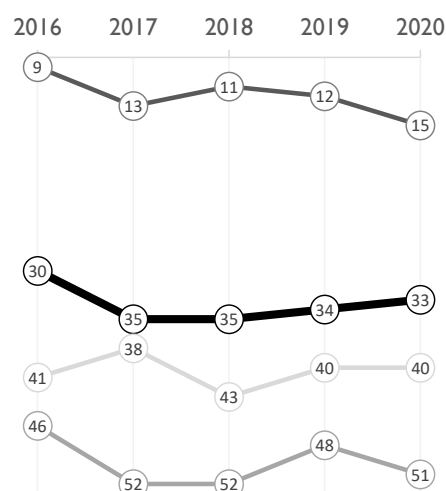
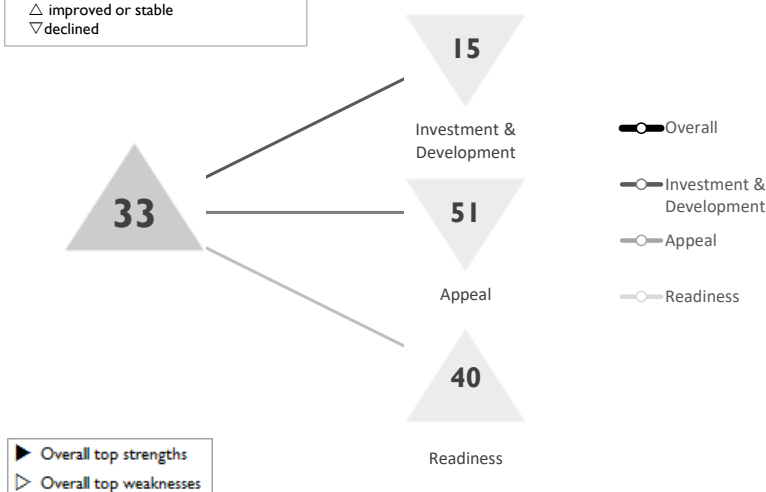
Readiness

		Value	2020 Rank
Labor force growth	Percentage change	1.04 %	25
Skilled labor	is readily available	5.97 Survey [0..10]	31
Finance skills	are readily available	6.59 Survey [0..10]	28
International experience	of senior managers is generally significant	5.51 Survey [0..10]	39
Competent senior managers	are readily available	5.27 Survey [0..10]	42
Primary and secondary education	meets the needs of a competitive economy	5.53 Survey [0..10]	44
Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	29.35 %	10
University education	meets the needs of a competitive economy	5.30 Survey [0..10]	48
Management education	meets the needs of the business community	5.53 Survey [0..10]	48
Language skills	are meeting the needs of enterprises	6.08 Survey [0..10]	38
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	1.64 number	41
Educational assessment - PISA	PISA survey of 15-year olds	520 Average	6

LATVIA

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
▶ Total public expenditure on education	Percentage of GDP	5.8 %	12
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	4,975 US\$	34
▶ Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	12.00 ratio	14
▶ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	9.53 ratio	13
Apprenticeships	are sufficiently implemented	5.07 Survey [0..10]	32
Employee training	is a high priority in companies	5.69 Survey [0..10]	39
▶ Female labor force	Percentage of total labor force	50.07 %	3
Health infrastructure	meets the needs of society	4.80 Survey [0..10]	43

Appeal

		Value	2020 Rank
Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	76.20 index	26
▷ Attracting and retaining talents	is a priority in companies	6.04 Survey [0..10]	50
Worker motivation	in companies is high	5.86 Survey [0..10]	35
▷ Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	3.20 Survey [0..10]	54
Quality of life	is high	6.09 Survey [0..10]	41
Foreign highly-skilled personnel	are attracted to your country's business environment	4.89 Survey [0..10]	40
▷ Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	11,431 US\$	51
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	103,020 US\$	46
Effective personal income tax rate	Percentage of an income equal to GDP per capita	22.84 %	47
Justice	is fairly administered	5.11 Survey [0..10]	38
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	14.11 micrograms	26

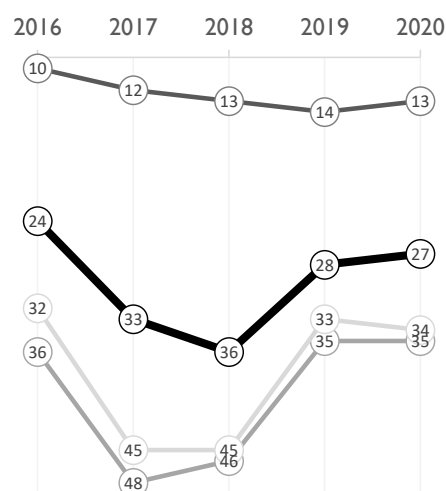
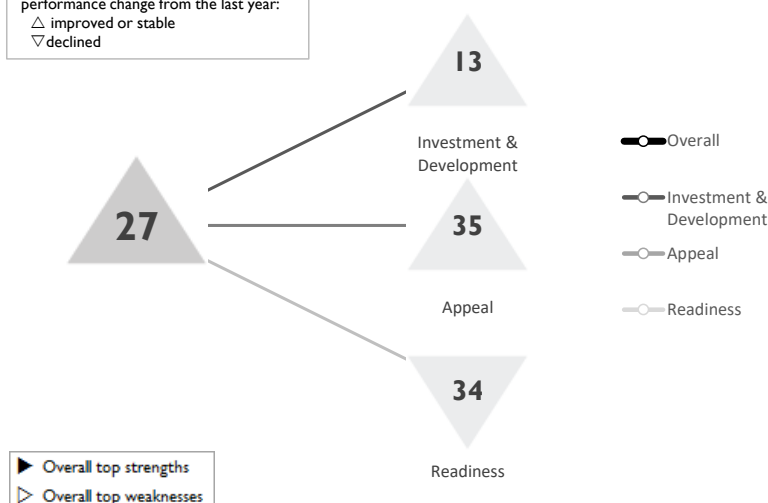
Readiness

		Value	2020 Rank
▷ Labor force growth	Percentage change	-1.11 %	60
Skilled labor	is readily available	5.60 Survey [0..10]	40
Finance skills	are readily available	6.09 Survey [0..10]	40
International experience	of senior managers is generally significant	5.86 Survey [0..10]	29
Competent senior managers	are readily available	5.87 Survey [0..10]	32
Primary and secondary education	meets the needs of a competitive economy	6.58 Survey [0..10]	28
▷ Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	20.17 %	47
University education	meets the needs of a competitive economy	6.22 Survey [0..10]	34
Management education	meets the needs of the business community	6.36 Survey [0..10]	36
▶ Language skills	are meeting the needs of enterprises	7.60 Survey [0..10]	19
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	3.91 number	22
Educational assessment - PISA	PISA survey of 15-year olds	487 Average	28

LITHUANIA

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
Total public expenditure on education	Percentage of GDP	4.5 %	33
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	4,043 US\$	39
► Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	11.22 ratio	9
► Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	7.75 ratio	3
► Apprenticeships	are sufficiently implemented	5.93 Survey [0..10]	13
Employee training	is a high priority in companies	6.68 Survey [0..10]	17
► Female labor force	Percentage of total labor force	50.20 %	1
Health infrastructure	meets the needs of society	5.84 Survey [0..10]	37

Appeal

		Value	2020 Rank
► Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	68.20 index	12
Attracting and retaining talents	is a priority in companies	7.20 Survey [0..10]	25
Worker motivation	in companies is high	6.24 Survey [0..10]	25
▷ Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	3.84 Survey [0..10]	50
Quality of life	is high	7.18 Survey [0..10]	31
Foreign highly-skilled personnel	are attracted to your country's business environment	5.10 Survey [0..10]	38
▷ Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	11,666 US\$	49
▷ Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	116,571 US\$	43
Effective personal income tax rate	Percentage of an income equal to GDP per capita	20.72 %	40
Justice	is fairly administered	6.07 Survey [0..10]	29
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	11.90 micrograms	18

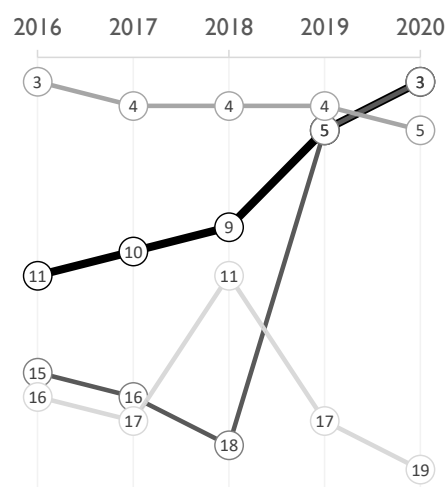
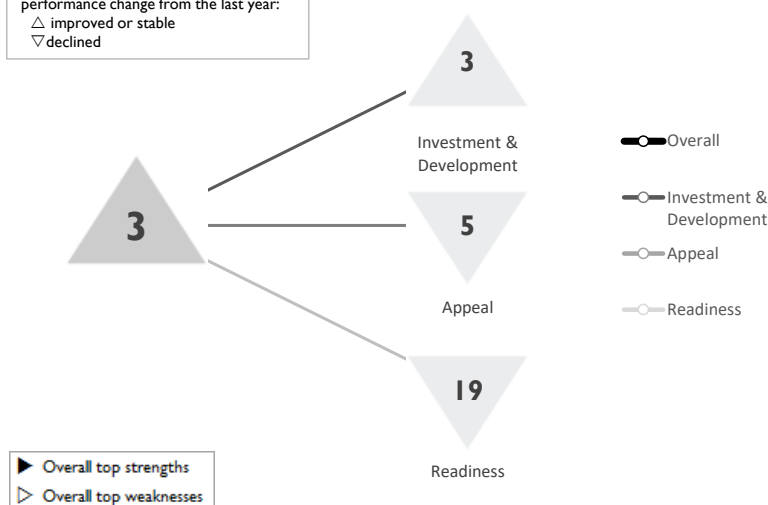
Readiness

		Value	2020 Rank
Labor force growth	Percentage change	0.38 %	40
▷ Skilled labor	is readily available	5.24 Survey [0..10]	45
▷ Finance skills	are readily available	5.34 Survey [0..10]	52
International experience	of senior managers is generally significant	6.19 Survey [0..10]	21
Competent senior managers	are readily available	5.98 Survey [0..10]	27
Primary and secondary education	meets the needs of a competitive economy	5.91 Survey [0..10]	38
Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	26.82 %	22
University education	meets the needs of a competitive economy	5.81 Survey [0..10]	41
Management education	meets the needs of the business community	6.33 Survey [0..10]	38
Language skills	are meeting the needs of enterprises	7.81 Survey [0..10]	18
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	2.25 number	33
Educational assessment - PISA	PISA survey of 15-year olds	480 Average	31

LUXEMBOURG

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
Total public expenditure on education	Percentage of GDP	4.6 %	30
▶ Total public exp. on education per student	Spending per enrolled pupil/student, all levels	29,052 US\$	1
▶ Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	9.05 ratio	1
Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	9.47 ratio	12
Apprenticeships	are sufficiently implemented	5.59 Survey [0..10]	22
Employee training	is a high priority in companies	6.91 Survey [0..10]	13
▷ Female labor force	Percentage of total labor force	41.03 %	52
Health infrastructure	meets the needs of society	8.03 Survey [0..10]	14

Appeal

		Value	2020 Rank
Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	80.30 index	31
▶ Attracting and retaining talents	is a priority in companies	8.20 Survey [0..10]	2
Worker motivation	in companies is high	6.24 Survey [0..10]	25
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	6.06 Survey [0..10]	18
Quality of life	is high	8.69 Survey [0..10]	13
Foreign highly-skilled personnel	are attracted to your country's business environment	8.17 Survey [0..10]	4
▶ Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	64,767 US\$	3
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	274,618 US\$	7
▷ Effective personal income tax rate	Percentage of an income equal to GDP per capita	24.50 %	52
Justice	is fairly administered	7.71 Survey [0..10]	17
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	10.18 micrograms	13

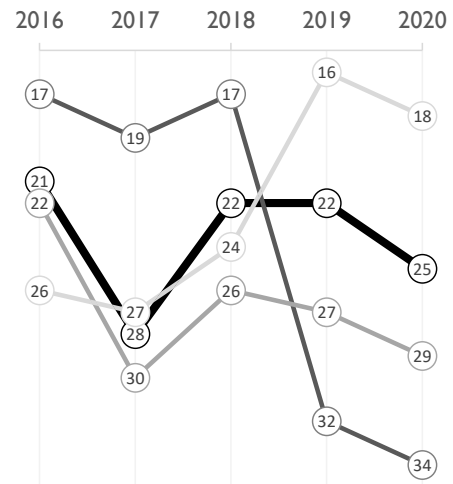
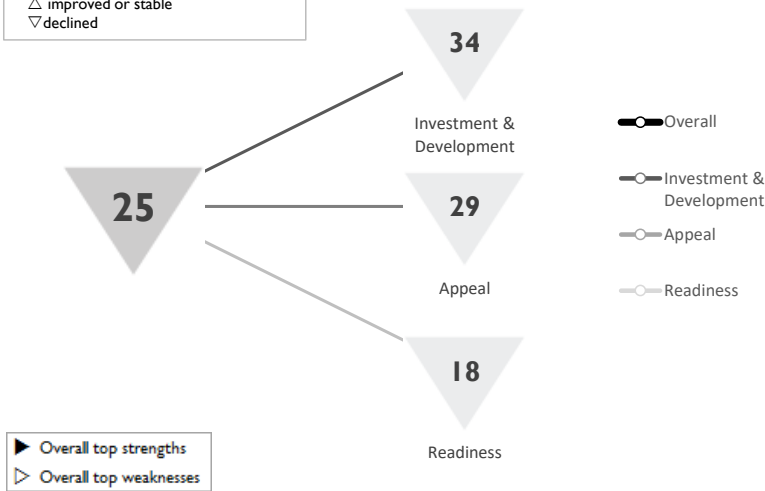
Readiness

		Value	2020 Rank
▶ Labor force growth	Percentage change	3.72 %	1
▷ Skilled labor	is readily available	4.32 Survey [0..10]	53
Finance skills	are readily available	7.13 Survey [0..10]	18
International experience	of senior managers is generally significant	7.54 Survey [0..10]	6
▷ Competent senior managers	are readily available	5.29 Survey [0..10]	41
Primary and secondary education	meets the needs of a competitive economy	6.49 Survey [0..10]	30
▷ Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	18.82 %	52
University education	meets the needs of a competitive economy	6.14 Survey [0..10]	36
Management education	meets the needs of the business community	6.65 Survey [0..10]	30
Language skills	are meeting the needs of enterprises	8.77 Survey [0..10]	4
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	5.58 number	12
Educational assessment - PISA	PISA survey of 15-year olds	477 Average	34

MALAYSIA

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
Total public expenditure on education	Percentage of GDP	4.4 %	34
▷ Total public exp. on education per student	Spending per enrolled pupil/student, all levels	3,267 US\$	42
► Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	11.70 ratio	12
Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	11.30 ratio	22
Apprenticeships	are sufficiently implemented	5.31 Survey [0..10]	28
Employee training	is a high priority in companies	6.13 Survey [0..10]	31
▷ Female labor force	Percentage of total labor force	39.01 %	55
Health infrastructure	meets the needs of society	7.30 Survey [0..10]	23

Appeal

		Value	2020 Rank
► Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	68.50 index	13
Attracting and retaining talents	is a priority in companies	6.50 Survey [0..10]	41
Worker motivation	in companies is high	5.97 Survey [0..10]	31
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	5.24 Survey [0..10]	30
Quality of life	is high	7.00 Survey [0..10]	33
Foreign highly-skilled personnel	are attracted to your country's business environment	5.99 Survey [0..10]	25
▷ Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	13,564 US\$	41
▷ Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	119,219 US\$	42
► Effective personal income tax rate	Percentage of an income equal to GDP per capita	10.53 %	15
Justice	is fairly administered	6.23 Survey [0..10]	27
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	16.04 micrograms	29

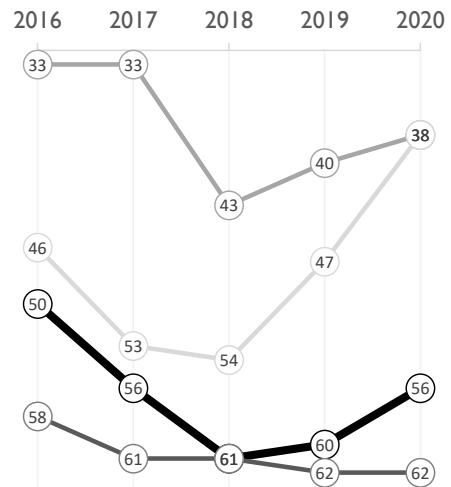
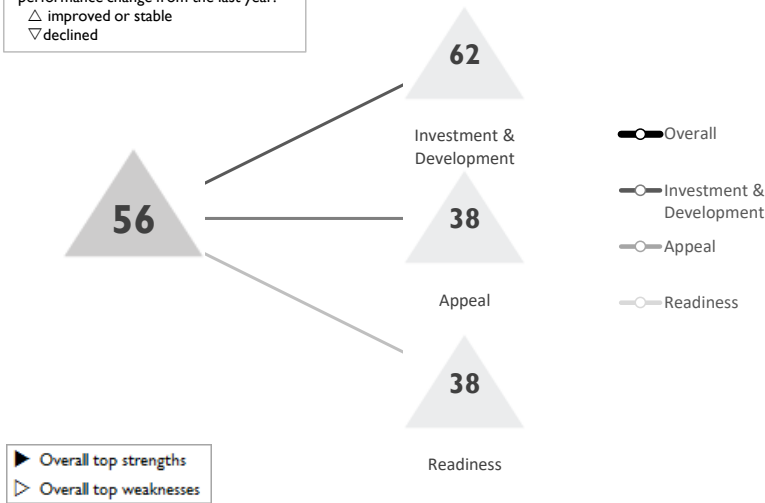
Readiness

		Value	2020 Rank
► Labor force growth	Percentage change	1.97 %	12
Skilled labor	is readily available	5.99 Survey [0..10]	30
Finance skills	are readily available	6.43 Survey [0..10]	33
International experience	of senior managers is generally significant	5.80 Survey [0..10]	32
Competent senior managers	are readily available	6.10 Survey [0..10]	24
Primary and secondary education	meets the needs of a competitive economy	6.53 Survey [0..10]	29
► Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	40.77 %	1
University education	meets the needs of a competitive economy	6.31 Survey [0..10]	32
Management education	meets the needs of the business community	6.32 Survey [0..10]	39
Language skills	are meeting the needs of enterprises	6.82 Survey [0..10]	28
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	3.15 number	27
▷ Educational assessment - PISA	PISA survey of 15-year olds	431 Average	44

MEXICO

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
Total public expenditure on education	Percentage of GDP	3.0 %	56
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	983 US\$	57
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	26.41 ratio	58
Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	27.84 ratio	61
Apprenticeships	are sufficiently implemented	4.97 Survey [0..10]	36
Employee training	is a high priority in companies	5.47 Survey [0..10]	43
Female labor force	Percentage of total labor force	39.57 %	54
Health infrastructure	meets the needs of society	3.15 Survey [0..10]	56

Appeal

		Value	2020 Rank
Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	65.30 index	8
Attracting and retaining talents	is a priority in companies	6.17 Survey [0..10]	46
Worker motivation	in companies is high	5.90 Survey [0..10]	33
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	4.44 Survey [0..10]	43
Quality of life	is high	5.44 Survey [0..10]	46
Foreign highly-skilled personnel	are attracted to your country's business environment	5.43 Survey [0..10]	33
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	7,429 US\$	55
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	198,605 US\$	21
Effective personal income tax rate	Percentage of an income equal to GDP per capita	14.10 %	25
Justice	is fairly administered	2.44 Survey [0..10]	57
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	21.24 micrograms	49

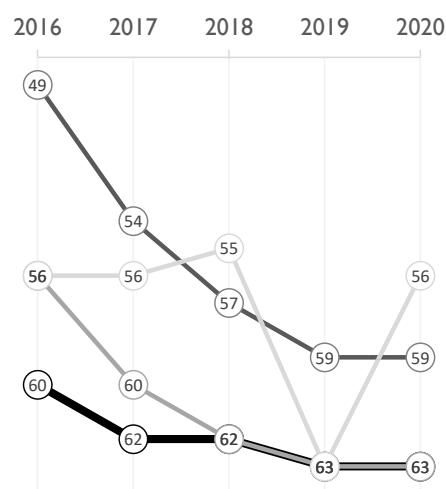
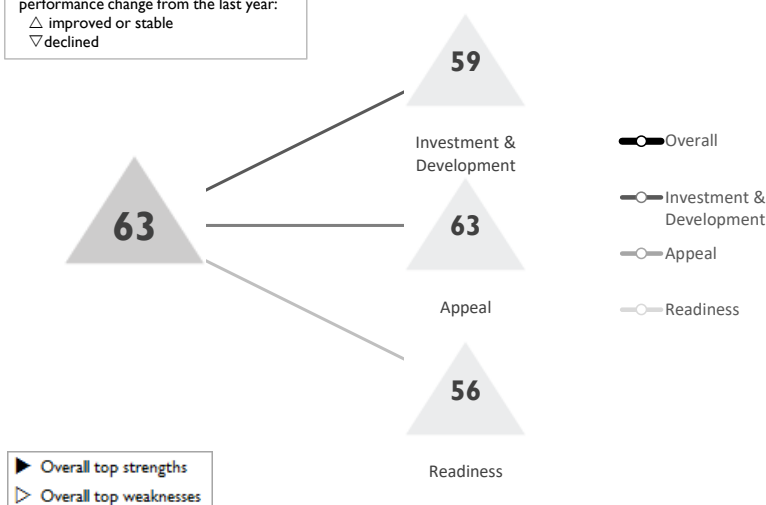
Readiness

		Value	2020 Rank
Labor force growth	Percentage change	2.86 %	2
Skilled labor	is readily available	5.92 Survey [0..10]	33
Finance skills	are readily available	5.75 Survey [0..10]	45
International experience	of senior managers is generally significant	6.17 Survey [0..10]	22
Competent senior managers	are readily available	5.68 Survey [0..10]	38
Primary and secondary education	meets the needs of a competitive economy	4.19 Survey [0..10]	52
Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	25.97 %	26
University education	meets the needs of a competitive economy	5.38 Survey [0..10]	47
Management education	meets the needs of the business community	5.77 Survey [0..10]	47
Language skills	are meeting the needs of enterprises	4.82 Survey [0..10]	50
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	0.06 number	59
Educational assessment - PISA	PISA survey of 15-year olds	416 Average	47

MONGOLIA

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
Total public expenditure on education	Percentage of GDP	4.3 %	38
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	768 US\$	58
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	32.41 ratio	61
Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	19.50 ratio	54
Apprenticeships	are sufficiently implemented	3.97 Survey [0..10]	57
▶ Employee training	is a high priority in companies	7.13 Survey [0..10]	9
▶ Female labor force	Percentage of total labor force	46.46 %	26
Health infrastructure	meets the needs of society	3.19 Survey [0..10]	54

Appeal

		Value	2020 Rank
Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	- index	-
▶ Attracting and retaining talents	is a priority in companies	8.00 Survey [0..10]	4
Worker motivation	in companies is high	4.67 Survey [0..10]	57
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	3.62 Survey [0..10]	51
Quality of life	is high	3.12 Survey [0..10]	61
Foreign highly-skilled personnel	are attracted to your country's business environment	3.80 Survey [0..10]	51
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	- US\$	-
▷ Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	6,084 US\$	63
▷ Effective personal income tax rate	Percentage of an income equal to GDP per capita	30.00 %	63
Justice	is fairly administered	3.13 Survey [0..10]	53
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	43.18 micrograms	58

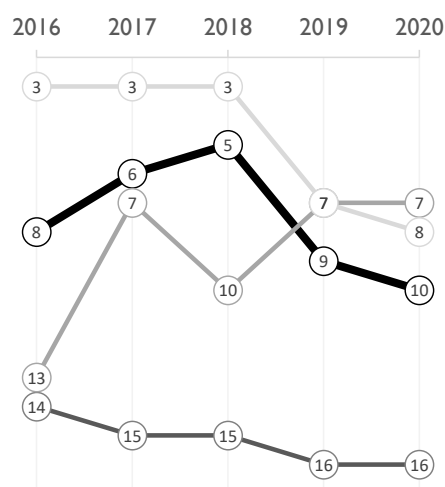
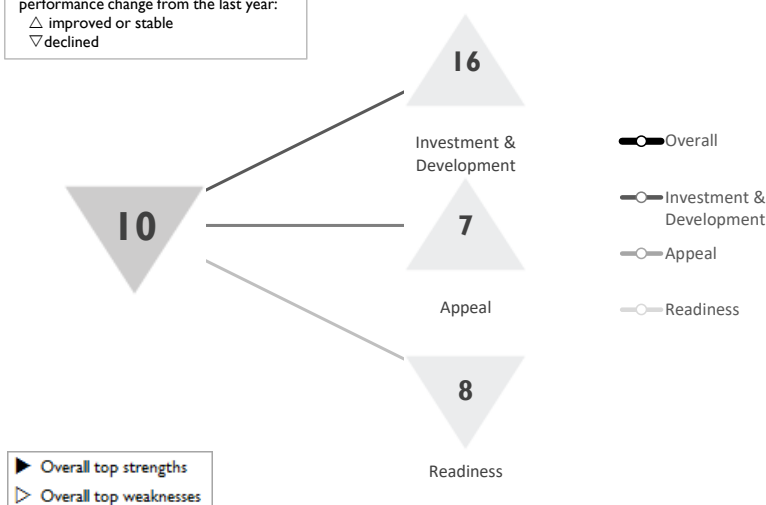
Readiness

		Value	2020 Rank
Labor force growth	Percentage change	- %	-
▷ Skilled labor	is readily available	2.90 Survey [0..10]	63
▷ Finance skills	are readily available	3.77 Survey [0..10]	62
International experience	of senior managers is generally significant	4.20 Survey [0..10]	59
Competent senior managers	are readily available	3.71 Survey [0..10]	58
Primary and secondary education	meets the needs of a competitive economy	3.68 Survey [0..10]	57
▶ Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	25.34 %	28
▷ University education	meets the needs of a competitive economy	3.13 Survey [0..10]	63
Management education	meets the needs of the business community	4.18 Survey [0..10]	60
Language skills	are meeting the needs of enterprises	4.29 Survey [0..10]	53
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	0.50 number	52
Educational assessment - PISA	PISA survey of 15-year olds	- Average	-

NETHERLANDS

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
Total public expenditure on education	Percentage of GDP	5.1 %	24
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	11,161 US\$	13
▷ Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	16.41 ratio	37
▷ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	16.87 ratio	50
Apprenticeships	are sufficiently implemented	6.78 Survey [0..10]	5
Employee training	is a high priority in companies	7.31 Survey [0..10]	7
Female labor force	Percentage of total labor force	46.72 %	24
Health infrastructure	meets the needs of society	8.31 Survey [0..10]	10

Appeal

		Value	2020 Rank
▷ Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	84.30 index	40
Attracting and retaining talents	is a priority in companies	7.97 Survey [0..10]	5
Worker motivation	in companies is high	7.34 Survey [0..10]	6
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	7.56 Survey [0..10]	5
Quality of life	is high	9.30 Survey [0..10]	7
Foreign highly-skilled personnel	are attracted to your country's business environment	7.85 Survey [0..10]	6
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	46,077 US\$	13
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	255,603 US\$	12
▷ Effective personal income tax rate	Percentage of an income equal to GDP per capita	26.42 %	57
▶ Justice	is fairly administered	8.79 Survey [0..10]	3
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	12.09 micrograms	20

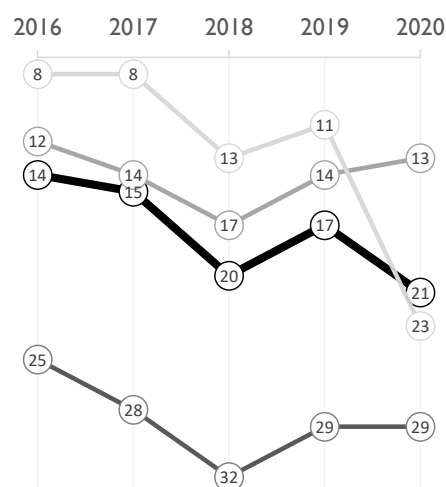
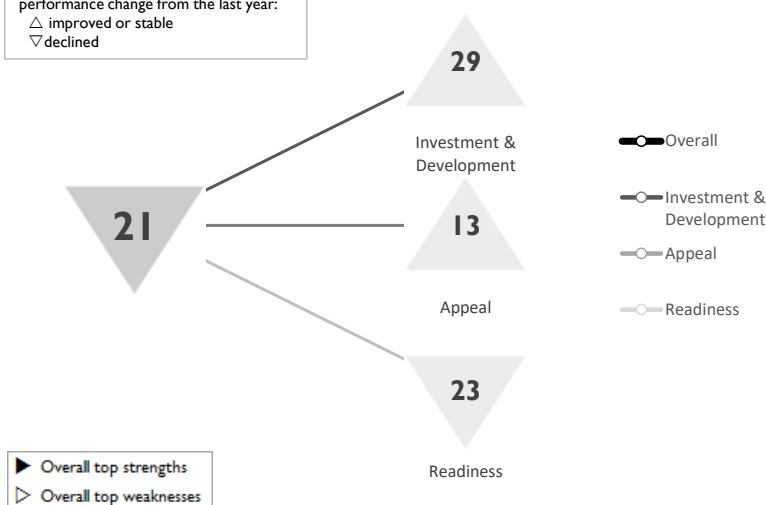
Readiness

		Value	2020 Rank
Labor force growth	Percentage change	1.62 %	16
Skilled labor	is readily available	6.73 Survey [0..10]	10
Finance skills	are readily available	7.87 Survey [0..10]	5
▶ International experience	of senior managers is generally significant	7.77 Survey [0..10]	3
▶ Competent senior managers	are readily available	7.34 Survey [0..10]	2
Primary and secondary education	meets the needs of a competitive economy	8.30 Survey [0..10]	5
▷ Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	17.45 %	56
University education	meets the needs of a competitive economy	8.59 Survey [0..10]	5
▶ Management education	meets the needs of the business community	8.10 Survey [0..10]	4
▶ Language skills	are meeting the needs of enterprises	8.97 Survey [0..10]	2
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	6.01 number	10
Educational assessment - PISA	PISA survey of 15-year olds	502 Average	16

NEW ZEALAND

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
Total public expenditure on education	Percentage of GDP	5.6 %	14
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	8,798 US\$	21
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	16.83 ratio	41
▷ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	14.64 ratio	47
▷ Apprenticeships	are sufficiently implemented	4.04 Survey [0..10]	56
▷ Employee training	is a high priority in companies	5.15 Survey [0..10]	51
▶ Female labor force	Percentage of total labor force	47.93 %	10
Health infrastructure	meets the needs of society	6.10 Survey [0..10]	32

Appeal

		Value	2020 Rank
Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	78.30 index	29
Attracting and retaining talents	is a priority in companies	7.66 Survey [0..10]	16
Worker motivation	in companies is high	6.24 Survey [0..10]	24
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	4.71 Survey [0..10]	37
▶ Quality of life	is high	8.78 Survey [0..10]	10
Foreign highly-skilled personnel	are attracted to your country's business environment	7.15 Survey [0..10]	12
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	40,586 US\$	15
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	166,713 US\$	29
Effective personal income tax rate	Percentage of an income equal to GDP per capita	22.76 %	46
▶ Justice	is fairly administered	8.41 Survey [0..10]	6
▶ Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	5.99 micrograms	2

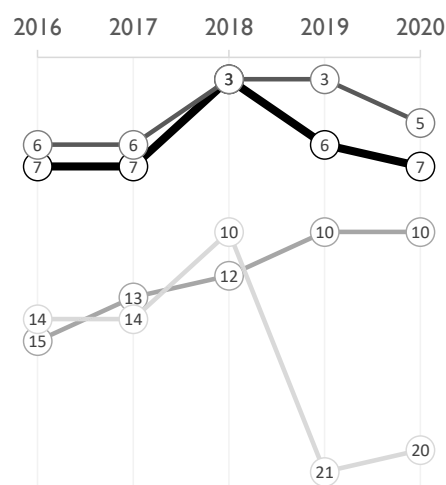
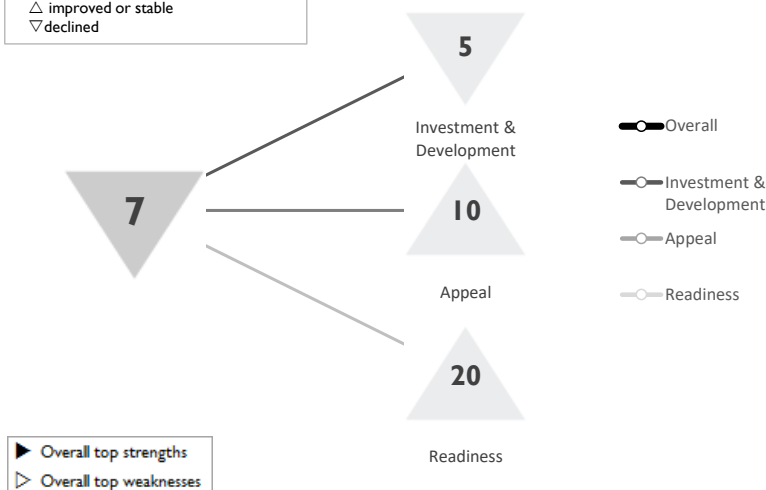
Readiness

		Value	2020 Rank
Labor force growth	Percentage change	1.34 %	20
▷ Skilled labor	is readily available	4.03 Survey [0..10]	56
Finance skills	are readily available	5.86 Survey [0..10]	44
International experience	of senior managers is generally significant	5.46 Survey [0..10]	40
▷ Competent senior managers	are readily available	5.05 Survey [0..10]	47
Primary and secondary education	meets the needs of a competitive economy	6.98 Survey [0..10]	23
Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	21.38 %	44
University education	meets the needs of a competitive economy	6.92 Survey [0..10]	26
Management education	meets the needs of the business community	6.14 Survey [0..10]	41
Language skills	are meeting the needs of enterprises	6.31 Survey [0..10]	32
▶ Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	10.69 number	3
Educational assessment - PISA	PISA survey of 15-year olds	503 Average	14

NORWAY

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
Total public expenditure on education	Percentage of GDP	5.4 %	17
▶ Total public exp. on education per student	Spending per enrolled pupil/student, all levels	17,181 US\$	4
▶ Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	10.10 ratio	4
Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	9.61 ratio	14
Apprenticeships	are sufficiently implemented	6.57 Survey [0..10]	7
▶ Employee training	is a high priority in companies	7.42 Survey [0..10]	4
Female labor force	Percentage of total labor force	46.96 %	20
Health infrastructure	meets the needs of society	8.23 Survey [0..10]	11

Appeal

		Value	2020 Rank
▷ Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	84.70 index	41
Attracting and retaining talents	is a priority in companies	7.50 Survey [0..10]	20
Worker motivation	in companies is high	7.37 Survey [0..10]	5
▶ Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	7.60 Survey [0..10]	4
Quality of life	is high	8.73 Survey [0..10]	12
Foreign highly-skilled personnel	are attracted to your country's business environment	6.92 Survey [0..10]	15
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	53,497 US\$	6
▷ Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	146,090 US\$	38
▷ Effective personal income tax rate	Percentage of an income equal to GDP per capita	25.26 %	53
Justice	is fairly administered	8.33 Survey [0..10]	9
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	7.05 micrograms	7

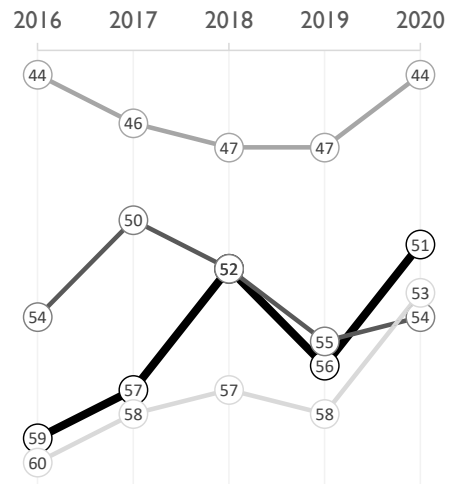
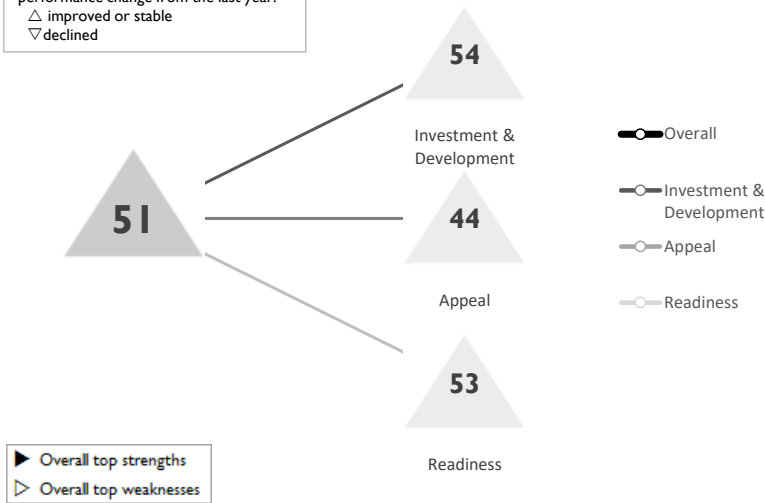
Readiness

		Value	2020 Rank
Labor force growth	Percentage change	0.99 %	26
▶ Skilled labor	is readily available	7.27 Survey [0..10]	4
Finance skills	are readily available	7.32 Survey [0..10]	16
International experience	of senior managers is generally significant	6.10 Survey [0..10]	25
Competent senior managers	are readily available	6.78 Survey [0..10]	10
Primary and secondary education	meets the needs of a competitive economy	7.63 Survey [0..10]	15
▷ Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	21.81 %	41
University education	meets the needs of a competitive economy	8.03 Survey [0..10]	10
Management education	meets the needs of the business community	7.80 Survey [0..10]	9
Language skills	are meeting the needs of enterprises	8.40 Survey [0..10]	10
▷ Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	2.29 number	32
Educational assessment - PISA	PISA survey of 15-year olds	497 Average	22

PERU

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
Total public expenditure on education	Percentage of GDP	3.7 %	46
▷ Total public exp. on education per student	Spending per enrolled pupil/student, all levels	1,035 US\$	56
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	19.99 ratio	53
Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	17.34 ratio	52
Apprenticeships	are sufficiently implemented	5.19 Survey [0..10]	31
Employee training	is a high priority in companies	5.18 Survey [0..10]	49
Female labor force	Percentage of total labor force	44.48 %	41
▷ Health infrastructure	meets the needs of society	2.23 Survey [0..10]	61

Appeal

		Value	2020 Rank
► Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	70.00 index	17
Attracting and retaining talents	is a priority in companies	5.67 Survey [0..10]	56
Worker motivation	in companies is high	5.42 Survey [0..10]	46
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	4.99 Survey [0..10]	31
Quality of life	is high	4.79 Survey [0..10]	50
► Foreign highly-skilled personnel	are attracted to your country's business environment	6.16 Survey [0..10]	22
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	13,359 US\$	42
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	164,455 US\$	32
► Effective personal income tax rate	Percentage of an income equal to GDP per capita	12.45 %	20
▷ Justice	is fairly administered	2.60 Survey [0..10]	56
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	26.04 micrograms	54

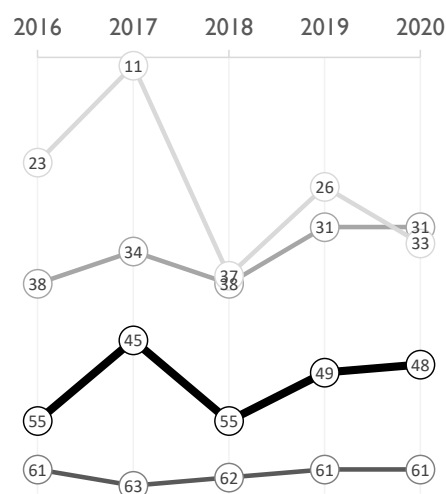
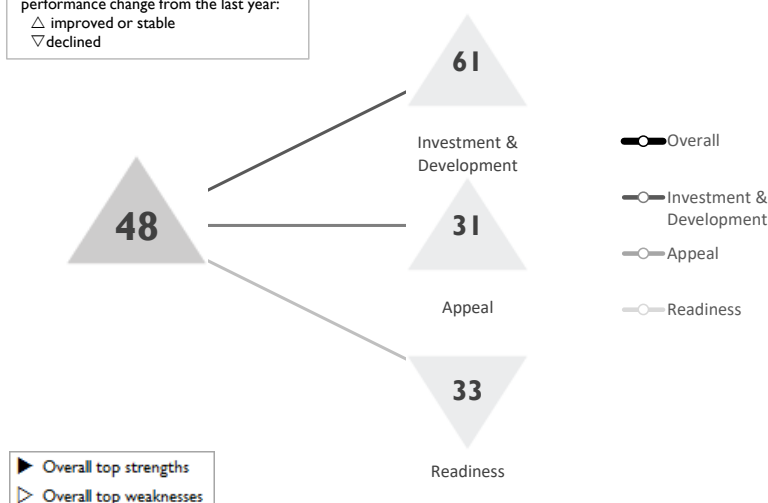
Readiness

		Value	2020 Rank
Labor force growth	Percentage change	0.00 %	47
Skilled labor	is readily available	4.92 Survey [0..10]	50
Finance skills	are readily available	5.36 Survey [0..10]	51
► International experience	of senior managers is generally significant	6.00 Survey [0..10]	26
Competent senior managers	are readily available	4.96 Survey [0..10]	48
▷ Primary and secondary education	meets the needs of a competitive economy	3.64 Survey [0..10]	59
► Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	29.64 %	9
University education	meets the needs of a competitive economy	4.47 Survey [0..10]	55
Management education	meets the needs of the business community	5.12 Survey [0..10]	52
▷ Language skills	are meeting the needs of enterprises	4.08 Survey [0..10]	57
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	- number	-
Educational assessment - PISA	PISA survey of 15-year olds	402 Average	53

PHILIPPINES

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
Total public expenditure on education	Percentage of GDP	3.3 %	50
▷ Total public exp. on education per student	Spending per enrolled pupil/student, all levels	421 US\$	61
▷ Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	27.13 ratio	59
▷ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	25.08 ratio	57
Apprenticeships	are sufficiently implemented	4.71 Survey [0..10]	44
Employee training	is a high priority in companies	5.80 Survey [0..10]	37
Female labor force	Percentage of total labor force	39.71 %	53
Health infrastructure	meets the needs of society	4.18 Survey [0..10]	49

Appeal

		Value	2020 Rank
► Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	69.70 index	15
Attracting and retaining talents	is a priority in companies	6.89 Survey [0..10]	28
Worker motivation	in companies is high	6.29 Survey [0..10]	22
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	4.29 Survey [0..10]	44
Quality of life	is high	5.27 Survey [0..10]	48
Foreign highly-skilled personnel	are attracted to your country's business environment	5.13 Survey [0..10]	37
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	12,791 US\$	43
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	152,973 US\$	35
► Effective personal income tax rate	Percentage of an income equal to GDP per capita	5.35 %	8
Justice	is fairly administered	3.75 Survey [0..10]	50
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	18.17 micrograms	42

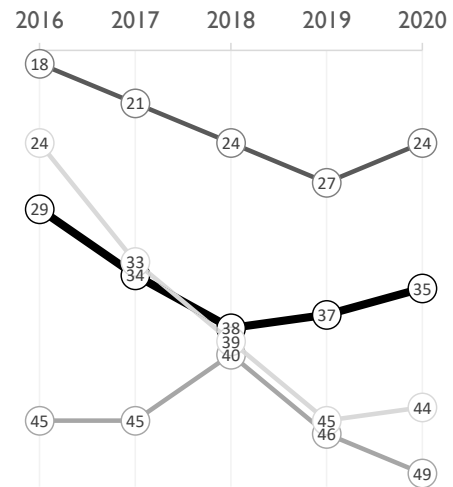
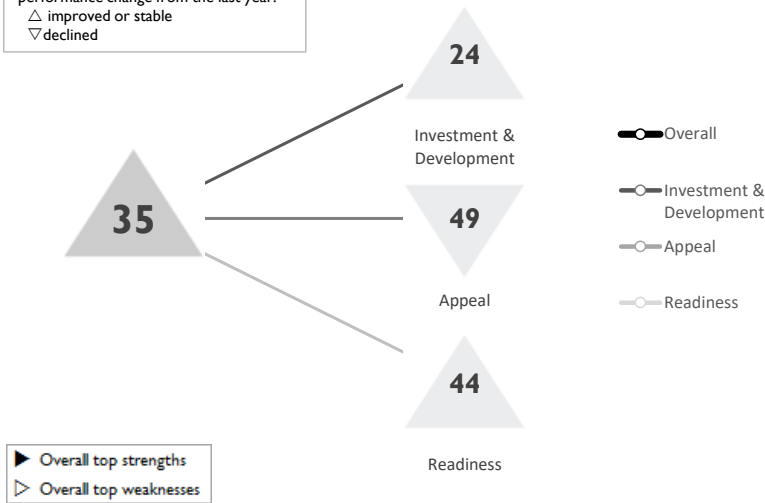
Readiness

		Value	2020 Rank
► Labor force growth	Percentage change	2.84 %	3
► Skilled labor	is readily available	6.62 Survey [0..10]	13
Finance skills	are readily available	6.38 Survey [0..10]	36
International experience	of senior managers is generally significant	5.58 Survey [0..10]	38
Competent senior managers	are readily available	6.24 Survey [0..10]	21
Primary and secondary education	meets the needs of a competitive economy	5.49 Survey [0..10]	45
► Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	29.17 %	11
University education	meets the needs of a competitive economy	6.24 Survey [0..10]	33
Management education	meets the needs of the business community	6.64 Survey [0..10]	31
Language skills	are meeting the needs of enterprises	7.56 Survey [0..10]	20
▷ Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	0.12 number	56
▷ Educational assessment - PISA	PISA survey of 15-year olds	350 Average	58

POLAND

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
Total public expenditure on education	Percentage of GDP	5.0 %	25
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	3,783 US\$	40
► Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	9.60 ratio	3
► Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	10.26 ratio	16
Apprenticeships	are sufficiently implemented	5.54 Survey [0..10]	25
► Employee training	is a high priority in companies	6.49 Survey [0..10]	22
Female labor force	Percentage of total labor force	44.78 %	39
▷ Health infrastructure	meets the needs of society	3.56 Survey [0..10]	52

Appeal

		Value	2020 Rank
► Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	66.30 index	9
▷ Attracting and retaining talents	is a priority in companies	5.32 Survey [0..10]	61
Worker motivation	in companies is high	6.06 Survey [0..10]	28
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	4.95 Survey [0..10]	32
Quality of life	is high	6.00 Survey [0..10]	42
Foreign highly-skilled personnel	are attracted to your country's business environment	4.65 Survey [0..10]	45
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	18,898 US\$	34
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	152,515 US\$	36
▷ Effective personal income tax rate	Percentage of an income equal to GDP per capita	25.75 %	54
Justice	is fairly administered	4.34 Survey [0..10]	46
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	20.94 micrograms	48

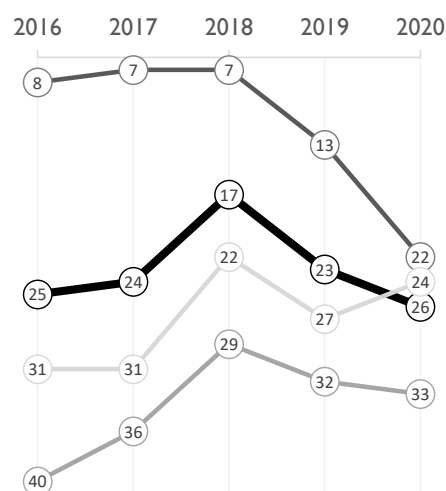
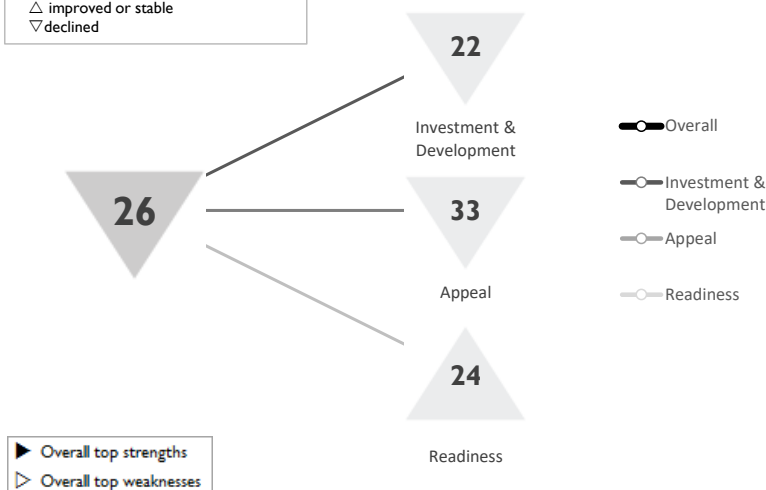
Readiness

		Value	2020 Rank
▷ Labor force growth	Percentage change	-0.72 %	56
Skilled labor	is readily available	5.50 Survey [0..10]	43
▷ Finance skills	are readily available	5.50 Survey [0..10]	50
International experience	of senior managers is generally significant	5.63 Survey [0..10]	35
Competent senior managers	are readily available	5.72 Survey [0..10]	36
Primary and secondary education	meets the needs of a competitive economy	5.42 Survey [0..10]	46
Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	21.65 %	43
University education	meets the needs of a competitive economy	6.22 Survey [0..10]	35
Management education	meets the needs of the business community	6.09 Survey [0..10]	42
Language skills	are meeting the needs of enterprises	6.18 Survey [0..10]	35
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	1.42 number	46
► Educational assessment - PISA	PISA survey of 15-year olds	513 Average	10

PORTUGAL

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
Total public expenditure on education	Percentage of GDP	4.5 %	31
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	5,498 US\$	31
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	12.42 ratio	18
► Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	9.21 ratio	8
Apprenticeships	are sufficiently implemented	5.28 Survey [0..10]	29
▷ Employee training	is a high priority in companies	4.88 Survey [0..10]	58
► Female labor force	Percentage of total labor force	49.39 %	4
Health infrastructure	meets the needs of society	6.85 Survey [0..10]	28

Appeal

		Value	2020 Rank
Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	75.90 index	25
▷ Attracting and retaining talents	is a priority in companies	6.05 Survey [0..10]	49
▷ Worker motivation	in companies is high	5.16 Survey [0..10]	51
▷ Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	3.93 Survey [0..10]	49
Quality of life	is high	7.83 Survey [0..10]	24
Foreign highly-skilled personnel	are attracted to your country's business environment	5.42 Survey [0..10]	35
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	21,500 US\$	32
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	165,200 US\$	31
Effective personal income tax rate	Percentage of an income equal to GDP per capita	18.51 %	33
▷ Justice	is fairly administered	2.80 Survey [0..10]	55
► Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	8.12 micrograms	9

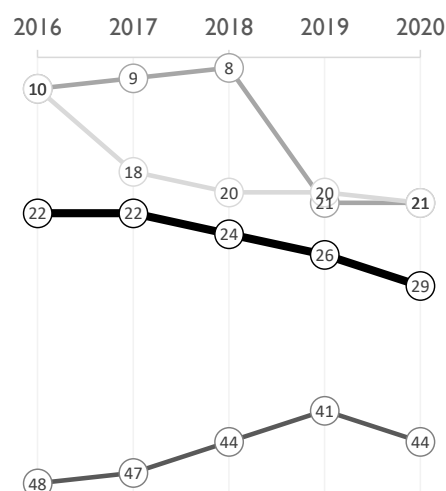
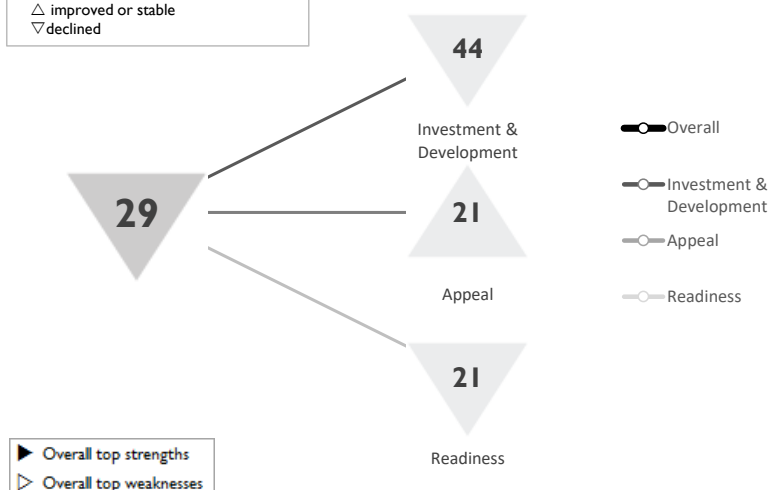
Readiness

		Value	2020 Rank
Labor force growth	Percentage change	0.38 %	41
Skilled labor	is readily available	6.24 Survey [0..10]	23
Finance skills	are readily available	6.22 Survey [0..10]	39
International experience	of senior managers is generally significant	5.01 Survey [0..10]	48
Competent senior managers	are readily available	5.16 Survey [0..10]	45
Primary and secondary education	meets the needs of a competitive economy	6.89 Survey [0..10]	26
Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	27.91 %	15
University education	meets the needs of a competitive economy	7.81 Survey [0..10]	14
► Management education	meets the needs of the business community	7.66 Survey [0..10]	12
► Language skills	are meeting the needs of enterprises	8.72 Survey [0..10]	7
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	2.74 number	30
Educational assessment - PISA	PISA survey of 15-year olds	492 Average	26

QATAR

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
▶ Total public expenditure on education	Percentage of GDP	2.6 %	60
▶ Total public exp. on education per student	Spending per enrolled pupil/student, all levels	14,408 US\$	7
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	12.17 ratio	17
Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	11.04 ratio	19
Apprenticeships	are sufficiently implemented	6.24 Survey [0..10]	8
Employee training	is a high priority in companies	7.11 Survey [0..10]	10
▷ Female labor force	Percentage of total labor force	13.55 %	61
Health infrastructure	meets the needs of society	8.39 Survey [0..10]	9

Appeal

		Value	2020 Rank
Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	72.30 index	20
Attracting and retaining talents	is a priority in companies	7.62 Survey [0..10]	17
Worker motivation	in companies is high	7.07 Survey [0..10]	14
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	6.66 Survey [0..10]	12
Quality of life	is high	8.49 Survey [0..10]	18
▶ Foreign highly-skilled personnel	are attracted to your country's business environment	7.85 Survey [0..10]	7
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	22,573 US\$	31
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	158,654 US\$	33
▶ Effective personal income tax rate	Percentage of an income equal to GDP per capita	0.00 %	1
Justice	is fairly administered	7.91 Survey [0..10]	14
▷ Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	89.72 micrograms	60

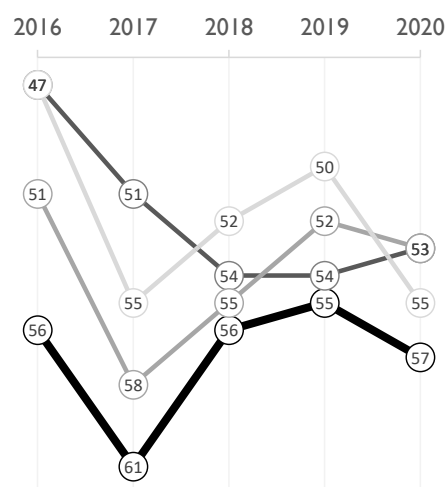
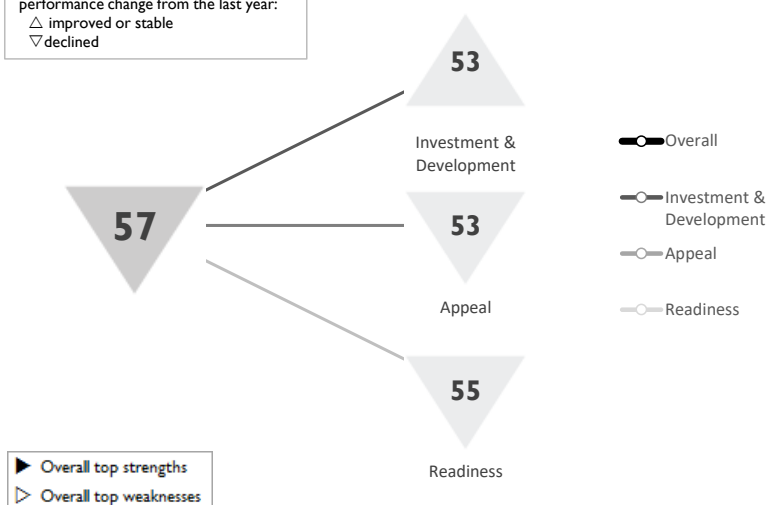
Readiness

		Value	2020 Rank
▷ Labor force growth	Percentage change	0.62 %	36
Skilled labor	is readily available	6.45 Survey [0..10]	19
Finance skills	are readily available	7.28 Survey [0..10]	17
▶ International experience	of senior managers is generally significant	7.72 Survey [0..10]	5
▶ Competent senior managers	are readily available	7.11 Survey [0..10]	6
Primary and secondary education	meets the needs of a competitive economy	8.00 Survey [0..10]	9
Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	22.55 %	35
University education	meets the needs of a competitive economy	8.11 Survey [0..10]	9
Management education	meets the needs of the business community	7.85 Survey [0..10]	7
Language skills	are meeting the needs of enterprises	7.85 Survey [0..10]	16
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	4.17 number	20
▷ Educational assessment - PISA	PISA survey of 15-year olds	413 Average	49

ROMANIA

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
Total public expenditure on education	Percentage of GDP	3.2 %	51
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	2,146 US\$	45
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	19.33 ratio	49
▶ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	12.08 ratio	31
▷ Apprenticeships	are sufficiently implemented	3.11 Survey [0..10]	62
Employee training	is a high priority in companies	5.35 Survey [0..10]	46
Female labor force	Percentage of total labor force	42.64 %	49
Health infrastructure	meets the needs of society	3.00 Survey [0..10]	57

Appeal

		Value	2020 Rank
▶ Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	61.90 index	3
Attracting and retaining talents	is a priority in companies	6.09 Survey [0..10]	48
Worker motivation	in companies is high	5.14 Survey [0..10]	52
▷ Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	2.71 Survey [0..10]	58
Quality of life	is high	4.49 Survey [0..10]	57
Foreign highly-skilled personnel	are attracted to your country's business environment	3.94 Survey [0..10]	49
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	11,654 US\$	50
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	95,295 US\$	50
Effective personal income tax rate	Percentage of an income equal to GDP per capita	26.31 %	56
Justice	is fairly administered	4.12 Survey [0..10]	47
▶ Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	14.61 micrograms	28

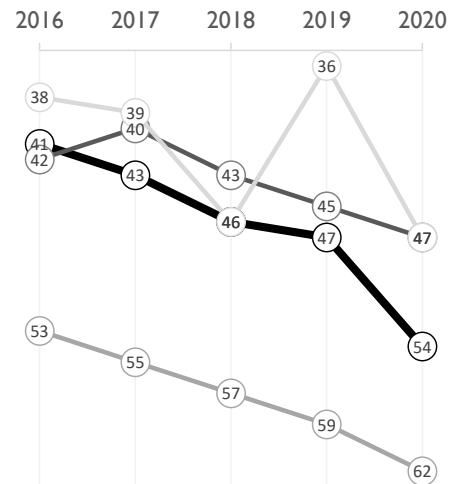
Readiness

		Value	2020 Rank
Labor force growth	Percentage change	0.53 %	38
▷ Skilled labor	is readily available	3.97 Survey [0..10]	57
▷ Finance skills	are readily available	4.44 Survey [0..10]	60
International experience	of senior managers is generally significant	4.76 Survey [0..10]	53
Competent senior managers	are readily available	3.91 Survey [0..10]	56
Primary and secondary education	meets the needs of a competitive economy	3.85 Survey [0..10]	56
▶ Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	28.77 %	12
University education	meets the needs of a competitive economy	4.40 Survey [0..10]	56
▷ Management education	meets the needs of the business community	3.94 Survey [0..10]	63
▶ Language skills	are meeting the needs of enterprises	7.38 Survey [0..10]	23
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	1.49 number	44
Educational assessment - PISA	PISA survey of 15-year olds	428 Average	45

RUSSIA

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
Total public expenditure on education	Percentage of GDP	3.5 %	48
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	1,993 US\$	48
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	22.93 ratio	54
Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	11.74 ratio	27
Apprenticeships	are sufficiently implemented	4.46 Survey [0..10]	51
Employee training	is a high priority in companies	5.00 Survey [0..10]	55
► Female labor force	Percentage of total labor force	49.02 %	5
Health infrastructure	meets the needs of society	3.92 Survey [0..10]	50

Appeal

		Value	2020 Rank
Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	96.20 index	51
▷ Attracting and retaining talents	is a priority in companies	5.60 Survey [0..10]	59
▷ Worker motivation	in companies is high	4.38 Survey [0..10]	60
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	2.78 Survey [0..10]	56
▷ Quality of life	is high	3.90 Survey [0..10]	59
Foreign highly-skilled personnel	are attracted to your country's business environment	3.44 Survey [0..10]	55
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	8,987 US\$	53
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	68,728 US\$	55
► Effective personal income tax rate	Percentage of an income equal to GDP per capita	11.33 %	17
Justice	is fairly administered	3.20 Survey [0..10]	52
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	16.17 micrograms	31

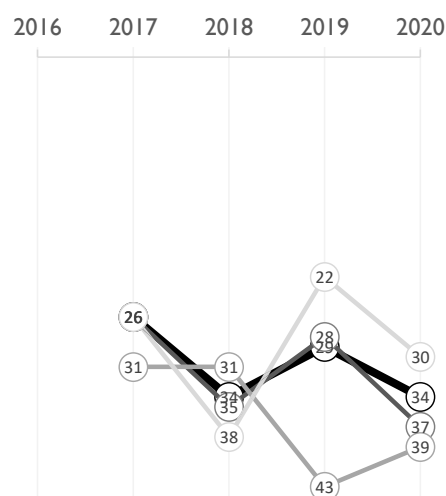
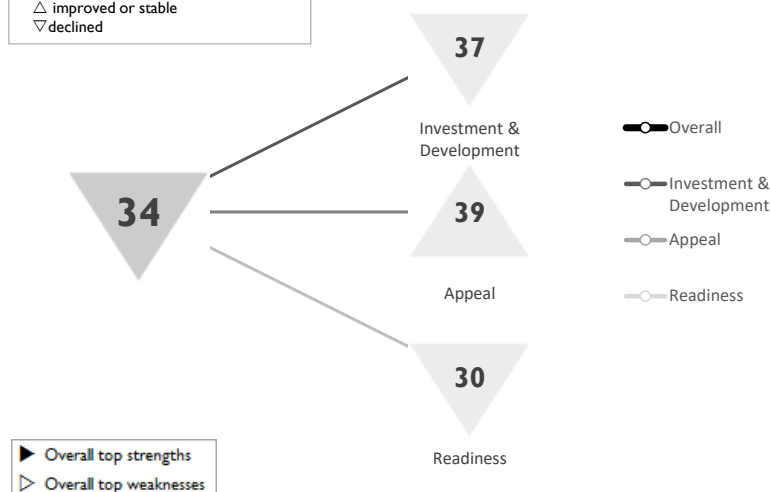
Readiness

		Value	2020 Rank
▷ Labor force growth	Percentage change	-1.04 %	59
► Skilled labor	is readily available	6.46 Survey [0..10]	17
► Finance skills	are readily available	6.85 Survey [0..10]	21
▷ International experience	of senior managers is generally significant	3.60 Survey [0..10]	61
Competent senior managers	are readily available	5.20 Survey [0..10]	44
Primary and secondary education	meets the needs of a competitive economy	5.60 Survey [0..10]	43
► Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	31.06 %	7
University education	meets the needs of a competitive economy	5.08 Survey [0..10]	50
Management education	meets the needs of the business community	5.18 Survey [0..10]	51
Language skills	are meeting the needs of enterprises	4.10 Survey [0..10]	56
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	1.79 number	38
Educational assessment - PISA	PISA survey of 15-year olds	481 Average	30

SAUDI ARABIA

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
▶ Total public expenditure on education	Percentage of GDP	7.1 %	4
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	6,622 US\$	27
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	13.81 ratio	27
Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	11.30 ratio	22
▶ Apprenticeships	are sufficiently implemented	6.14 Survey [0..10]	10
Employee training	is a high priority in companies	6.03 Survey [0..10]	33
▷ Female labor force	Percentage of total labor force	17.51 %	60
Health infrastructure	meets the needs of society	7.62 Survey [0..10]	18

Appeal

		Value	2020 Rank
▷ Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	85.90 index	42
Attracting and retaining talents	is a priority in companies	7.00 Survey [0..10]	26
Worker motivation	in companies is high	5.91 Survey [0..10]	32
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	6.56 Survey [0..10]	14
Quality of life	is high	7.66 Survey [0..10]	26
▶ Foreign highly-skilled personnel	are attracted to your country's business environment	7.14 Survey [0..10]	13
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	28,388 US\$	25
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	144,059 US\$	39
Effective personal income tax rate	Percentage of an income equal to GDP per capita	12.12 %	18
Justice	is fairly administered	7.49 Survey [0..10]	20
▷ Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	92.37 micrograms	62

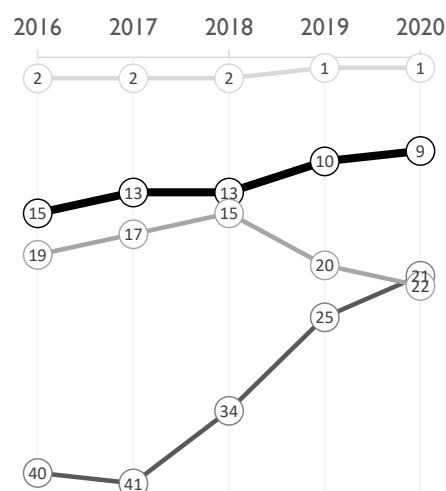
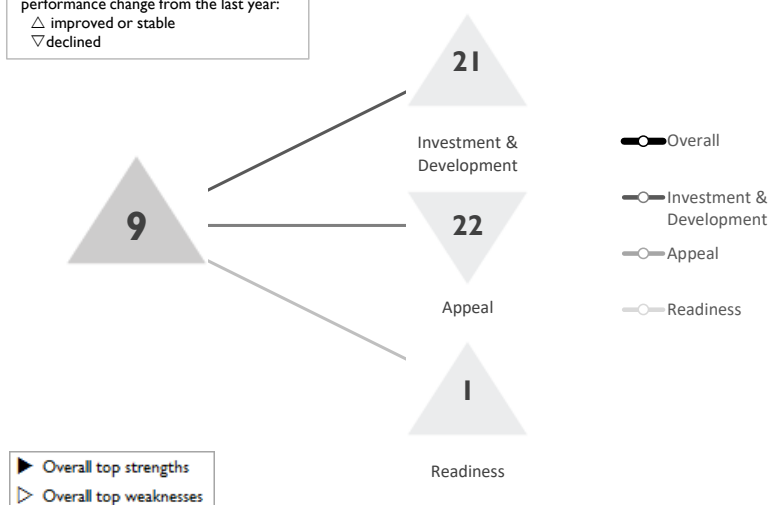
Readiness

		Value	2020 Rank
▶ Labor force growth	Percentage change	2.60 %	4
Skilled labor	is readily available	6.03 Survey [0..10]	29
Finance skills	are readily available	6.74 Survey [0..10]	26
▶ International experience	of senior managers is generally significant	6.69 Survey [0..10]	11
Competent senior managers	are readily available	6.51 Survey [0..10]	16
Primary and secondary education	meets the needs of a competitive economy	6.43 Survey [0..10]	31
▷ Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	21.14 %	45
University education	meets the needs of a competitive economy	6.79 Survey [0..10]	29
Management education	meets the needs of the business community	6.94 Survey [0..10]	25
Language skills	are meeting the needs of enterprises	6.80 Survey [0..10]	29
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	2.21 number	34
▷ Educational assessment - PISA	PISA survey of 15-year olds	386 Average	56

SINGAPORE

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
▷ Total public expenditure on education	Percentage of GDP	2.6 %	61
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	13,453 US\$	9
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	14.33 ratio	28
Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	11.31 ratio	24
Apprenticeships	are sufficiently implemented	5.58 Survey [0..10]	24
Employee training	is a high priority in companies	6.82 Survey [0..10]	16
Female labor force	Percentage of total labor force	46.27 %	28
Health infrastructure	meets the needs of society	8.85 Survey [0..10]	4

Appeal

		Value	2020 Rank
▷ Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	110.10 index	57
Attracting and retaining talents	is a priority in companies	7.58 Survey [0..10]	18
Worker motivation	in companies is high	6.89 Survey [0..10]	17
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	6.95 Survey [0..10]	8
Quality of life	is high	8.61 Survey [0..10]	16
Foreign highly-skilled personnel	are attracted to your country's business environment	8.03 Survey [0..10]	5
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	- US\$	-
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	299,993 US\$	4
▷ Effective personal income tax rate	Percentage of an income equal to GDP per capita	18.79 %	34
Justice	is fairly administered	8.39 Survey [0..10]	7
▷ Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	19.72 micrograms	44

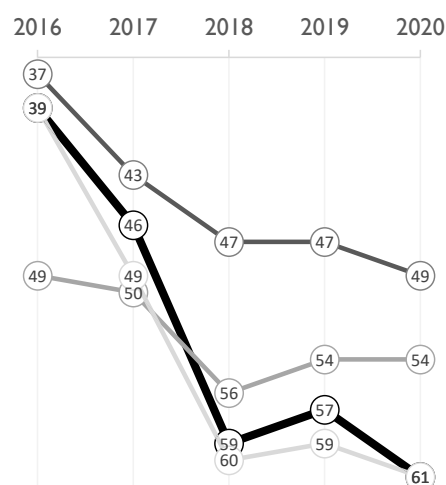
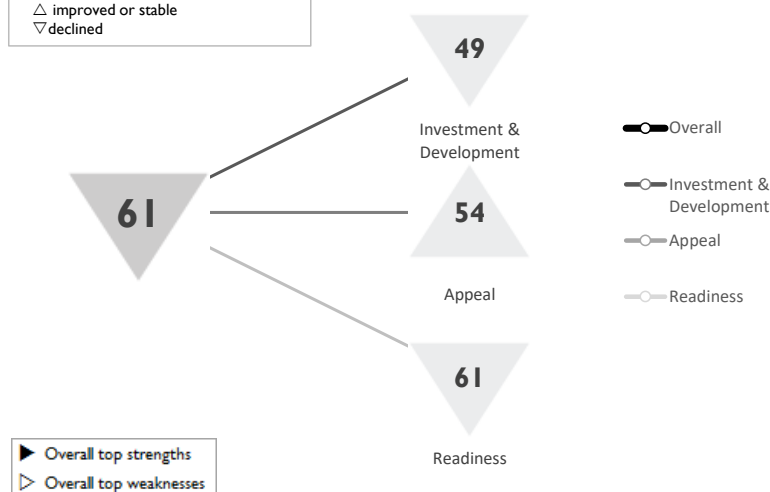
Readiness

		Value	2020 Rank
Labor force growth	Percentage change	1.77 %	15
▶ Skilled labor	is readily available	7.34 Survey [0..10]	3
Finance skills	are readily available	7.68 Survey [0..10]	7
International experience	of senior managers is generally significant	7.34 Survey [0..10]	7
Competent senior managers	are readily available	7.00 Survey [0..10]	7
▶ Primary and secondary education	meets the needs of a competitive economy	8.87 Survey [0..10]	2
Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	33.48 %	4
▶ University education	meets the needs of a competitive economy	8.82 Survey [0..10]	3
▶ Management education	meets the needs of the business community	8.16 Survey [0..10]	3
Language skills	are meeting the needs of enterprises	8.37 Survey [0..10]	11
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	9.18 number	4
▶ Educational assessment - PISA	PISA survey of 15-year olds	556 Average	2

SLOVAK REPUBLIC

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
Total public expenditure on education	Percentage of GDP	3.9 %	43
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	4,218 US\$	37
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	17.52 ratio	44
► Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	12.93 ratio	40
▷ Apprenticeships	are sufficiently implemented	2.39 Survey [0..10]	63
Employee training	is a high priority in companies	4.69 Survey [0..10]	62
► Female labor force	Percentage of total labor force	45.24 %	36
Health infrastructure	meets the needs of society	2.27 Survey [0..10]	60

Appeal

		Value	2020 Rank
► Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	72.70 index	21
▷ Attracting and retaining talents	is a priority in companies	4.90 Survey [0..10]	62
▷ Worker motivation	in companies is high	3.73 Survey [0..10]	63
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	2.24 Survey [0..10]	61
Quality of life	is high	4.72 Survey [0..10]	53
Foreign highly-skilled personnel	are attracted to your country's business environment	2.33 Survey [0..10]	61
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	14,558 US\$	39
► Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	182,711 US\$	27
Effective personal income tax rate	Percentage of an income equal to GDP per capita	16.95 %	31
▷ Justice	is fairly administered	1.61 Survey [0..10]	62
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	17.93 micrograms	41

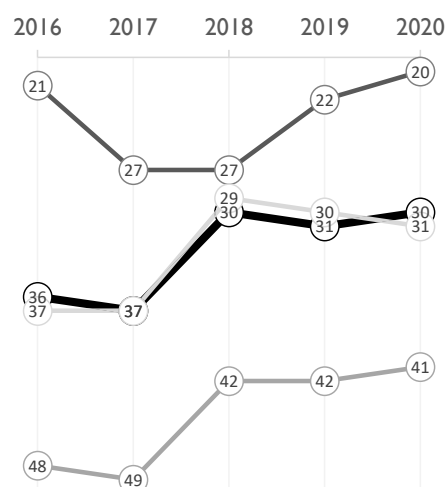
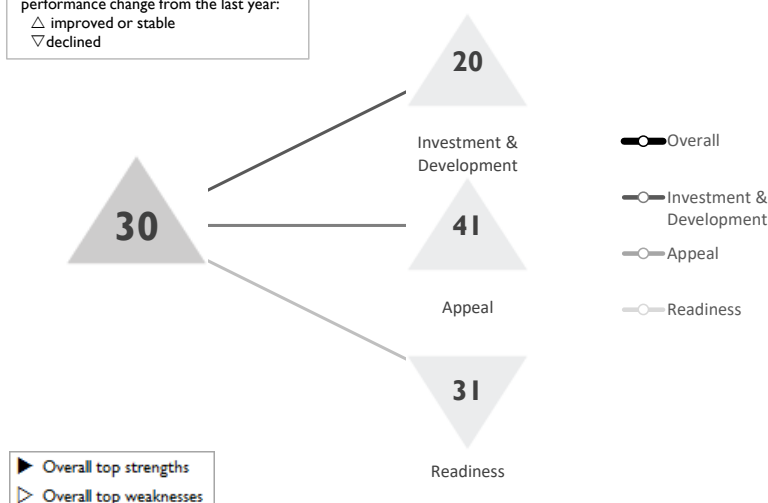
Readiness

		Value	2020 Rank
Labor force growth	Percentage change	-0.17 %	50
Skilled labor	is readily available	3.23 Survey [0..10]	59
Finance skills	are readily available	4.36 Survey [0..10]	61
International experience	of senior managers is generally significant	4.54 Survey [0..10]	58
Competent senior managers	are readily available	3.39 Survey [0..10]	60
Primary and secondary education	meets the needs of a competitive economy	3.04 Survey [0..10]	61
Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	22.07 %	40
▷ University education	meets the needs of a competitive economy	3.30 Survey [0..10]	62
Management education	meets the needs of the business community	4.62 Survey [0..10]	59
Language skills	are meeting the needs of enterprises	4.42 Survey [0..10]	51
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	2.13 number	36
Educational assessment - PISA	PISA survey of 15-year olds	469 Average	36

SLOVENIA

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
Total public expenditure on education	Percentage of GDP	4.9 %	26
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	6,468 US\$	28
► Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	10.34 ratio	6
► Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	9.27 ratio	9
▷ Apprenticeships	are sufficiently implemented	3.30 Survey [0..10]	60
Employee training	is a high priority in companies	6.67 Survey [0..10]	18
Female labor force	Percentage of total labor force	46.09 %	31
Health infrastructure	meets the needs of society	5.44 Survey [0..10]	39

Appeal

		Value	2020 Rank
► Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	70.00 index	17
Attracting and retaining talents	is a priority in companies	6.64 Survey [0..10]	36
Worker motivation	in companies is high	5.87 Survey [0..10]	34
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	4.46 Survey [0..10]	42
Quality of life	is high	8.52 Survey [0..10]	17
▷ Foreign highly-skilled personnel	are attracted to your country's business environment	3.70 Survey [0..10]	53
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	23,443 US\$	30
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	133,045 US\$	41
▷ Effective personal income tax rate	Percentage of an income equal to GDP per capita	26.78 %	58
Justice	is fairly administered	4.77 Survey [0..10]	43
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	16.25 micrograms	33

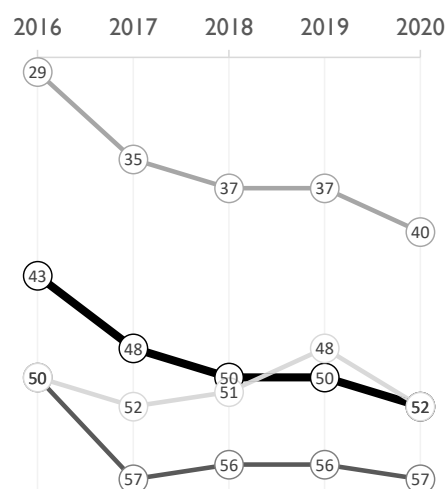
Readiness

		Value	2020 Rank
▷ Labor force growth	Percentage change	-0.51 %	54
Skilled labor	is readily available	5.91 Survey [0..10]	34
Finance skills	are readily available	6.06 Survey [0..10]	41
International experience	of senior managers is generally significant	5.33 Survey [0..10]	42
▷ Competent senior managers	are readily available	5.08 Survey [0..10]	46
Primary and secondary education	meets the needs of a competitive economy	7.07 Survey [0..10]	21
Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	27.23 %	19
University education	meets the needs of a competitive economy	6.65 Survey [0..10]	30
Management education	meets the needs of the business community	7.02 Survey [0..10]	22
► Language skills	are meeting the needs of enterprises	8.33 Survey [0..10]	12
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	1.65 number	40
► Educational assessment - PISA	PISA survey of 15-year olds	504 Average	12

SOUTH AFRICA

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
▶ Total public expenditure on education	Percentage of GDP	8.3 %	1
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	2,053 US\$	47
▷ Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	30.33 ratio	60
▷ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	27.62 ratio	60
Apprenticeships	are sufficiently implemented	3.31 Survey [0..10]	59
Employee training	is a high priority in companies	4.90 Survey [0..10]	57
▶ Female labor force	Percentage of total labor force	45.43 %	35
Health infrastructure	meets the needs of society	2.70 Survey [0..10]	59

Appeal

		Value	2020 Rank
▶ Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	61.30 index	2
Attracting and retaining talents	is a priority in companies	5.98 Survey [0..10]	52
▷ Worker motivation	in companies is high	4.00 Survey [0..10]	61
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	3.19 Survey [0..10]	55
Quality of life	is high	4.70 Survey [0..10]	55
Foreign highly-skilled personnel	are attracted to your country's business environment	4.67 Survey [0..10]	44
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	17,757 US\$	35
▷ Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	46,502 US\$	59
▶ Effective personal income tax rate	Percentage of an income equal to GDP per capita	1.68 %	3
Justice	is fairly administered	5.31 Survey [0..10]	37
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	24.96 micrograms	52

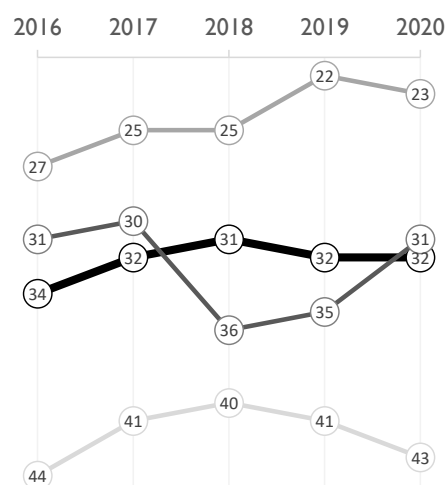
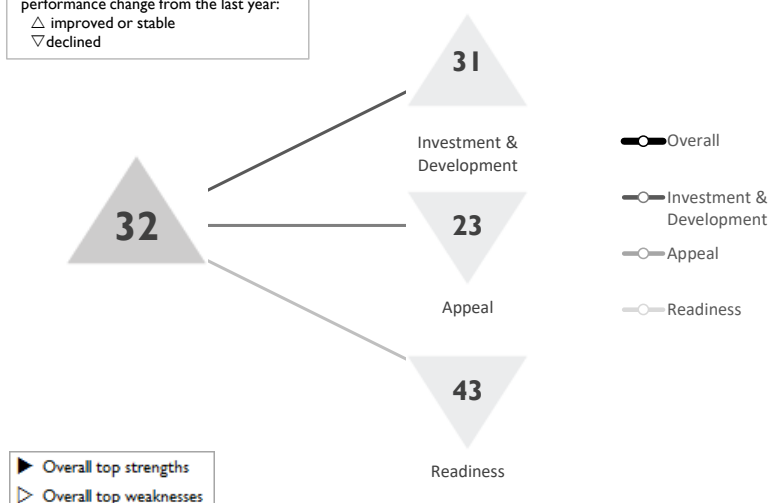
Readiness

		Value	2020 Rank
▶ Labor force growth	Percentage change	2.11 %	11
Skilled labor	is readily available	4.11 Survey [0..10]	55
Finance skills	are readily available	5.26 Survey [0..10]	54
International experience	of senior managers is generally significant	4.66 Survey [0..10]	55
Competent senior managers	are readily available	4.72 Survey [0..10]	52
▷ Primary and secondary education	meets the needs of a competitive economy	3.23 Survey [0..10]	60
Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	18.28 %	55
University education	meets the needs of a competitive economy	4.83 Survey [0..10]	53
Management education	meets the needs of the business community	5.41 Survey [0..10]	49
Language skills	are meeting the needs of enterprises	6.02 Survey [0..10]	40
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	0.73 number	51
Educational assessment - PISA	PISA survey of 15-year olds	- Average	-

SPAIN

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
Total public expenditure on education	Percentage of GDP	4.0 %	41
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	5,763 US\$	30
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	13.61 ratio	25
▶ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	11.16 ratio	20
▷ Apprenticeships	are sufficiently implemented	4.37 Survey [0..10]	53
▷ Employee training	is a high priority in companies	5.04 Survey [0..10]	54
Female labor force	Percentage of total labor force	46.70 %	25
▶ Health infrastructure	meets the needs of society	8.03 Survey [0..10]	13

Appeal

		Value	2020 Rank
Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	81.30 index	34
▷ Attracting and retaining talents	is a priority in companies	5.65 Survey [0..10]	57
Worker motivation	in companies is high	5.39 Survey [0..10]	49
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	4.64 Survey [0..10]	39
Quality of life	is high	8.28 Survey [0..10]	20
Foreign highly-skilled personnel	are attracted to your country's business environment	6.14 Survey [0..10]	23
▶ Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	36,803 US\$	20
▶ Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	212,822 US\$	19
Effective personal income tax rate	Percentage of an income equal to GDP per capita	14.63 %	28
Justice	is fairly administered	5.08 Survey [0..10]	39
▶ Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	9.91 micrograms	12

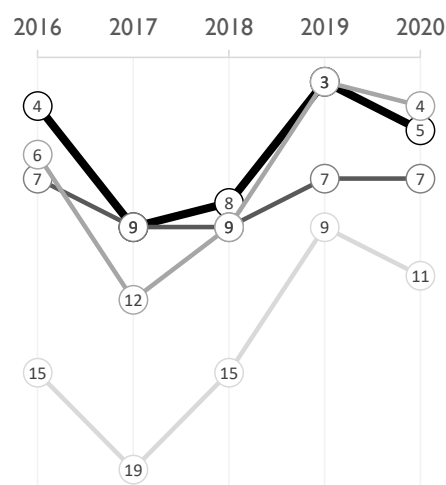
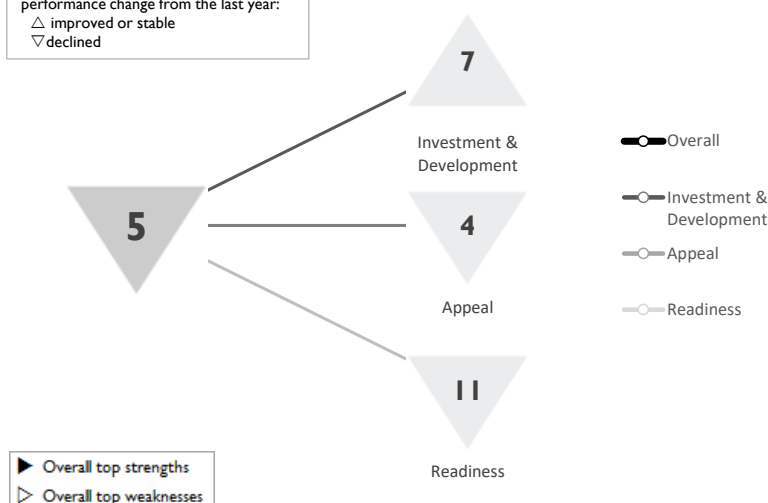
Readiness

		Value	2020 Rank
Labor force growth	Percentage change	0.97 %	27
Skilled labor	is readily available	5.65 Survey [0..10]	39
Finance skills	are readily available	6.02 Survey [0..10]	43
International experience	of senior managers is generally significant	5.07 Survey [0..10]	46
▷ Competent senior managers	are readily available	4.80 Survey [0..10]	51
Primary and secondary education	meets the needs of a competitive economy	5.63 Survey [0..10]	42
Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	22.27 %	38
University education	meets the needs of a competitive economy	5.60 Survey [0..10]	44
Management education	meets the needs of the business community	6.78 Survey [0..10]	28
▷ Language skills	are meeting the needs of enterprises	4.31 Survey [0..10]	52
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	1.52 number	43
Educational assessment - PISA	PISA survey of 15-year olds	- Average	-

SWEDEN

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
▶ Total public expenditure on education	Percentage of GDP	6.9 %	5
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	13,947 US\$	8
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	13.65 ratio	26
Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	12.32 ratio	34
▷ Apprenticeships	are sufficiently implemented	4.73 Survey [0..10]	43
Employee training	is a high priority in companies	7.06 Survey [0..10]	11
Female labor force	Percentage of total labor force	47.58 %	14
Health infrastructure	meets the needs of society	7.08 Survey [0..10]	26

Appeal

		Value	2020 Rank
Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	76.90 index	27
Attracting and retaining talents	is a priority in companies	7.87 Survey [0..10]	8
▶ Worker motivation	in companies is high	7.51 Survey [0..10]	4
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	7.09 Survey [0..10]	7
▶ Quality of life	is high	9.40 Survey [0..10]	5
Foreign highly-skilled personnel	are attracted to your country's business environment	6.21 Survey [0..10]	21
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	51,960 US\$	7
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	224,486 US\$	17
▷ Effective personal income tax rate	Percentage of an income equal to GDP per capita	24.35 %	51
Justice	is fairly administered	8.31 Survey [0..10]	10
▶ Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	6.13 micrograms	3

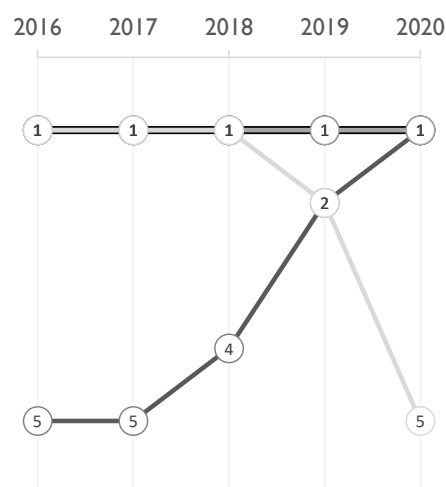
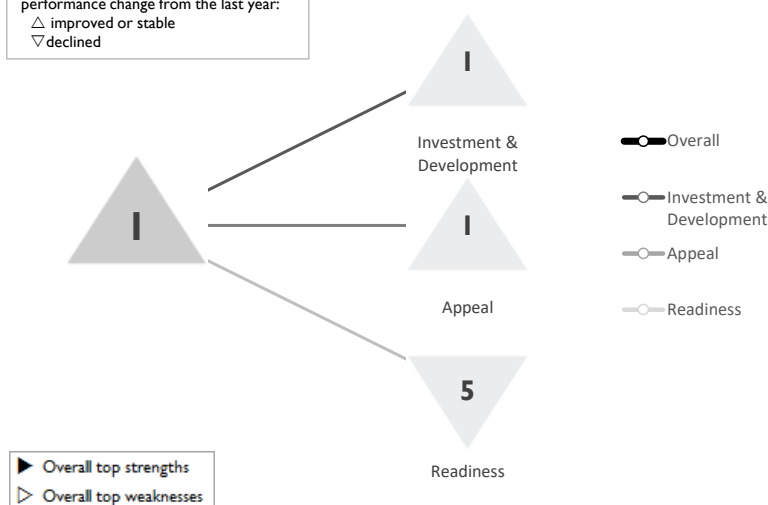
Readiness

		Value	2020 Rank
Labor force growth	Percentage change	1.18 %	23
Skilled labor	is readily available	6.62 Survey [0..10]	12
Finance skills	are readily available	7.45 Survey [0..10]	13
International experience	of senior managers is generally significant	7.06 Survey [0..10]	8
Competent senior managers	are readily available	6.88 Survey [0..10]	8
Primary and secondary education	meets the needs of a competitive economy	7.90 Survey [0..10]	11
Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	26.64 %	23
University education	meets the needs of a competitive economy	8.16 Survey [0..10]	7
Management education	meets the needs of the business community	7.77 Survey [0..10]	10
▶ Language skills	are meeting the needs of enterprises	8.75 Survey [0..10]	6
▷ Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	3.02 number	28
Educational assessment - PISA	PISA survey of 15-year olds	503 Average	15

SWITZERLAND

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
Total public expenditure on education	Percentage of GDP	5.6 %	13
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	24,292 US\$	2
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	15.22 ratio	31
Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	11.91 ratio	30
► Apprenticeships	are sufficiently implemented	8.86 Survey [0..10]	1
Employee training	is a high priority in companies	7.31 Survey [0..10]	6
Female labor force	Percentage of total labor force	46.88 %	21
Health infrastructure	meets the needs of society	8.91 Survey [0..10]	2

Appeal

		Value	2020 Rank
▷ Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	111.60 index	58
Attracting and retaining talents	is a priority in companies	7.48 Survey [0..10]	21
Worker motivation	in companies is high	7.60 Survey [0..10]	3
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	7.80 Survey [0..10]	2
Quality of life	is high	9.66 Survey [0..10]	3
► Foreign highly-skilled personnel	are attracted to your country's business environment	8.90 Survey [0..10]	1
► Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	81,614 US\$	1
► Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	460,999 US\$	1
Effective personal income tax rate	Percentage of an income equal to GDP per capita	12.71 %	21
Justice	is fairly administered	8.58 Survey [0..10]	4
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	10.44 micrograms	15

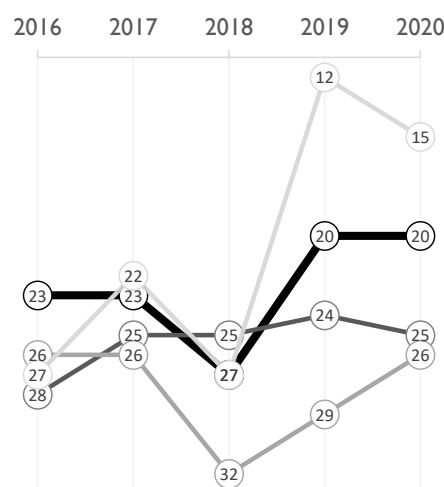
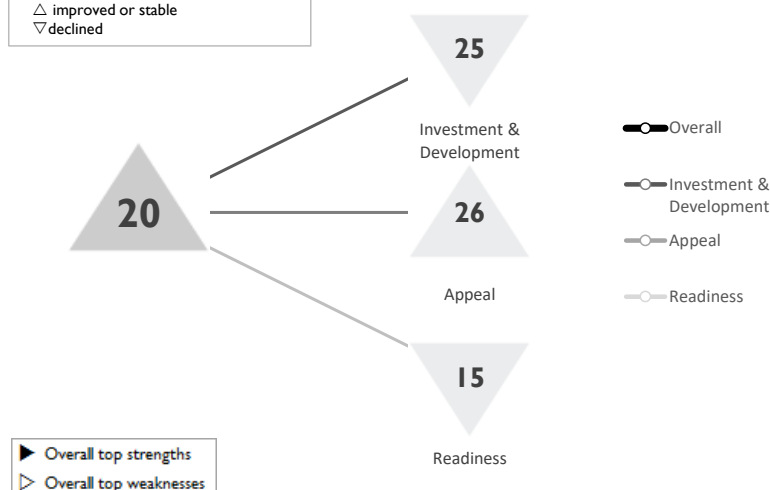
Readiness

		Value	2020 Rank
▷ Labor force growth	Percentage change	0.32 %	43
Skilled labor	is readily available	7.06 Survey [0..10]	7
Finance skills	are readily available	8.07 Survey [0..10]	3
► International experience	of senior managers is generally significant	7.83 Survey [0..10]	1
Competent senior managers	are readily available	7.14 Survey [0..10]	5
Primary and secondary education	meets the needs of a competitive economy	8.84 Survey [0..10]	3
Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	25.21 %	30
University education	meets the needs of a competitive economy	9.05 Survey [0..10]	1
Management education	meets the needs of the business community	8.59 Survey [0..10]	1
Language skills	are meeting the needs of enterprises	8.77 Survey [0..10]	5
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	6.40 number	8
Educational assessment - PISA	PISA survey of 15-year olds	498 Average	21

TAIWAN, CHINA

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
▷ Total public expenditure on education	Percentage of GDP	3.7 %	45
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	5,223 US\$	33
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	12.10 ratio	16
Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	12.90 ratio	39
Apprenticeships	are sufficiently implemented	5.86 Survey [0..10]	15
Employee training	is a high priority in companies	6.99 Survey [0..10]	12
Female labor force	Percentage of total labor force	44.49 %	40
▶ Health infrastructure	meets the needs of society	8.77 Survey [0..10]	5

Appeal

		Value	2020 Rank
▷ Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	89.70 index	48
Attracting and retaining talents	is a priority in companies	6.73 Survey [0..10]	34
▶ Worker motivation	in companies is high	7.21 Survey [0..10]	8
▷ Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	3.94 Survey [0..10]	48
Quality of life	is high	7.98 Survey [0..10]	22
▷ Foreign highly-skilled personnel	are attracted to your country's business environment	4.59 Survey [0..10]	47
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	26,500 US\$	27
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	185,939 US\$	25
▶ Effective personal income tax rate	Percentage of an income equal to GDP per capita	5.77 %	9
Justice	is fairly administered	5.94 Survey [0..10]	31
▷ Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	18.30 micrograms	43

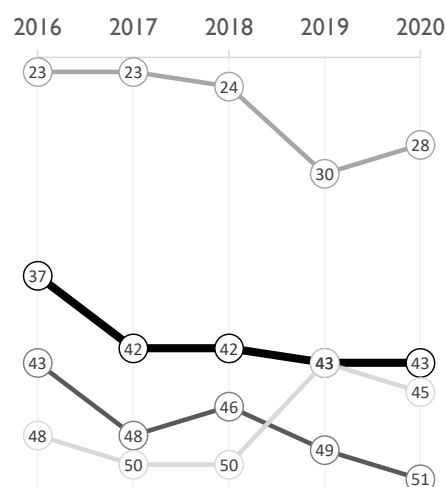
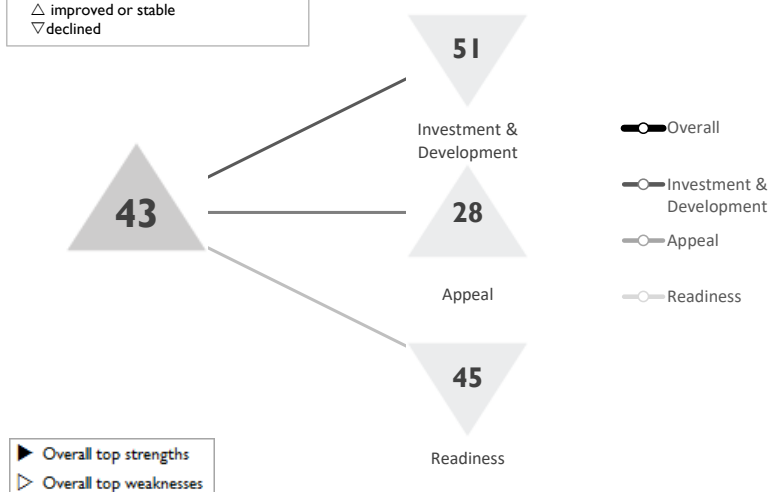
Readiness

		Value	2020 Rank
Labor force growth	Percentage change	0.61 %	37
Skilled labor	is readily available	6.18 Survey [0..10]	24
Finance skills	are readily available	6.80 Survey [0..10]	24
International experience	of senior managers is generally significant	5.72 Survey [0..10]	34
Competent senior managers	are readily available	5.92 Survey [0..10]	28
Primary and secondary education	meets the needs of a competitive economy	7.54 Survey [0..10]	19
▶ Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	32.85 %	5
University education	meets the needs of a competitive economy	6.89 Survey [0..10]	27
Management education	meets the needs of the business community	6.81 Survey [0..10]	27
Language skills	are meeting the needs of enterprises	6.28 Survey [0..10]	33
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	5.48 number	13
▶ Educational assessment - PISA	PISA survey of 15-year olds	516 Average	8

THAILAND

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
▷ Total public expenditure on education	Percentage of GDP	3.0 %	57
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	1,167 US\$	52
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	16.89 ratio	42
▷ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	25.95 ratio	59
▶ Apprenticeships	are sufficiently implemented	5.77 Survey [0..10]	17
Employee training	is a high priority in companies	6.33 Survey [0..10]	25
Female labor force	Percentage of total labor force	45.53 %	34
Health infrastructure	meets the needs of society	7.51 Survey [0..10]	22

Appeal

		Value	2020 Rank
Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	83.60 index	39
Attracting and retaining talents	is a priority in companies	6.98 Survey [0..10]	27
Worker motivation	in companies is high	6.22 Survey [0..10]	27
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	5.63 Survey [0..10]	26
Quality of life	is high	6.45 Survey [0..10]	38
▶ Foreign highly-skilled personnel	are attracted to your country's business environment	6.86 Survey [0..10]	16
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	12,681 US\$	44
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	184,089 US\$	26
▶ Effective personal income tax rate	Percentage of an income equal to GDP per capita	4.09 %	5
Justice	is fairly administered	5.96 Survey [0..10]	30
▷ Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	26.34 micrograms	55

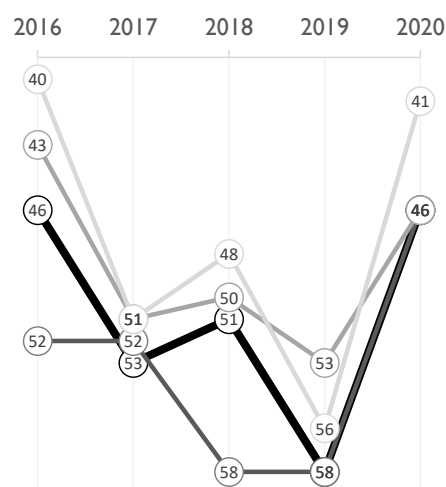
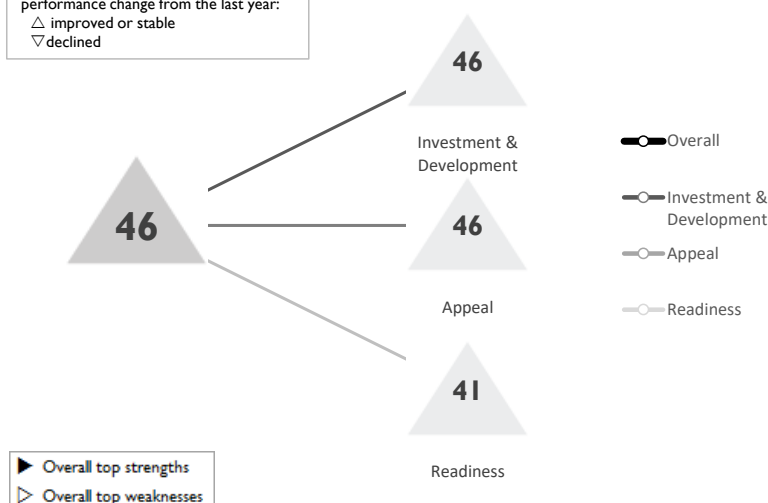
Readiness

		Value	2020 Rank
▷ Labor force growth	Percentage change	-0.67 %	55
Skilled labor	is readily available	6.29 Survey [0..10]	21
Finance skills	are readily available	6.37 Survey [0..10]	37
▶ International experience	of senior managers is generally significant	6.33 Survey [0..10]	15
Competent senior managers	are readily available	6.29 Survey [0..10]	20
Primary and secondary education	meets the needs of a competitive economy	5.80 Survey [0..10]	39
▶ Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	27.86 %	16
University education	meets the needs of a competitive economy	5.96 Survey [0..10]	38
Management education	meets the needs of the business community	6.45 Survey [0..10]	34
Language skills	are meeting the needs of enterprises	5.02 Survey [0..10]	47
▷ Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	0.48 number	53
Educational assessment - PISA	PISA survey of 15-year olds	412 Average	50

TURKEY

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
Total public expenditure on education	Percentage of GDP	4.2 %	39
▷ Total public exp. on education per student	Spending per enrolled pupil/student, all levels	1,275 US\$	51
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	17.18 ratio	43
Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	14.09 ratio	46
▶ Apprenticeships	are sufficiently implemented	5.60 Survey [0..10]	21
Employee training	is a high priority in companies	5.60 Survey [0..10]	42
▷ Female labor force	Percentage of total labor force	32.83 %	57
▶ Health infrastructure	meets the needs of society	6.98 Survey [0..10]	27

Appeal

		Value	2020 Rank
▶ Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	64.50 index	7
Attracting and retaining talents	is a priority in companies	6.65 Survey [0..10]	35
Worker motivation	in companies is high	5.85 Survey [0..10]	36
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	4.69 Survey [0..10]	38
Quality of life	is high	5.63 Survey [0..10]	45
Foreign highly-skilled personnel	are attracted to your country's business environment	4.40 Survey [0..10]	48
▷ Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	8,368 US\$	54
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	147,309 US\$	37
Effective personal income tax rate	Percentage of an income equal to GDP per capita	20.43 %	39
Justice	is fairly administered	4.11 Survey [0..10]	48
▷ Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	21.82 micrograms	50

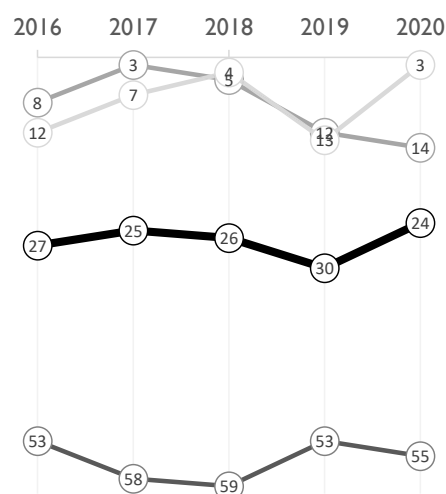
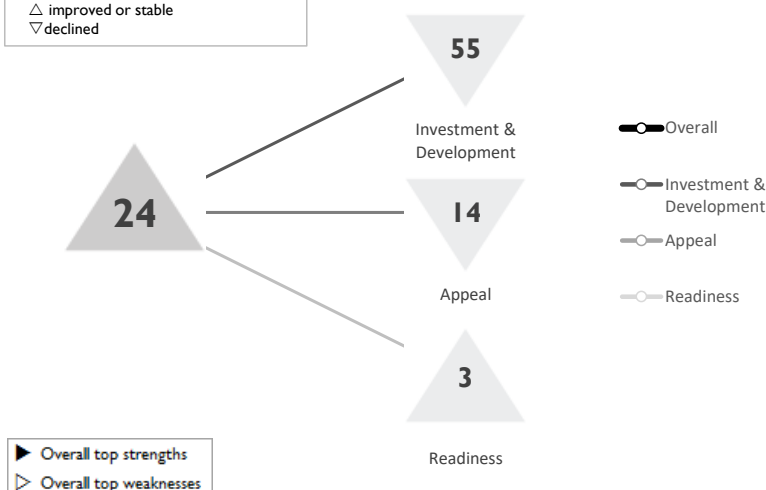
Readiness

		Value	2020 Rank
Labor force growth	Percentage change	0.85 %	33
▶ Skilled labor	is readily available	6.44 Survey [0..10]	20
Finance skills	are readily available	6.62 Survey [0..10]	27
International experience	of senior managers is generally significant	5.89 Survey [0..10]	28
▶ Competent senior managers	are readily available	6.15 Survey [0..10]	23
Primary and secondary education	meets the needs of a competitive economy	5.16 Survey [0..10]	47
▷ Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	19.44 %	48
University education	meets the needs of a competitive economy	5.45 Survey [0..10]	46
Management education	meets the needs of the business community	6.07 Survey [0..10]	43
Language skills	are meeting the needs of enterprises	5.38 Survey [0..10]	44
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	1.53 number	42
Educational assessment - PISA	PISA survey of 15-year olds	462 Average	39

UAE

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
▷ Total public expenditure on education	Percentage of GDP	2.0 %	62
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	4,635 US\$	35
▷ Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	23.20 ratio	55
Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	9.40 ratio	11
Apprenticeships	are sufficiently implemented	6.74 Survey [0..10]	6
Employee training	is a high priority in companies	6.90 Survey [0..10]	14
▷ Female labor force	Percentage of total labor force	24.71 %	58
Health infrastructure	meets the needs of society	8.13 Survey [0..10]	12

Appeal

		Value	2020 Rank
▷ Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	90.30 index	49
Attracting and retaining talents	is a priority in companies	7.36 Survey [0..10]	24
Worker motivation	in companies is high	7.13 Survey [0..10]	12
▶ Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	7.61 Survey [0..10]	3
Quality of life	is high	8.67 Survey [0..10]	15
▶ Foreign highly-skilled personnel	are attracted to your country's business environment	8.18 Survey [0..10]	3
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	32,449 US\$	24
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	241,787 US\$	15
Effective personal income tax rate	Percentage of an income equal to GDP per capita	4.64 %	6
Justice	is fairly administered	8.28 Survey [0..10]	11
▷ Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	40.65 micrograms	57

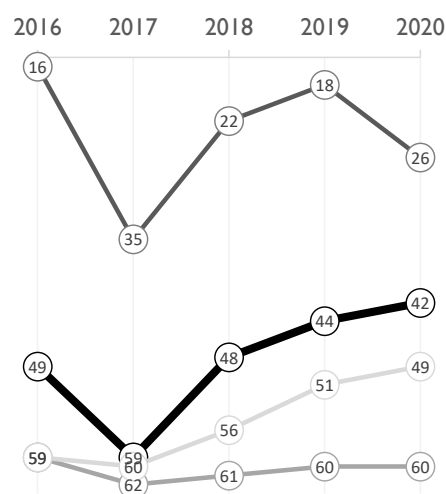
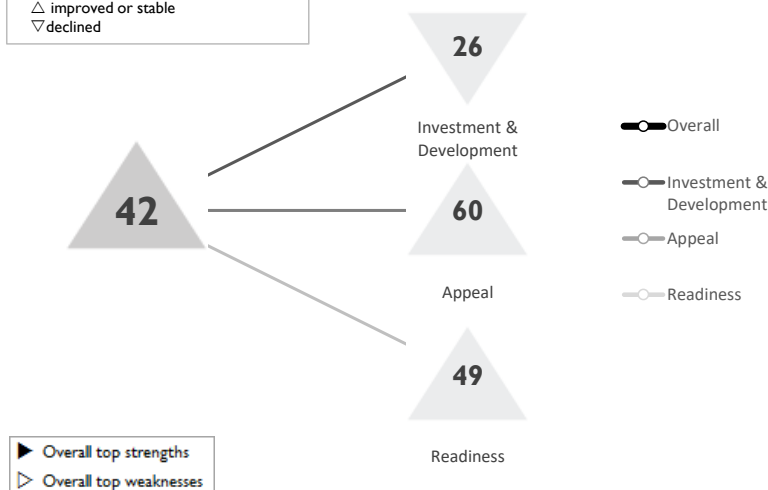
Readiness

		Value	2020 Rank
Labor force growth	Percentage change	2.21 %	8
▶ Skilled labor	is readily available	7.38 Survey [0..10]	2
Finance skills	are readily available	7.59 Survey [0..10]	9
▶ International experience	of senior managers is generally significant	7.79 Survey [0..10]	2
▶ Competent senior managers	are readily available	7.56 Survey [0..10]	1
Primary and secondary education	meets the needs of a competitive economy	8.23 Survey [0..10]	6
Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	27.73 %	17
University education	meets the needs of a competitive economy	7.41 Survey [0..10]	21
Management education	meets the needs of the business community	7.46 Survey [0..10]	16
Language skills	are meeting the needs of enterprises	8.44 Survey [0..10]	8
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	8.49 number	6
Educational assessment - PISA	PISA survey of 15-year olds	433 Average	43

UKRAINE

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
▶ Total public expenditure on education	Percentage of GDP	5.9 %	11
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	1,123 US\$	54
▶ Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	12.98 ratio	20
▶ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	7.34 ratio	2
Apprenticeships	are sufficiently implemented	5.00 Survey [0..10]	33
Employee training	is a high priority in companies	5.40 Survey [0..10]	45
▶ Female labor force	Percentage of total labor force	47.67 %	12
▷ Health infrastructure	meets the needs of society	1.59 Survey [0..10]	62

Appeal

		Value	2020 Rank
▶ Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	62.30 index	5
Attracting and retaining talents	is a priority in companies	6.16 Survey [0..10]	47
Worker motivation	in companies is high	5.10 Survey [0..10]	53
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	2.43 Survey [0..10]	59
▷ Quality of life	is high	2.63 Survey [0..10]	62
Foreign highly-skilled personnel	are attracted to your country's business environment	2.93 Survey [0..10]	59
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	3,311 US\$	59
▷ Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	28,071 US\$	60
Effective personal income tax rate	Percentage of an income equal to GDP per capita	13.28 %	23
▷ Justice	is fairly administered	2.11 Survey [0..10]	61
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	20.70 micrograms	46

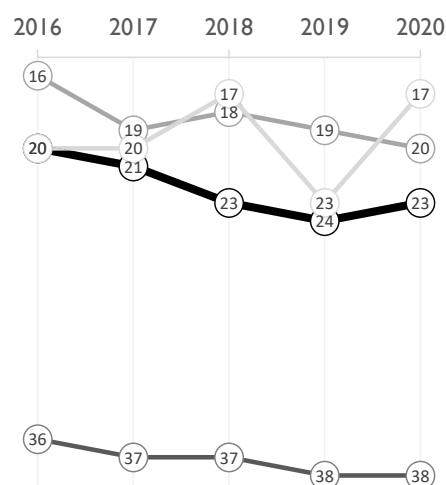
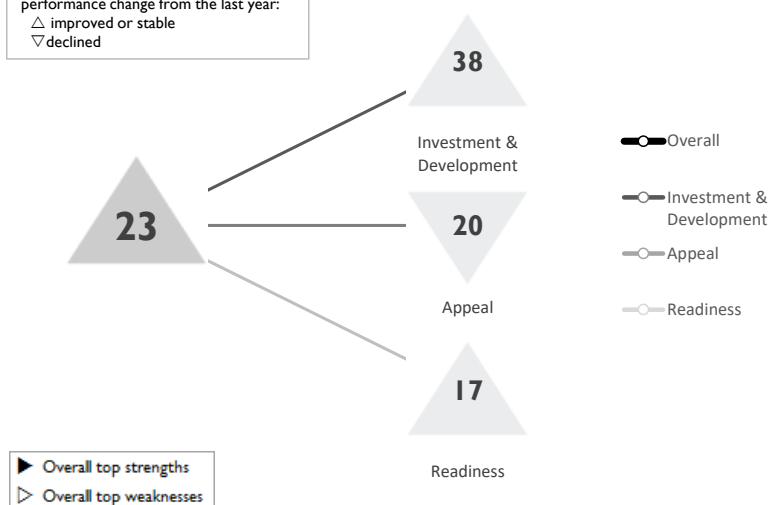
Readiness

		Value	2020 Rank
Labor force growth	Percentage change	1.21 %	22
Skilled labor	is readily available	5.70 Survey [0..10]	36
Finance skills	are readily available	6.05 Survey [0..10]	42
International experience	of senior managers is generally significant	4.11 Survey [0..10]	60
Competent senior managers	are readily available	4.89 Survey [0..10]	49
Primary and secondary education	meets the needs of a competitive economy	4.49 Survey [0..10]	49
Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	25.28 %	29
▷ University education	meets the needs of a competitive economy	4.08 Survey [0..10]	60
Management education	meets the needs of the business community	5.03 Survey [0..10]	54
Language skills	are meeting the needs of enterprises	4.22 Survey [0..10]	54
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	1.18 number	49
Educational assessment - PISA	PISA survey of 15-year olds	463 Average	38

UNITED KINGDOM

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
Total public expenditure on education	Percentage of GDP	4.8 %	27
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	9,052 US\$	20
▷ Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	19.89 ratio	52
▷ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	17.08 ratio	51
Apprenticeships	are sufficiently implemented	5.24 Survey [0..10]	30
▷ Employee training	is a high priority in companies	5.65 Survey [0..10]	41
Female labor force	Percentage of total labor force	47.16 %	18
Health infrastructure	meets the needs of society	5.97 Survey [0..10]	35

Appeal

		Value	2020 Rank
▷ Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	94.20 index	50
Attracting and retaining talents	is a priority in companies	6.79 Survey [0..10]	32
Worker motivation	in companies is high	6.06 Survey [0..10]	29
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	6.38 Survey [0..10]	16
Quality of life	is high	7.22 Survey [0..10]	29
Foreign highly-skilled personnel	are attracted to your country's business environment	6.61 Survey [0..10]	18
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	39,774 US\$	17
▶ Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	250,925 US\$	13
Effective personal income tax rate	Percentage of an income equal to GDP per capita	20.07 %	37
▶ Justice	is fairly administered	7.91 Survey [0..10]	15
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	10.44 micrograms	16

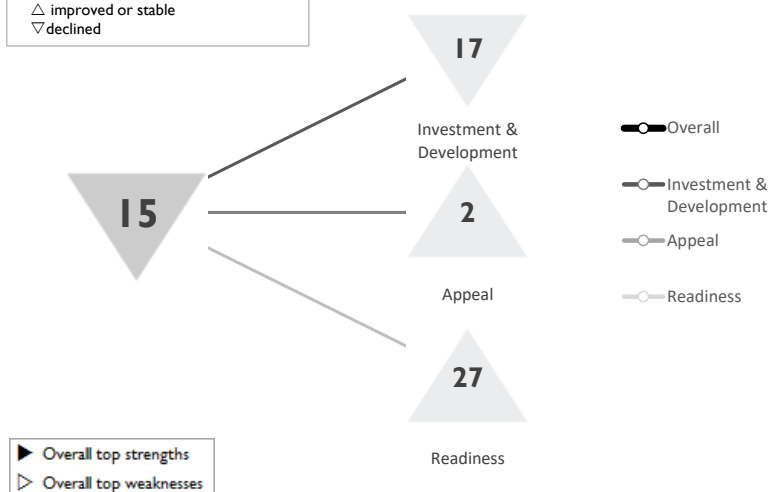
Readiness

		Value	2020 Rank
Labor force growth	Percentage change	0.78 %	35
Skilled labor	is readily available	6.03 Survey [0..10]	28
▶ Finance skills	are readily available	7.44 Survey [0..10]	14
International experience	of senior managers is generally significant	6.24 Survey [0..10]	18
Competent senior managers	are readily available	6.53 Survey [0..10]	15
Primary and secondary education	meets the needs of a competitive economy	6.62 Survey [0..10]	27
Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	26.91 %	21
University education	meets the needs of a competitive economy	7.62 Survey [0..10]	17
Management education	meets the needs of the business community	7.13 Survey [0..10]	19
▷ Language skills	are meeting the needs of enterprises	5.44 Survey [0..10]	43
▶ Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	6.80 number	7
▶ Educational assessment - PISA	PISA survey of 15-year olds	503 Average	13

USA

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
Total public expenditure on education	Percentage of GDP	5.9 %	10
▶ Total public exp. on education per student	Spending per enrolled pupil/student, all levels	15,560 US\$	5
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	15.22 ratio	32
▷ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	15.13 ratio	48
▷ Apprenticeships	are sufficiently implemented	4.22 Survey [0..10]	54
Employee training	is a high priority in companies	5.68 Survey [0..10]	40
Female labor force	Percentage of total labor force	46.99 %	19
▷ Health infrastructure	meets the needs of society	5.11 Survey [0..10]	41

Appeal

		Value	2020 Rank
▷ Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	100.00 index	54
▶ Attracting and retaining talents	is a priority in companies	7.96 Survey [0..10]	6
Worker motivation	in companies is high	6.47 Survey [0..10]	19
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	6.75 Survey [0..10]	10
Quality of life	is high	7.96 Survey [0..10]	23
▶ Foreign highly-skilled personnel	are attracted to your country's business environment	8.24 Survey [0..10]	2
▶ Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	59,616 US\$	4
▶ Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	391,787 US\$	2
Effective personal income tax rate	Percentage of an income equal to GDP per capita	13.34 %	24
Justice	is fairly administered	6.61 Survey [0..10]	23
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	7.36 micrograms	8

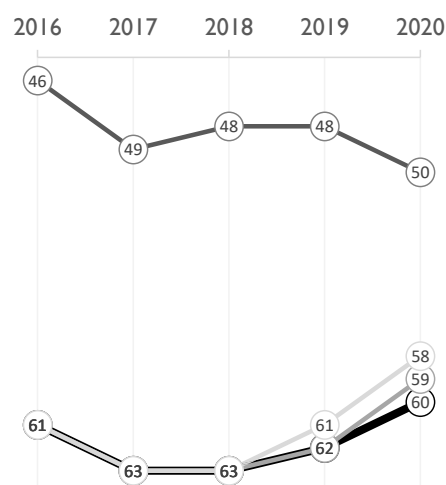
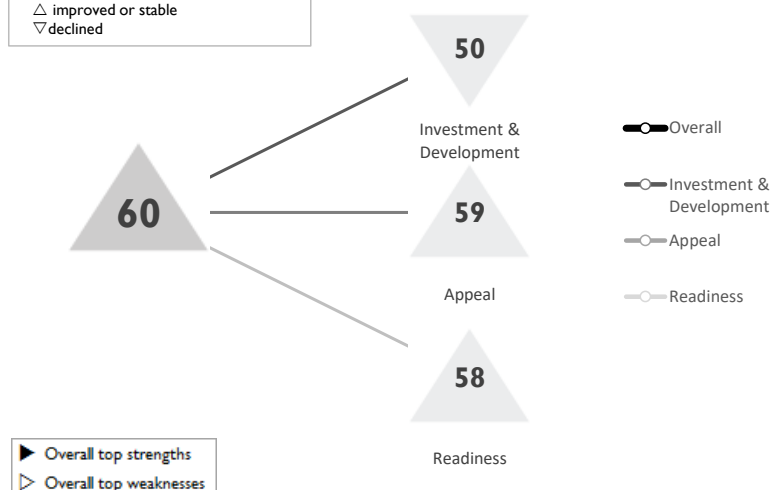
Readiness

		Value	2020 Rank
Labor force growth	Percentage change	0.90 %	28
Skilled labor	is readily available	6.15 Survey [0..10]	25
Finance skills	are readily available	7.55 Survey [0..10]	10
International experience	of senior managers is generally significant	5.81 Survey [0..10]	31
Competent senior managers	are readily available	6.74 Survey [0..10]	11
Primary and secondary education	meets the needs of a competitive economy	6.28 Survey [0..10]	32
▷ Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	19.02 %	51
University education	meets the needs of a competitive economy	7.57 Survey [0..10]	18
Management education	meets the needs of the business community	7.63 Survey [0..10]	14
Language skills	are meeting the needs of enterprises	6.11 Survey [0..10]	36
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	3.02 number	29
Educational assessment - PISA	PISA survey of 15-year olds	495 Average	24

VENEZUELA

OVERALL PERFORMANCE (63 countries)

The direction of the triangle indicates the performance change from the last year:
 △ improved or stable
 ▽ declined



Investment & Development

		Value	2020 Rank
Total public expenditure on education	Percentage of GDP	- %	-
Total public exp. on education per student	Spending per enrolled pupil/student, all levels	- US\$	-
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	- ratio	-
Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	- ratio	-
Apprenticeships	are sufficiently implemented	4.80 Survey [0..10]	39
Employee training	is a high priority in companies	5.18 Survey [0..10]	48
Female labor force	Percentage of total labor force	42.75 %	48
Health infrastructure	meets the needs of society	0.76 Survey [0..10]	63

Appeal

		Value	2020 Rank
Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	- index	-
Attracting and retaining talents	is a priority in companies	6.80 Survey [0..10]	31
Worker motivation	in companies is high	4.44 Survey [0..10]	59
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	2.12 Survey [0..10]	62
Quality of life	is high	1.43 Survey [0..10]	63
Foreign highly-skilled personnel	are attracted to your country's business environment	1.14 Survey [0..10]	63
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	- US\$	-
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	23,610 US\$	61
Effective personal income tax rate	Percentage of an income equal to GDP per capita	0.98 %	2
Justice	is fairly administered	0.45 Survey [0..10]	63
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	17.40 micrograms	38

Readiness

		Value	2020 Rank
Labor force growth	Percentage change	1.09 %	24
Skilled labor	is readily available	3.20 Survey [0..10]	60
Finance skills	are readily available	4.56 Survey [0..10]	59
International experience	of senior managers is generally significant	4.56 Survey [0..10]	57
Competent senior managers	are readily available	3.40 Survey [0..10]	59
Primary and secondary education	meets the needs of a competitive economy	2.32 Survey [0..10]	63
Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	- %	-
University education	meets the needs of a competitive economy	4.36 Survey [0..10]	57
Management education	meets the needs of the business community	5.04 Survey [0..10]	53
Language skills	are meeting the needs of enterprises	3.80 Survey [0..10]	58
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	- number	-
Educational assessment - PISA	PISA survey of 15-year olds	- Average	-

The IMD World Talent Ranking methodology

I. The structure of the IMD World Talent Ranking

The ranking is structured according to three factors:

- 1) investment and development
- 2) appeal
- 3) readiness

The first factor takes into account the investment in and development of home-grown talent. It traces the size of public investment on education by incorporating an indicator of public expenditure. It also looks at the quality of education through indicators related to pupil-teacher ratios. The development of talent is covered by variables related to the implementation of apprenticeship and the priority of employee training for companies. It also looks at the development of the female labor force. In addition, this factor takes into account the quality of the health infrastructure in terms of meeting the health needs of society.

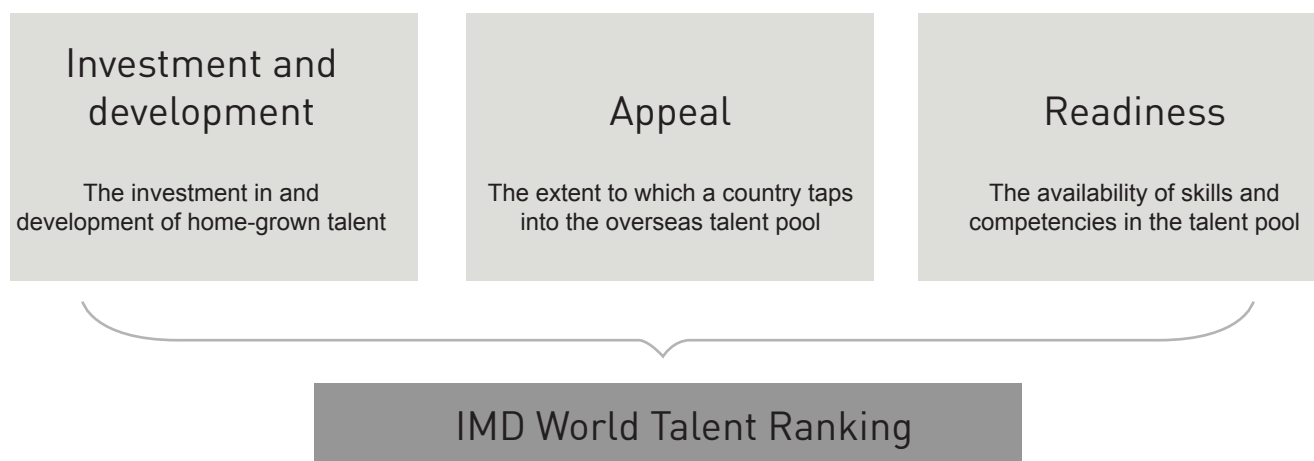
The appeal factor goes beyond the focus on the local labor force to incorporate the ability of a country to tap into the overseas talent pool. It does so by including indicators such as the cost of living and quality of life in a particular economy. Specifically, it examines the ability of a country to attract highly skilled foreign labor. In addition, it assesses the way enterprises prioritize the attraction and retention of talent. Another component of this factor evaluates the impact of brain drain on the competitiveness of countries. It also takes into account the level of worker motivation. Salary and taxation levels are important for an economy to be able to maintain an effective flow of talent. The appeal factor thus considers remuneration at the management and

services professions levels and personal income tax rates. This factor also incorporates measures of personal security and the protection of private property rights because they play a key role in increasing the attractiveness of a particular economy.

The success of the investment in and development of talent and the ability to attract and retain talent is reflected in the availability of skills and competencies to sustain an economy's talent pool. The readiness factor looks at the context of the talent pool. It considers the growth of the labor force and the quality of the skills available. It also takes into consideration the experience and competencies of the existing senior managers' pool. In addition, the readiness factor focuses, on the ability of the educational system to meet the talent needs of enterprises. It examines the way in which the educational system fulfils the talent demands of the economy, the ability of higher education to meet that demand and the languages skills available. Finally, it considers the mobility of students (inbound) and educational assessment (PISA).

Such a comprehensive set of criteria enables us to observe how countries perform in terms of sustaining their talent pool. In developing the talent ranking, we have omitted measures of the regulation of labor and productivity. The reason for this is because our objective is to assess the development and retention of talent, and the regulation of labor and its focus on conflict resolution could be perceived as peripheral to that objective. Similarly, productivity is an outcome of what we want to assess.

Graph 1. Relation between Competitiveness and the Scientific Infrastructure sub-factor



II. Constructing the IMD World Talent Ranking

In order to calculate the IMD World Talent Ranking, we:

- Normalize criteria data using the same STD methodology used in the IMD World Competitiveness Yearbook
- Average the criteria STDs to generate the three talent competitiveness factors
- Aggregate factors to build the overall talent ranking
- Normalize the factors and overall ranking to the 0 to 100 range to facilitate the interpretation of results.

We employ this methodology to rank the countries' evolution in talent aspects from 2013 onward. However, there are some caveats. For certain years, our sample varies according to the evolution of the IMD World Competitiveness

Yearbook. That is to say, some countries appear in the talent ranking only for the years since they became part of the Yearbook. For example, talent rankings for Mongolia are available from 2015 onward and Cyprus and Saudi Arabia are available only from 2017.

Additionally, hard data may not be available for specific countries in specific years. Whenever possible, we use the most recent data available.

In **Table 2** we present all the definitions of hard and survey criteria. Note that the value range for all survey-based criteria is of 0 to 10.

Table 1: Sample size (2016-2020)

Year:	2016	2017	2018	2019	2020
# Countries:	61	63	63	63	63

Table 2: Criteria definitions and survey questions**Investment & Development**

Total public expenditure on education	Percentage of GDP
Total public expenditure on education per student	Spending per enrolled pupil/student, all levels
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff
Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff
Apprenticeships	Apprenticeships are sufficiently implemented
Employee training	Employee training is a high priority in companies
Female labor force	Percentage of total labor force
Health infrastructure	Health infrastructure meets the needs of society

Appeal

Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)
Attracting and retaining talents	Attracting and retaining talents is a priority in companies
Worker motivation	Worker motivation in companies is high
Brain drain	Brain drain (well-educated and skilled people) does not hinder competitiveness in your economy
Quality of life	Quality of life is high
Foreign highly-skilled personnel	Foreign highly-skilled personnel are attracted to your country's business environment
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$
Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$
Effective personal income tax rate	Percentage of an income equal to GDP per capita
Justice	Justice is fairly administered
Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre

Readiness

Labor force growth	Percentage change
Skilled labor	Skilled labor is readily available
Finance skills	Finance skills are readily available
International experience	International experience of senior managers is generally significant
Competent senior managers	Competent senior managers are readily available
Primary and secondary education	Primary and secondary education meets the needs of a competitive economy
Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences
University education	University education meets the needs of a competitive economy
Management education	Management education meets the needs of the business community
Language skills	Language skills are meeting the needs of enterprises
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants
Educational assessment - PISA	PISA survey of 15-year olds

Notes and Sources by Criteria

The source of the survey criteria is always :
IMD World Competitiveness Center's Executive Opinion Survey 2020.
Which was conducted from mid-February to early May 2020, with a total number of 5'866 respondents.

Background Criteria

0.01 [B] Exchange Rate

International Financial Statistics Online March 2020 (IMF)
National sources

Period average.

0.02 [B] Population - Market Size

UNDP Human Development Report 2019

Mid-year estimates. Croatia: new census in 2011 with a new methodology. India: break in series in 2011. Jordan: series have been revised according to the the new Population and Housing Census published in 2016: end of year population for 2019. Portugal: methodological change in 2011. Russia: including Crimea as of 2015. UAE: re-estimation of the national population was made by the National Bureau of Statistics in 2010 (consequent increase as of 2008). Lithuania: break in series 2011 - census revised population figure downwards by 10% (emigration to EU over past decade). Philippines: Latest available census data is for 2010. 2011-2015 figures are projections based on PSA's annual Philippines in Figures publication.

0.03 [B] GDP per capita

OECD (2020), Main Economic Indicators - complete database
National sources

Provisional data or estimates for most recent year. Malaysia: Data 2017 & 2018: Preliminary; Data 2019 is sum of 4 quarters.

Factor 1: Investment & Development

1.01 Total public expenditure on education

UNESCO <http://stats.uis.unesco.org>
Eurostat April 2020
National sources

Total general (local, regional and central) government expenditure in educational institutions (current and capital). It excludes transfers to private entities such as subsidies to households and students, but includes expenditure funded by transfers from international sources to government. It includes pre-primary, primary, secondary all levels and tertiary public institutions. Chile and Jordan: Budgetary central government. Philippines: Includes expenditure for items other than basic and higher education such as vocational education, culture and sports.

1.02 Total public expenditure on education per student

UNESCO <http://stats.uis.unesco.org>
Eurostat October 2020
National sources

Total general (local, regional and central) government expenditure in educational institutions (current and capital). It excludes transfers to private entities such as subsidies to households and students, but includes expenditure funded by transfers from international sources to government. It includes pre-primary, primary, secondary all levels and tertiary public institutions. Chile and Jordan: Budgetary central government. Philippines: Includes expenditure for items other than basic and higher education such as vocational education, culture and sports.

1.03 Pupil-teacher ratio (primary education)

UNESCO <http://stats.uis.unesco.org>
OECD Education at a Glance 2020
National sources

For public and private institutions, based on full-time equivalent. Primary education (ISCED level 1): level of which the main function is to provide the basic elements of education at such establishments as elementary schools, primary schools. The ratio of students to teaching staff is calculated as the total number of full-time equivalent students divided by the total number of full-time equivalent educational personal. Teaching staff refers to professional personnel directly involved in teaching students. The classification includes classroom teachers; special education teacher; and other teachers who work with students as a whole class in a classroom, in small groups in a resource room, or in one-to-one teaching inside a regular classroom. Teaching staff also includes chairpersons of departments whose duties include some amount of teaching, but it does not include non-professional personnel who support teachers in providing instructions to students, such as teacher's aides and other paraprofessional personnel. Data are UNESCO

or OECD estimates and from national statistics. Bulgaria, Cyprus, Greece, Hong Kong SAR, India, Indonesia, Jordan, Kazakhstan, Mongolia, Peru, Philippines, Qatar, Romania, Saudi Arabia, Singapore, Thailand, UAE and Ukraine: based on headcounts. Canada: Primary includes pre-primary education. France: Public and government-dependent private institutions only for all levels. Ireland and Switzerland: Public institutions only for all levels.

1.04 Pupil-teacher ratio (secondary education)

UNESCO <http://stats.uis.unesco.org>

OECD Education at a Glance 2020

National sources

For public and private institutions, based on full-time equivalent. Secondary education (ISCED levels 2 and 3): level providing general and/or specialized instruction at middle schools, secondary schools, high schools, teacher training schools and schools of a vocational or technical nature. The ratio of students to teaching staff is calculated as the total number of full-time equivalent students divided by the total number of full-time equivalent educational personnel. Teaching staff refers to professional personnel directly involved in teaching students. The classification includes classroom teachers; special education teacher; and other teachers who work with students as a whole class in a classroom, in small groups in a resource room, or in one-to-one teaching inside a regular classroom. Teaching staff also includes chairpersons of departments whose duties include some amount of teaching, but it does not include non-professional personnel who support teachers in providing instructions to students, such as teacher's aides and other paraprofessional personnel. Data are UNESCO or OECD estimates and from national statistics. Bulgaria, Cyprus, Greece, Hong Kong, Jordan, Kazakhstan, Peru, Philippines, Qatar, Romania, Singapore, Thailand, UAE, Ukraine and Venezuela: Based on headcounts. Australia: general programs only. Ireland, Israel and Switzerland: public institutions only. France: Public and government-dependent private institutions only. Iceland: lower secondary only.

1.07 Female labor force

OECD (2020), Main Economic Indicators - complete database

National sources

Estimate for 2019. Austria: break in series in 2008. Belgium: until Q3 for 2018. Denmark: break in series in 2009. Malaysia: break in series in 2010. Portugal: methodological change in 2011. Romania: for 2018 - third quarter. Spain: break in series in 2005. Philippines: 2018 data calculated from the July 2018 Labor Force Survey

Factor 2: Appeal

2.01 Cost-of-living index

MERCER Cost of Living survey 2018

www.mercer.com

Break in series in 2015: In the main city as of 2015, average of main cities in large countries (made by IMD WCC) or in the capital in smaller ones up to 2014. The Mercer survey covers 214 cities across five continents and measures the comparative cost of over 200 items in each location, including housing, transport, food, clothing, household goods and entertainment. It is the world's most comprehensive cost of living survey and is used to help multinational companies and governments determine compensation allowance for their expatriate employees. New York is used as the base city (=100) for the index and all cities are compared against New York. Currency movements are measured against the US dollar. The cost of housing - often the biggest expense for expats - plays an important part in determining where cities are ranked.

Data is not always comparable over years (money fluctuations in 2010 and 2011).

2.07 [7] Remuneration in services professions

UBS Prices and Earnings 2018

National sources

Figures are estimates remuneration paid in major cities. Gross annual income including possible supplementary benefits, such as bonuses, vacation pay, meal or housing allowances, or family assistance. Product Manager: manager in pharmaceutical, chemical or food industry, about five years of experience, tertiary educational degree, middle management, approximate age and status: 35, married. Primary school teacher: teaching for about 10 years in government-operated schools, approximate age and status: 35, married, two children. Secretary/Personal Assistant: secretary of a department manager in an industrial firm, at least five years of experience; knowledge of PCs and one foreign language, approximate age and status: 25, single. Call center agent: trained agent at an inbound call/service center in the telecommunications or technology sector, approximate age and status: 25, single. Nurse: Completed apprenticeship or studies, at least 10 years of experience, approx. age and status: 35, married, two children. Sales Assistant: Sales in ladies' apparel at a large department store, specialized training in sales, several years of experience, approx. age and status: 25, single.

2.08 [4] Remuneration of management

HCM International Ltd, April 2019

National sources

Total remuneration: including annual base salary, annual short-term incentive bonus and long term incentive. Based on companies having a minimal turnover of US\$ 250 million. Chief Executive Officer: directs all company's operations, including sales, marketing, manufacturing and support function; coordinates and provides guidance for the development and implementation of business strategies; optimizes market potential; provides long-term vision and leadership; identifies growth opportunities; assures organizational efficiency of the operations; builds long-term partnership with key accounts. Estonia: break in series in 2011 (change of source, data for earlier years are not comparable).

2.09 Effective personal income tax rate

PricewaterhouseCoopers, Resource Tax Manager

This criterion is based on the GDP per capita 2018 figures. Amount of personal income tax (including social security paid by the employee) that an individual married + 1 child with this level of earnings would expect to pay in 2018.

The taxes for Canada, Switzerland and the US are an average for the respective provinces, cantons and states.

India: in case, where the number of employees in the establishment exceeds 20 and an employee's monthly salary is less than INR 6,500.--, he would have to contribute to Provident Fund 12% of basic salary. The employer also contributes to an equal amount to Provident Fund. As a consequence, if we assume that the number of employees is less than 20, no social security contributions would be due.

The differences against last year's data can generally be explained by differences in base GDP/capita, and the changes in legislation for some countries.

2.11 Exposure to particle pollution

OECD (2020), Air quality and health: Exposure to PM2.5 fine particles - countries and regions, OECD Environment Statistics (database)

Particle pollution, also called particulate matter or PM, is a mixture of solids and liquid droplets floating in the air. Some particles are released directly from a specific source, while others form in complicated chemical reactions in the atmosphere. Particles less than 10 micrometers in diameter pose the greatest problems, because they can get deep into lungs and even the bloodstream. Cyprus: includes PM2.5 and PM10.

Factor 3: Readiness

3.01 Labor force growth

OECD (2020), Main Economic Indicators - complete database

National sources

Estimates for 2019. Austria: break in series in 2008. Belgium: untill Q3 for 2018. Brazil: break in series in 2014. China and Saudi Arabia: estimate calculated by the World Competitiveness Center based on employment and unemployment rate for 2018. Denmark: break in series in 2009. Lithuania: break in series 2011 - census revised labor force figure downwards by 10% (emigration to EU over past decade). Latvia: break in series in 2012. Malaysia: break in series in 2010. Portugal: methodological change in 2011. Romania: for 2018 - third quarter. Spain: break in series in 2005.

3.07 Graduates in Sciences

OECD Education at a Glance 2020

UNESCO

National sources

Share of graduates in Natural Sciences; Mathematics and Statistics; Information and Communication technologies; Engineering, manufacturing and construction. In tertiary education (ISCED2011 levels 5 to 8), both sexes (%). Philippines: Academic Year 2017-2018 data. Japan: Data on information and communication technologies are included in other fields.

3.11 Student mobility inbound

UNESCO <http://stats.uis.unesco.org>

International mobile students (men and women) from abroad studying in a given country (in tertiary education). Data can refer to the school or financial year prior or after the reference year.

3.12 [2] Educational assessment - PISA

PISA 2015 (OECD)

<http://www.oecd.org/pisa/>

The OECD's Programme for International Student Assessment (PISA) is a regular survey of 15-year olds which assesses aspects of their preparedness for adult life. Mathematical literacy: an individual's capacity to identify and understand the role that mathematics plays in the world, to make well-founded judgments and to use and engage with mathematics in ways that meet the needs of that individual's life as a constructive, concerned and reflective citizen. Scientific literacy: an individual's scientific knowledge and use of that knowledge to identify questions, to acquire new knowledge, to explain scientific phenomena, and to draw evidence based conclusions about science-related issues, understanding of the characteristic features of science as a form of human knowledge and enquiry, awareness of how science and technology shape our material, intellectual, and cultural environments, and willingness to engage in science-related issues, and with the ideas of science, as a reflective citizen. Cyprus: relates to the southern part of the Island. Argentina, Kazakhstan and Malaysia: Coverage is too small to ensure comparability.

About the Institute for Management Development (IMD)

IMD is an independent academic institution with Swiss roots and global reach, founded almost 75 years ago by business leaders for business leaders. Since its creation, IMD has been a pioneering force in developing leaders who transform organizations and contribute to society.

Based in Lausanne (Switzerland) and Singapore, IMD has been ranked in the Top 3 of the FT's annual Executive Education Global Ranking for the last nine consecutive years and in the top five for 17 consecutive years. Our MBA and EMBA programs have repeatedly been singled out among the best in Europe and the world.

We believe that this consistency at the forefront of our industry is grounded in IMD's unique approach to creating "Real Learning. Real Impact". Led by an expert and diverse faculty, we strive to be the trusted learning partner of choice for ambitious individuals and organizations worldwide. Challenging what is and inspiring what could be.

www.imd.org

