# DIGITALES ARCHIV

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

#### **Periodical Part**

IMD world talent ranking / IMD ; IMD World Competiveness Center ; 2018

#### **Provided in Cooperation with:**

International Institute for Management Development (IMD), Lausanne

Reference: IMD world talent ranking / IMD; IMD World Competiveness Center; 2018 (2018).

This Version is available at: http://hdl.handle.net/11159/2986

#### Kontakt/Contact

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

#### 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://savearchive.zbw.eu/termsofuse

#### Terms of use:

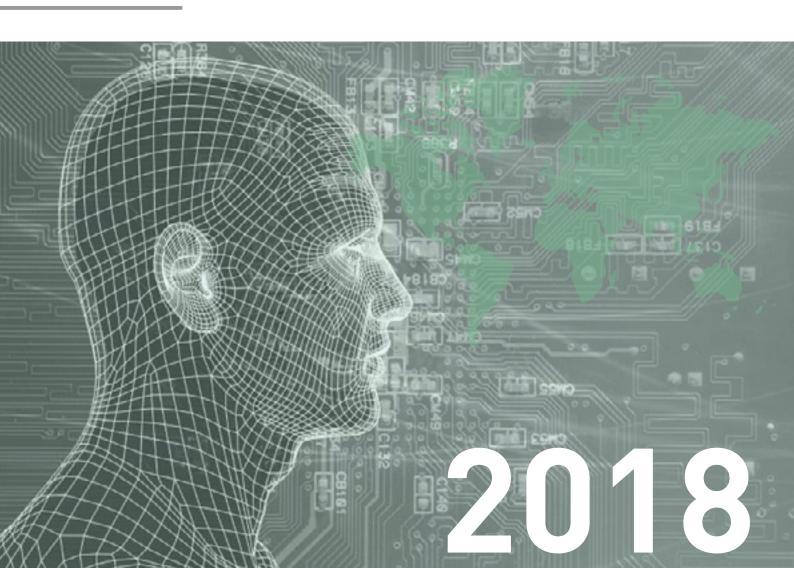
This document may be saved and copied for your personal and scholarly purposes. You are not to copy it for public or commercial purposes, to exhibit the document in public, to perform, distribute or otherwise use the document in public. If the document is made available under a Creative Commons Licence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







# TALENT RANKING



IMD WORLD

**TALENT** 

RANKING

2018





#### November 2018

#### **IMD WORLD TALENT RANKING 2018**

Copyright © 2018 IMD: Institute for Management Development 23, Ch. de Bellerive P.O. Box 915 CH-1001 Lausanne Switzerland

Tel: +41 21 618 02 51 Fax: +41 21 618 02 04

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

The IMD World Competitiveness Center is pleased to present its 2018 *IMD World Talent Ranking*. Since 2014, this publication assesses how the 63 economies we study develop, attract and retain highly-skilled professionals.

Cultivating a skilled and educated workforce is crucial to strengthening competitiveness and achieving long-term prosperity, particularly in the current dynamic landscape where artificial intelligence, robotics and other new technologies constantly redefine the challenges that governments, businesses and society in general will have to face in the future.

The performance of the countries in the *IMD World Talent Ranking* relies on three factors. The "Investment and Development" factor measures the resources committed to cultivate homegrown human capital. The "Appeal" factor evaluates the extent to which a country attracts local and foreign talent. Finally, the "Readiness" factor quantifies the quality of the skills and competencies that are available in a country.

The 2018 edition of the *IMD World Talent Ranking* confirms the trends we identified in the past: the most successful countries in talent competitiveness are mainly European, mid-size economies, with high levels of investment in education and quality of life. Furthermore, results suggest that the wealth of the country is not the only significant driver of talent competitiveness. In fact, indicators of social progress as well as the quality of institutions (e.g., adherence to the rule of law) are a strong foundation for attracting highly skilled professionals from the international talent pool.

As for all our publications, the *IMD World Talent Ranking*, depends heavily upon the support we so generously receive from many stakeholders. Our *Partner Institutes*, the *IMD Alumni* community and our *Panel of Experts* from all the countries offer data and insights that are crucial for completing such an undertaking. We are most grateful for their support.

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 2018

| Preface                       |               |                 |                |
|-------------------------------|---------------|-----------------|----------------|
|                               |               |                 |                |
|                               |               | development     |                |
|                               |               |                 |                |
|                               |               |                 |                |
|                               |               |                 |                |
|                               |               |                 |                |
|                               |               |                 |                |
| Factor 1: Investment and d    | evelopment    |                 | 29             |
| Factor 2: Appeal              |               |                 | 30             |
| Factor 3: Readiness           |               |                 | 3 <sup>,</sup> |
| Factor rankings               |               |                 |                |
| Talent country profiles       |               |                 | 3              |
| The IMD World Talent Rankin   | g methodology |                 | 100            |
| Notes and sources             |               |                 | 104            |
|                               |               |                 |                |
| World Talent Country Profiles | •             |                 |                |
| Argentina                     | 36            | Luxembourg      | 69             |
| Australia                     | 37            | Malaysia        | 70             |
| Austria                       | 38            | Mexico          | 71             |
| Belgium                       | 39            | Mongolia        | 72             |
| Brazil                        | 40            | Netherlands     | 73             |
| Bulgaria                      | 41            | New Zealand     | 74             |
| Canada                        | 42            | Norway          | 75             |
| Chile                         | 43            | Peru            | 76             |
| China Mainland                | 44            | Philippines     | 77             |
| Colombia                      | 45            | Poland          | 78             |
| Croatia                       | 46            | Portugal        | 79             |
| Cyprus                        |               | Qatar           |                |
| Czech Republic                |               | Romania         |                |
| Denmark                       |               | Russia          |                |
| Estonia                       |               | Saudi Arabia    |                |
| Finland                       |               | Singapore       |                |
| France                        |               | Slovak Republic |                |
| Germany                       |               | Slovenia        |                |
| Greece                        |               | South Africa    |                |
| Hong Kong SAR                 |               | Spain           |                |
| Hungary                       |               | Sweden          |                |
| Iceland                       |               | Switzerland     |                |
| India                         |               | Taiwan          |                |
| Indonesia                     |               | Thailand        |                |
| Ireland                       |               | Turkey          |                |
| Israel                        |               | UAE             |                |
| Italy                         |               | Ukraine         |                |
| Japan                         |               | United Kingdom  |                |
| Jordan                        |               | USA             |                |
| Kazakhstan                    |               | Venezuela       | 98             |
| Korea Republic                |               |                 |                |
| Latvia                        | ნ/            |                 |                |

# The IMD World Competitiveness Center

For thirty years, the IMD World Competitiveness Center has pioneered research on how countries 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 55 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
Maëlle Desard Marketing Specialist

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   |  |
|---|--|
| Economic Development and Institutions Research Program  | Dr. Alicia Caballero, Dean   |
| Faculty of Economic Sciences                            | Dr. Marcelo F. Resico, Director  |
| Catholic University of Argentina, Buenos Aires          | Mr. Santiago Varela, Research Assistant  |
| http://www.uca.edu.ar                                   |  |
| Australia   |  |
| CEDA - Committee for Economic Development of Australia, | Jarrod Ball, Chief Economist   |
| Melbourne   | Roxanne Punton, Director, External Affairs   |
| www.ceda.com.au   |  |
| Austria   |  |
| Federation of Austrian Industries, Vienna               | Dr. Christian Helmenstein, Chief Economist   |
| Austrian Institute of Economic Research, Vienna         | Ms. Helena Zwickl  |
| http://www.iv-net.at                                    | Mr. Michael Oliver   |
| Belgium   |  |
| FEB - Federation of Enterprises in Belgium, Brussels    | Ms. Carole Dembour, Economist  |
| www.vbo-feb.be  |  |
| Brazil  |  |
| Fundação Dom Cabral, Innovation and Entrepreneurship    | Carlos Arruda, Professor and Director FDC Innovation and   |
| Center  | Entrepreneurship Center  |
| www.fdc.org.br  | Ana Burcharth, Professor   |
|   | Luana Lott, Researcher   |
| Bulgaria  |  |
| Center for the Study of Democracy, Sofia                | Mr. Ruslan Stefanov, Director, Economic Program  |
| www.csd.bg  | Ms. Daniela Mineva, Research Fellow, Economic Program  |
|   | Mr. Martin Vladimirov, Analyst, Economic Program Dr. Todor Galev, Senior Analyst, Economic Program |
|   | Dr. Todor Galev, Schlor Analyst, Economic Program  |
| Chile   |  |
| Universidad de Chile, Facultad de Economía y Negocios   | Dr. Enrique Manzur, Associate Professor  |
| (FEN) www.fen.uchile.cl                                 | Dr. Sergio Olavarrieta, Vice Dean Dr. Pedro Hidalgo, Associate Professor                           |
| www.ion.doinic.or                                       | Dr. F curo Findingo, Associate F 10103301  |
| China Mainland  |  |
| China Institute for Development Planning, Tsinghua      | Prof. Yang Yongheng, Associate Dean of School of Public  |
| University<br>http://www.tsinghua.edu.cn/               | Policy & Management, Assistant Director of China Institute for Development Planning                |
| http://www.tsinghua.edu.ch/                             | Prof. Wang Yougiang, Executive Director of China Institute   |
|   | for Development Planning   |
|   | Dr. Gong Pu, Research Fellow   |
|   | Mr. Wang Hongshuai, PhD Candidate  |
|   | Mr. Wu Zebang, Research Assistant  |
| Colombia  |  |
| National Planning Department, Bogota                    | Luis Fernando Mejia, Managing Director The National  |
| www.dnp.gov.co  | Department of Planning   |
|   | Juan Sebastian Robledo Botero, Director of Innovation and Business Development                     |
|   | риэшеээ релеюринент  |

| Croatia   |  |
|---|--|
| National Competitiveness Council, Zagreb                | Ms. Jadranka Gable, Advisor  |
| http://www.konkurentnost.hr/                            | Mr. Kresimir Jurlin, PhD, Researcher   |
| Cyprus  |  |
| Economics Research Centre                               | Sofronis Clerides, Professor of Economics  |
| University of Cyprus, Nicosia                           | Nicoletta Pashourtidou, Assistant Director   |
| http://ucy.ac.cy/erc/en/                                | Sofia Andreou, Research Officer  |
| 0 15 15   |  |
| Czech Republic CERGE-EI, Prague                         | Dr. Vilem Semerak  |
| www.cerge-ei.cz   | Dr. Lucia Štefánková   |
|   |  |
| Denmark   |  |
| Confederation of Danish Industry (DI)                   | Mr. Allan Sorensen   |
| http://di.dk/English/Pages/English.aspx                 |  |
| Estonia   |  |
| Estonian Institute of Economic Research, Tallinn        | Ms. Marje Josing, Director   |
| www.ki.ee   | Ms. Ingrid Niklus  |
|   | Mr. Koit Nilson, Researcher  |
| Enterprise Estonia, Tallinn                             | Mr. Tanel Rebane, Director of Development Unit                                       |
|   |  |
| Finland   |  |
| ETLA, The Research Institute of the Finnish Economy,    | Markku Kotilainen  |
| Helsinki<br>www.etla.fi                                 | Ville Kaitila Petri Rouvinen   |
| www.cua.ii  | retii Nouvilleti   |
| France  |  |
| Business France, Paris                                  | Ms. Sylvie Montout, Economist  |
| http://en.businessfrance.fr/                            |  |
| Greece  |  |
| Federation of Industries of Northern Greece, (FING),    | Dr. Christos Georgiou, Director, Research and  |
| Thessaloniki  | Documentation Department   |
|   | Mr. Constantinos Styliaras, Economist, Research and                                  |
|   | Documentation Department   |
| Foundation for Economic and Industrial Research (FEIR/  | Aggelos Tsakanikas, Assistant Professor National Technical                           |
| IOBE), Athens   | University of Athens - Scientific Advisor  |
| ,   | Sophia Stavraki, Research Associate  |
| Hang Kang CAD   |  |
| Hong Kong SAR Hong Kong Trade Development Council       | Mr. Billy Wong, Principal Economist (Greater China)                                  |
| www.hktdc.com   | Ms. Doris Fung, Economist  |
|   |  |
| Hungary   |  |
| ICEG European Center, Budapest                          | Ms. Renata Anna Jaksa, Director  |
| www.icegec.org  | Dr. Oliver Kovacs, Research Fellow   |
| National University of Public Service,                  | Prof. Dr. Magdolna Csath, Research Professor   |
| Competitiveness and Fiscal Stability Research Group,    |  |
| Budapest  |  |
| http://en.uni-nke.hu/                                   |  |
| Iceland   |  |
|   |  |
| icelandic Chamber of Commerce, Reyklavik                | Mr. Konrad S. Gudjonsson, Chief Economist  |
| Icelandic Chamber of Commerce, Reykjavik www.chamber.is | Mr. Konrad S. Gudjonsson, Chief Economist Mr. Isak Einar Runarsson, Economic Analyst |

| National Productivity Council, New Delhi  | Dr. K.P. Sunny, Director & Head (Economic Services)   |
|---|---|
| vww.npcindia.gov.in   | Mr. Rajesh Sund, Deputy Director (Economic Services)<br>Dr. Rajat Sharma, Deputy Director (Economic Services) |
| ndonesia  |   |
| Lembaga Management, Faculty of Economics, University of                                     | Dr. Toto Pranoto, Managing Director   |
| ndonesia, Jakarta   | Dr. Willem Makaliwe, Associate Director of Research &   |
| nttp://www.lmfeui.com/index.php   | Consulting Bayuadi Wibowo, Group Head of Research Division  |
|   | Arza Fadly, Researcher  |
|   | Adam F Amru, Researcher   |
|   | Fabio Ray Jordan, Researcher  |
| NuPMK Consulting, Jakarta   | Ms. Tini Moeis, Managing Director   |
| nttp://nupmk.co.id/   | Mr. Kiki Lekir Daud, Principal Partner  |
|   | Ms. Devi Hamdani, Client Relation Manager   |
| reland  |   |
| DA Ireland, Investment and Development Agency, Dublin www.idaireland.com                    |   |
| srael   |   |
| The Federation of Israeli Chambers of Commerce, Tel-Aviv                                    | Ms. Israela Many, Deputy Managing Director  |
| www.chamber.org.il  | of Economy and Tax<br>Mr. Aviad Toub, Economist   |
|   | Wil. Avida foub, Economist  |
| Japan<br>Mitsubishi Research Institute, Inc., Tokyo   | Dr. Hirotsugu Sakai, Research Director  |
| Research Center for Policy and Economy www.mri.co.jp  | Di. Fill otougu Gunai, Medeuron Director  |
| Jordan  | Mr. Decem Kopen Director of Delicine and Studies  |
| Ministry of Planning and International Cooperation, Amman http://www.mop.gov.jo/            | Mr. Basem Kanan, Director of Policies and Studies Department  |
| ntp://www.mop.gov.jo/   | Mrs. Ghada Issa   |
|   | Mr.Omar Alshriadeh  |
|   | Mr. Moh'd Al-Asakreh  |
|   | Mr. Thamer Masarweh   |
| Kazakhstan  |   |
| Economic Research Institute, JSC of the Ministry of National Economy, Astana www.economy.kz | Seitzhan Yerzhanov, Acting Chairman of the Board<br>Shakharbanu Zhakupova, Deputy Chairman of the Board       |
| •   | Center for Strategic Development:   |
|   | Bakytgul Khambar, Director  |
|   | Bayan Abdrakhmanova, Deputy Director  |
|   | Sholpan Ibraimova, Leading Expert   |
|   | Natalya Novokshanova, Leading Expert<br>Aidana Terlikbayeva, Senior Expert                                    |
|   | Nauryz Baizakov, Senior Expert  |
| Korea, Rep.   |   |
| Korea Institute for International Economic Policy (KIEP)                                    | Dr. Heungchong Kim, Senior Research Fellow  |
| nttp://www.kiep.go.kr/eng/  | Ms. Nayoun Park, Researcher   |
| _atvia  |   |
| Jniversity of Latvia Centre for European and Transition Studies, LU CETS, Riga              | Mrs. Zane Zeibote   |

| Lithuania   |  |
|---|--|
| Enterprise Lithuania, Vilnius www.enterpriselithuania.com   | Ms. Renata Nedzinskienė, Senior Project Manager  |
| Luxembourg Chamber of Commerce of the Grand Duchy of Luxembourg www.cc.lu   | Mr. Marc Wagener, Member of the Managing Board<br>Mr. Jean-Baptiste Nivet, Economist<br>Ms. Laure Demezet, Economist   |
| Malaysia Malaysia Productivity Corporation (MPC), Petaling Jaya, Selangor www.mpc.gov.my  | Dato' Mohd Razali Hussain, Director General Dato' Abdul Latif Abu Seman, Deputy Director General Datin Zainon Bakar, Director Productivity & Competitiveness Development Division  |
| Mexico Strategic Studies Center for Competitiveness, Saltillo www.ceec.edu.mx   | M.C. Carlos Maroto Cabrera, General Director<br>M.S. Carlos Maroto Espinosa, Project & Relationship<br>Manager   |
| Mongolia Economic Policy and Competitiveness Research Center, Ulaanbaatar www.ecrc.mn   | Mr. Boldbaatar Tserenpuntsag, Founder Mr.Tsagaan Puntsag, Founder Ms.Lakshmi Boojoo, Director General Ms.Odonchimeg Ikhbayar, Deputy Director Mr. Ganbat Chuluun, Research Economist Ms.Tungalag Erdenebat, Research Economist Mr. Zolbayar Enkhbaatar, Research Economist Mr. Otgon-Erdene Khandaa, Research Economist Ms.Yesunchuluu Khuderchuluu, Research Economist Ms. Khulan Jamiyandorj, Research Economist |
| Netherlands Confederation of Netherlands Industry and Employers (VNO-NCW), The Hague www.vno-ncw.nl   | Mr. Thomas Grosfeld<br>Mr. Tim Zandbergen  |
| New Zealand Kerridge & Partners, Auckland https://www.kerridgepartners.com/   | Mr. Peter Kerridge, Partner  |
| Peru CENTRUM Católica Graduate Business School, Lima http://centrum.pucp.edu.pe   | Mr. Percy Marquina, General Director<br>Mr. Luis Del Carpio, Center of Competitiveness Director<br>Mr. Victor Fajardo, Economist   |
| Philippines Asian Institute of Management Rizalino S. Navarro Policy Center for Competitiveness, Makati City http://beta.aim.edu/research-centers/rizalino-s-navarro- policy-center-competitiveness | Jamil Paolo S. Francisco, PhD, Executive Director<br>Tristan A. Canare, Program Manager and Senior Economist<br>Emmanuel M. Garcia, Economist<br>Christopher Ed C. Caboverde, Research Associate   |
| Poland Warsaw School of Economics, Warsaw   | Dr. Bogdan A. Radomski, Associate Professor of Finance   |
| http://www.sgh.waw.pl/en/ Portugal  | Dr. Marcin Nowakowski, Professor of International Business and Prorector   |

| Qatar  |  |
|--|--|
| Ministry of Development Planning and Statistics, Department of Environmental and Economic Development Planning, Doha www.gsdp.gov.qa | Dr. Issa Ju'ma Ibrahim, economic expert<br>Mrs. Hissa Alassiry, acting head of Economic Development<br>Section   |
| Romania CIT-IRECSON Center of Technological Information, Bucharest www.cit-irecson.ro  | Mr. Bogdan Ciocanel, PhD, Director<br>Mr. Dan Grigore, Economist   |
| Russia Moscow Business School http://mbschool.ru/  | Ms. Elina Pechonova  |
| Saudi Arabia SAGIA, Saudi Arabian General Investment Authority, Riyadh https://www.sagia.gov.sa/en/                                  | Dr. Eiman AlMutairi, Head of National Competitiveness<br>Center<br>Salman M. AlTukhaifi, Manager of Analytical Department<br>Nawaf M. AlSalloum, 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 The F.A Hayek Foundation, Bratislava www.hayek.skv   | Mr. Martin Lindak, Analyst   |
| Slovenia<br>Institute for Economic Research, Ljubljana<br>http://www.ier.si/   | Mr. Peter Stanovnik, PhD, Associate Professor<br>Ms. Sonja Ursic, M.A.   |
| University of Ljubljana, Faculty of Economics http://www.ef.uni-lj.si/en   | Ms. Mateja Drnovsek, PhD, Full Professor<br>Mr. Ales Vahcic, PhD, Full Professor   |
| South Africa Productivity SA, Midrand www.productivitysa.co.za   | Mr. Mothunye Mothiba, CEO<br>Dr. Leroi Raputsoane, Chief Economist<br>Ms. Juliet Sebolelo Mashabela, Economist   |
| Spain Spanish Confederation of Employers, Madrid www.ceoe.es   | Ms. Edita Pereira, Head of Economic Research Unit<br>Ms. Paloma Blanco, Economic Research Unit   |
| Taiwan National Development Council, Taipei www.ndc.gov.tw   | Dr. Chiou, Jiunn-Rong, Deputy Minister Ms. Wu, Ming Huei, Director of Economic Development Department Ms. Lee, Cho-Jin, Senior Economist                 |
| 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                                |

| Turkey TUSIAD, Turkish Industry and Business Association Economic Research Department http://tusiad.org/en/ | Zümrüt İmamoğlu, Chief Economist<br>Elçin Tüzel, Expert<br>İsmet Tosunoğlu, Junior Expert                            |
|---|--|
| United Arab Emirates  |  |
| Federal Competitiveness & Statistics Authority (FCSA),  |  |
| Dubai   |  |
| Ukraine   |  |
| International Management Institute (MIM-Kyiv)   | Dr. Iryna Tykhomyrova, President   |
| www.mim.kiev.ua   | Dr. Volodymyr Danko, Professor   |
|   | Ms. Oksana Kukuruza, External Relations Directorr  |
| Venezuela   |  |
| National Council to Investment Promotion (CONAPRI) www.conapri.org  | Mr. Eduardo Porcarelli, Executive Director<br>Ms. Litsay Guerrero A, Economic Affairs & Investor Services<br>Manager |

# IMD Talent ranking 2018

### Trends and insights in talent development

Dr. Arturo Bris Director Dr. Christos Cabolis Chief Economist Dr. José Caballero Senior Economist Marco Pistis Research Specialist

#### I. Introduction

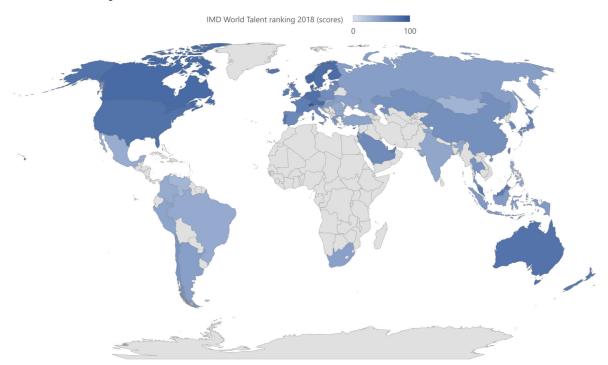
The talent ranking captures the efforts invested in developing local talent while being able to attract overseas staff. Ultimately, it describes the quality of the talent pool available in an economy. To do so, we employ three factors. The Investment and Development factor measures the resources committed to cultivate homegrown human capital. The Appeal factor evaluates the extent to which a country attracts foreign talent and retains professionals from the local talent pool. Finally, the Readiness factor quantifies the quality of the skills and competencies available in the country.

Switzerland in the 1st and Denmark in the 2nd position firmly lead the ranking for the fifth consecutive year, followed by Norway, Austria and the Netherlands. Norway joins the top three, advancing four positions with respect to last year, thanks to an improvement in indicators such as public expenditure on education and the readiness of its talent pool. Canada, Finland, Sweden, Luxembourg and Germany complete the top 10.

The 2018 edition of the *IMD World Talent Ranking* confirms the trends we identified in the past: the most successful countries in talent competitiveness are mainly European, mid-size economies, with high levels of investments in education and quality of life. Furthermore, results suggest that the wealth of the country is not the only significant driver of talent competitiveness. In fact, indicators of social progress as well as the quality of institutions (e.g., adherence to the rule of law) are a strong foundation for attracting highly skilled professionals from the international talent pool.

In the following sections, we first provide a review of the rankings for 2018 along with an analysis of the talent competitiveness trends at sub-regional level. We then explore the association between the rankings and variables related to the decision of talent to remain or move to another country.

Figure 1. World talent rankings



Source IMD World Competitiveness Center (2018)

#### 2. Regional trends

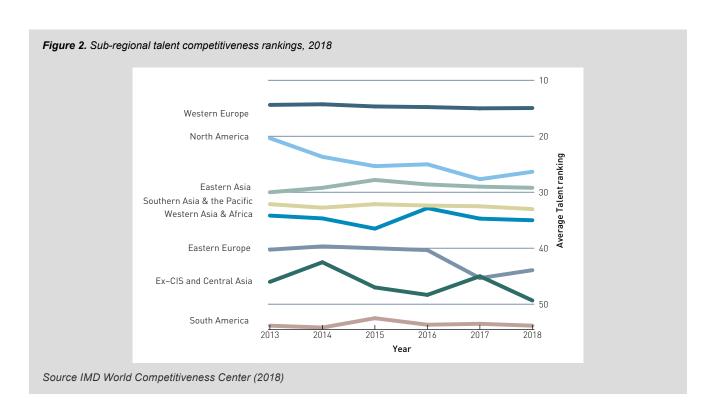
The IMD World Talent ranking studies 63 economies most of which have a high or middle level of income per capita. In 2018, the clear majority of countries (48) maintained or experienced an improvement in their capacity to develop, retain and attract highly-skilled individuals while 15 of them exhibit a decline, with respect to last year.

To identify important trends around the world, Figure 2 presents the evolution of the overall rankings at a subregional level for the last six years. The list of countries in each sub-region can be found in Appendix 1. Figure 2 shows that Western Europe continues to lead the IMD World Talent Rankings enjoying, on average, nine Western European economies in the top ten positions. North America follows despite Mexico's lower ranks across factors. Eastern Asian economies rank third. The lowest ranking sub-regions are

Ex-CIS and Central Asia, and South America. Appendix 2 presents the 2018 factor-level talent competitiveness ranking at the sub-regional level. In what follows, we discuss in detail the talent competitiveness trends within each sub-region.

#### Western Europe

Western Europe's lead in talent competitiveness is driven by Switzerland and the Nordic economies. Switzerland tops the talent ranking for the fifth consecutive year confirming its role as an important global talent hub. It ranks 4<sup>th</sup> in Investment and Development, and 1<sup>st</sup> in both the Appeal and Readiness factors. Denmark ranks 2<sup>nd</sup> in the overall ranking. Norway takes 3<sup>rd</sup> place, Finland and Sweden come 7<sup>th</sup> and 8<sup>th</sup> respectively. Iceland, the only Nordic country ranked outside the top 10, is 16<sup>th</sup>.



At the factor level, all Nordic countries have their best performance in Investment and Development. Here they are all highly ranked in total public expenditure. Norway, Finland and Denmark rank 2<sup>nd</sup>, 6<sup>th</sup> and 7<sup>th</sup> (respectively) in health infrastructure. In the employee training indicator Denmark is 1<sup>st</sup> and Norway reaches 5<sup>th</sup> place. In the Appeal factor, most Nordic countries are perceived to have high quality of life and to be successful in attracting and retaining talent. Nevertheless, high cost of living and high personal income tax rate may constrain the Nordics from further strengthening their talent pools. In Readiness, the region ranks high in the availability of finance and language skills. Denmark, Norway and Finland perform well in the effectiveness of the education system in general, and specifically in management education and the emphasis given to science in schools.

Austria and the Netherlands rank 4<sup>th</sup> and 5<sup>th</sup> in overall talent. Austria performs strongly in Investment and Development, and Appeal. In Readiness, the country ranks relatively low

(18th) mainly because of a slowdown in labor force growth and availability of skilled labor. The Netherlands continues to perform rather low (15th) in Investment and Development. In Appeal (10th), there is slight downturn in the worker motivation, brain drain and the importance of attracting and retaining talent rankings. In Readiness, the Netherlands ranks the highest (3rd) because of the effectiveness of its educational system in developing the talent/skills necessary for its economy to thrive.

Luxembourg (9th) and Germany (10th) are also leading talent hubs in Western Europe. Luxembourg performs well in Appeal and Readiness, in which the country's improvement originated this year, despite a decline in Investment and Development. Germany's strengths are in Investment and Development, and Appeal. In the former, the implementation of apprenticeship schemes and the prioritization of employee training drive the talent development aspects of the country, while the quality of life and the prioritization of attracting and retaining talent reinforces the country's appeal.

#### North America

Canada moves into the top of the ranking as a result in small improvements in all three factors. These advancements arise from an upturn in executive perceptions about prioritizing talent retention, increasing worker motivation while reducing the impact of brain drain on the economy, and strengthening the effectiveness of its educational system. The USA also improves in the overall talent ranking moving up to 12th place from 16th because of slight improvements in Investment and Development and Appeal factors. At the indicator level, there are more positive perceptions about the prioritization of employee training and worker motivation, the availability of skilled workforce and the effectiveness of the educational system. However, there is an increase in negative executive views in terms of the quality of life, the country's attractiveness for overseas highly skilled staff and the adequate protection of personal security and private property rights.

Mexico's drop to the bottom five of the ranking (61st) originates in an across-the-board decline. The components of the Investment and Development factor show some worsening signs. The total public expenditure in education declines to 54th (from 49th). Also, business executives' negative perceptions about the implementation of apprenticeships and the private sector's prioritization of employee training severely increase, dropping from 31st to 45th and from 36th to 54th, respectively. The drop in the Appeal factor (from 33rd to 43rd) is mainly due to an increase in negative perceptions about the level of worker motivation (41st), the existence of brain drain (44th) and the country's quality of life (49th). This factor also includes some of Mexico's main weaknesses, the prioritization of attracting and retaining talents (60th) and the protection of personal security and private property rights (60th). There is also a negative turn in executives' perception about several elements of Readiness including the availability of skilled labor (41st from 36th) and finance skills (56th from 46th).

#### Eastern Asia

Hong Kong ranks the highest in this sub-region (18th) despite declining six places. Its talent strengths are in appealing to overseas highly skilled professionals which enables it to sustain its top-tier talent pool, however, its gradual decline is worrying for the future, especially considering that it lags behind in terms of public investments in education.

Despite a decline in Investment and Development, and Appeal, Japan improves slightly (31st to 29th) in the overall talent ranking. This is because of boosts to the availability of skilled labor and the effectiveness of its educational system in providing the skills and competencies needed for the success of its economy.

Taiwan drops from the 23<sup>rd</sup> to 27<sup>th</sup> rank due to its performance in the prioritization of the attraction/retaining talent and its attractiveness for foreign highly skilled personnel, as well as measures pertaining to the availability of skills and competencies, and the effectiveness of the country's educational system.

Korea's advancement from 39<sup>th</sup> to 33<sup>rd</sup> stems partly from increased government expenditure on education (per student), and improvements in the implementation of apprenticeships programs and employee training, and the reduction of the impact of brain drain in the economy. In addition, the country performs well in the availability of senior executives with significant international experience and language skills.

China (39<sup>th</sup>) places in the second half of the ranking, because of its difficulties in attracting foreign skilled workers paired with a level of public expenditure in education that is below the average of other advanced economies.

#### Southern Asia and The Pacific

Singapore (13th) and Malaysia (22nd) achieve the best placements in terms of talent competitiveness. Compared to last year, Singapore keeps the same position in the ranking and Malaysia moves up by six. Singapore continues to excel in appealing professionals from abroad to sustain their toptier talent pool but lags behind in terms of public investments in education. Conversely, Malaysia's progress in the ranking is rooted in investments in education to develop its homegrown skilled workforce, in addition to improved perceptions about the quality of the talent pool available in the country.

Australia and New Zealand reaffirm their role of talent-appealing hubs, showing high levels of readiness in their talent pool and offering attractive quality of life for international professionals. Both countries moved by five positions compared to last year, however Australia advances from the 19<sup>th</sup> to the 14<sup>th</sup> position while New Zealand declines from the 15<sup>th</sup> to the 20<sup>th</sup> place.

Indonesia (45th) and the Philippines (55th) show opposite trends between 2017 and 2018. Indonesia advances by two places, following improvements in several indicators related to investment in education. On the other hand, the Philippines experiences a ten-position decline from last year, due to a sharp drop in the Readiness factor (37th, from 11th in 2017). This change is driven by a marked deterioration in every criterion re lated to the business community's perceptions on the quality of education, as well as a decline in labor force.

#### Western Asia and Africa

In this sub-region, Israel (19th), Qatar(24th) and the UAE (26th) stay in the first half of the ranking. Israel moves one position up with respect to last year, thanks to improvements in attracting and retaining talent and in perceptions about the quality of managers available in the country. On the other hand, compared to 2017, the UAE and Qatar lose one and two positions respectively. In the former case, the decline is mainly driven by a worsening of indicators related to investment in education while in the latter, it is led by a slowdown in labor force growth.

Saudi Arabia (34th), Jordan (41st) and Turkey (51st) perform below average compared to the countries included in the analysis. Saudi Arabia experiences a drop of eight places from last year, mostly due to a sharp decline in the Readiness factor (38th from 26th in 2017). This result is explained by rising concerns on the educational system and quality of the available talent pool, in addition to the partial decrease in labor force growth. Conversely, Jordan moves up by eight positions compared to 2017, thanks to the increase of investment in talent development and the enhancement of the business community's perceptions about the quality of the education system. Turkey also shows a two-position improvement from last year, supported by progress in both the Appeal (50th) and Readiness (48th) factors.

South Africa ranks (50<sup>th</sup>) in the overall talent ranking, 56<sup>th</sup> in Investment and Development (up from 57<sup>th</sup>), 37<sup>th</sup> in Appeal (slight decrease from 35<sup>th</sup>) and 51<sup>st</sup> in Readiness (an increase from 52<sup>nd</sup>). Its main weaknesses are in the pupil-teacher ratio in both primary (62<sup>nd</sup>) and secondary education (61<sup>st</sup>), implementation of apprenticeships (61<sup>st</sup>), worker motivation (60<sup>th</sup>), remuneration of management (58<sup>th</sup>) and the availability of skilled labor (58<sup>th</sup>). Other indicators that may also help us understand the country's low ranks are health infrastructure (50<sup>th</sup>), brain drain (55<sup>th</sup>) and personal security and private property rights (52<sup>nd</sup>).

#### Eastern-Europe

Except for Estonia (28th) and Slovenia (30th), Eastern European countries generally place in the lower part of the ranking. Data from low ranking Eastern European economies highlight the overall trend that talent competitive countries benefit from high levels of quality of life and availability of skilled labor.

Estonia improves slightly this year. It ranks 16<sup>th</sup> in Investment and Development, 33<sup>rd</sup> in Appeal and 31<sup>st</sup> in Readiness. It progresses five ranks in the Appeal factor mainly due to improvements in worker motivation, the impact of brain drain and the country's attractiveness for highly-skilled foreign personnel. In the Readiness factor, Estonia also moves up (four ranks) because of an upturn in positive perceptions about the availability of finance skills, executives with international experience, competent senior managers and language skills, and the effectiveness of the education system.

Slovenia moves from 37th to 30th place. It ranks 27th in Investment and Development, 42nd in Appeal and 29th in Readiness. The country's ranking improvements arise from more positive executive opinions about the private sector's prioritization of attracting and retaining talent, quality of life, and availability of senior managers with international experience and language skills. There are some worrying signs for the future development of the country's talent pool. It ranks 59th in the implementation of apprenticeships and 56th in the country's attractiveness for highly-skilled overseas staff.

Elsewhere in the region other countries improve to different degrees: the Czech Republic ranks 37th, Ukraine 48th, Hungary 49th and Croatia 54th. Ukraine's strong performance in moving out of the bottom five originates mainly in gains in the implementation of apprenticeships, emphasis on employee training and the effectiveness of its health infrastructure. In addition, Ukraine improves in the prioritization of attracting and retaining talent, availability of a skilled labor force, financial skills and competent senior managers.

Conversely, Lithuania (33<sup>rd</sup> to 36<sup>th</sup>) and Poland (34<sup>th</sup> to 38<sup>th</sup>) decline.

At the lower end of the ranking, Romania (56th), Bulgaria (57th) and the Slovak Republic (59th) all decline in the Investment and Development factor. In the Appeal factor the Slovak Republic and Bulgaria drop and Romania rises. While Bulgaria and Romania slightly improve in the Readiness factor, the Slovak Republic drops several ranks because of a deterioration across all components of the factor.

#### **Ex-CIS and Central Asia**

Kazakhstan drops from 30th to 40th due to a decrease in total public expenditure on education, and the deterioration of perceptions of apprenticeships, employee training and health infrastructure. There are also declines to different degrees across all the indicators of Appeal with the greater impact in the prioritization of attracting and retaining talents and worker motivation. Similarly, all components of Readiness decline, with steep decreases in all measures of skills available and the effectiveness of the educational system.

Russia declines from 43<sup>rd</sup> to 46<sup>th</sup> due to its poor performance in all factors of talent competitiveness. The total public expenditure on education, and the quality of education (measured by pupil/teacher ratio) decline. The implementation of apprenticeship schemes and worker motivation are an issue, and the attractiveness of the country for foreign highly skilled talent also declines. In Readiness, Russia's indicators of the skills available and the effectiveness of its educational system decrease.

Mongolia remains at 62<sup>nd</sup> in the overall ranking but improves its total public expenditure on education, the emphasis given to the teaching of sciences in schools and the availability of language skills.

#### **South America**

Several South American countries rank at the bottom of the 2018 IMD World Talent Ranking. These economies struggle in developing and retaining talent and are characterized by low levels of quality of life and reduced availability of skilled labor. Brazil (58th), Colombia (60th) and Venezuela (63rd) all share issues related to brain drain matched with a relatively low level of investment in education.

Brazil's drop from 52<sup>nd</sup> to 58<sup>th</sup> in the overall talent ranking is mainly due to its performance in the Investment and Development and Appeal factors. In the Investment and Development factor, public expenditure on education, the quality of primary and secondary education (measured by a pupil/teacher ratio), implementation of apprenticeships and prioritization of employee training all drop, albeit to different degrees. Similarly, Brazil's ranking in the Appeal factor has been negatively affected by a decline in attracting and retaining talent (48<sup>th</sup>), worker motivation (50<sup>th</sup>), quality of life (58<sup>th</sup>), and by personal security and private property rights (59<sup>th</sup>). The Readiness factor includes some of Brazil's main weaknesses; the educational system (62<sup>nd</sup>), emphasis on science in schools (63<sup>rd</sup>) and availability of language skills (63<sup>rd</sup>).

Colombia's decline in the ranking is due to an increasing cost-of-living, the deterioration of labor force growth, and student mobility (inbound). In addition, there is an increase in negative perceptions about the implementation of apprenticeships, prioritization of employee training, the impact of brain drain, the emphasis given to science in schools and the effectiveness of management education.

Elsewhere in the region there are improvements: Argentina moves to 47<sup>th</sup> (from 50<sup>th</sup>), Chile to 43<sup>rd</sup> (from 44<sup>th</sup>) and Peru to 52<sup>nd</sup> (from 57<sup>th</sup>). Argentina shows performance gains in all three factors; progressing in Investment and Development from 55<sup>th</sup> to 53<sup>rd</sup>, in Appeal from 53<sup>rd</sup> to 48<sup>th</sup> and in Readiness

from 46<sup>th</sup> to 44<sup>th</sup>. Despite a slowdown in Investment and Development (from 53<sup>rd</sup> to 55<sup>th</sup>) and Appeal (from 27<sup>th</sup> to 30<sup>th</sup>), a strong performance in Readiness (from 43<sup>rd</sup> to 35<sup>th</sup>) drives Chile's slight improvement in the overall ranking (from 44<sup>th</sup> to 43<sup>rd</sup>). The decline in Appeal results primarily from an increase in cost of living and the impact of brain drain in the economy. Peru performs well in the overall talent ranking mainly as a result of improvements in government expenditure on education (per student), the reduction of the impact of brain drain, labor force growth, the availability of executives with significant international experience, and competent senior managers.

Thus far, the analysis outlines the strengths and areas for improvement in different economies. Can we establish a relationship between the IMD World Talent Ranking and different criteria employed? This is what we tackle in the next section.

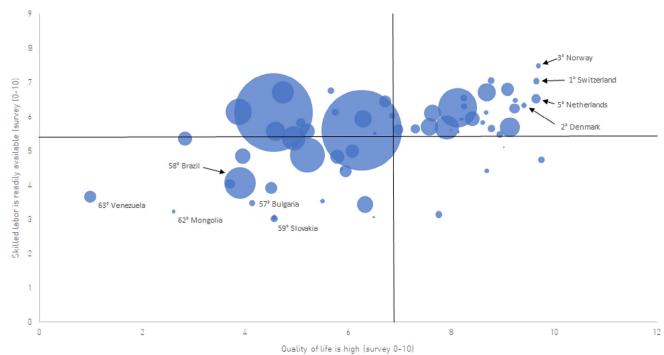
#### 3. Talent insights

Studying the factors that varied the most from 2017 as well as the change in the ranking positions of different countries in the previous section we have noted that there are two criteria that seem to be important in performing well in the IMD World Talent Rankings: quality of life and the presence of skilled labor.

Figure 3 illustrates the relationship between these variables, and the population of each country. In the horizontal axis we account for a country's quality of life. The data comes from responses we receive from upper- and mid-level managers who participate in the IMD Executive Opinion Survey. In the vertical axis we present the response of executives to the

question "Skilled labor is readily available" in your country. Finally, the scale of the bubble indicates a country's size of the population. Figure 3 shows that top performers in talent competitiveness are small and medium economies, with European countries dominating the rest of the sample. It also outlines that countries that exhibit high level of quality of life alongside availability of skilled labor, exhibit higher ranks in talent competitiveness.

Figure 3. Quality of life, availability of highly skilled workers and country's population size

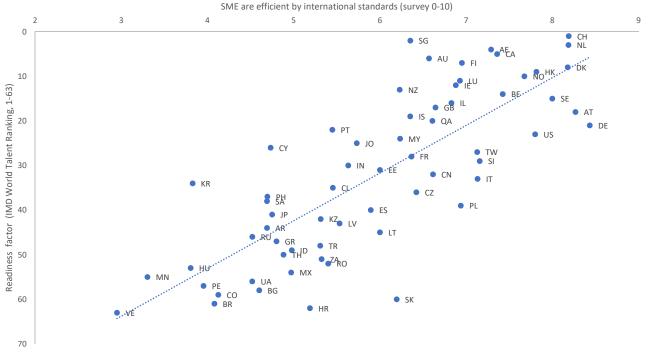


Source IMD World Competitiveness Center (2018)

Fostering a skilled workforce is critical not only to improving talent competitiveness but also in achieving sustainable prosperity. Rightfully then, policy decision makers are interested in the relationship between the talent market and the performance of the Small and Medium Enterprises (SMEs). The reasons are understandable: the importance of SMEs for both developed and developing economies. OECD, for instance, reports that about 99% of all firms are SMEs contributing about 70% of all the jobs and generating about 60% of value added (see OECD 2017.)

A significant concern is related to the quality of the skills and competencies of the labor force and whether they meet the market demands. In the IMD Talent Ranking we capture the presence of marketable competences through the Readiness factor. Combining this factor with the response to the survey question "Are SMEs efficient by international standards" Figure 4 specifies a positive relationship. Countries that exhibit high levels of preparedness with respect to skills embedded in the labor force are also the countries that are perceived as having highly efficient SMEs.

Figure 4. Talent readiness and SME efficiency

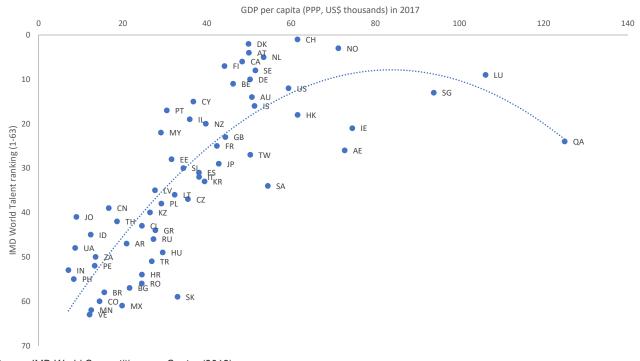


Source IMD World Competitiveness Center (2018)

What are the measures that exhibit high correlation with the talent ranking performance? Economies at the top of the IMD World Talent Ranking are among the richest countries in the world. A strong positive association between GDP per capita -a common proxy for the average level of wages in a given country- and a country's ranking is, therefore, expected. In fact, a high level of income per capita is expected to be an important factor for both attracting foreign highly-skilled professionals and retaining homegrown talent. However,

the shape of the curve shown in Figure 5 reveals that the relationship between the two indicators is not linear. Instead, after reaching the point of 70'000 USD (PPP), wages are not the dominant criterion for attracting talent in a country.

Figure 5. Talent competitiveness and GDP

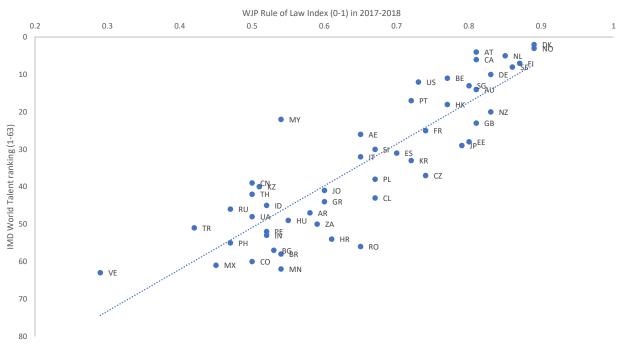


Source IMD World Competitiveness Center (2018)

Which variables beyond income then contribute in making a country appealing to the world talent pool? In other words, what does a person who is considering remaining or relocating to a place take into consideration? For instance, the institutional framework of a country is an important criterion that influences different economic decisions. Figure 6 captures the relationship between the IMD World Talent Ranking and the Rule of law index as constructed by the World Justice Project (WJP). The latter measures the

adherence to the rule of law and regulations by governments and all members of society. An effective Rule of Law assigns accountability, reduces corruption, and improves the living conditions of a country's citizens (see World Justice Project, 2018). Figure 6 presents a strong positive relationship suggesting that countries with strong accountability and low levels of corruption are also the countries that rank highly in our talent index.

Figure 6. Talent competitiveness and institutions



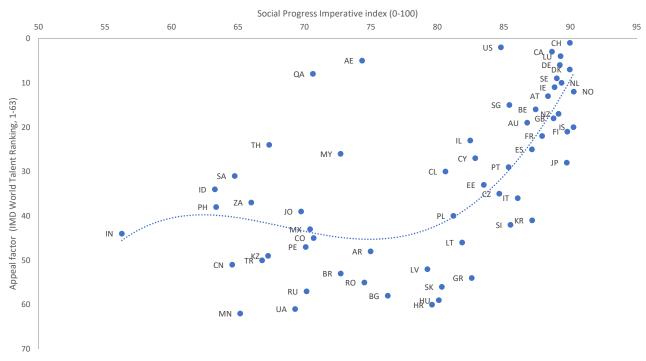
Source IMD World Competitiveness Center (2018), World Justice Project (2018)

In addition to the Rule of Law, the provisions of a country to address social and environmental needs of its citizens may also be an important component in the employment decision. These aspects are depicted by the Social Progress Index, generated by the Social Progress Imperative. The index quantifies three important dimensions: basic human needs, wellbeing, and opportunity.

Figure 7 portrays the relationship between the Appeal Factor and the Social Progress index. It is an interesting and complex relationship. Low levels of the Social Progress

index are associated with low levels of Appeal. In fact, during a certain range, small increases in the index are related with decreasing levels of Appeal. This is reversed for high levels of the Social Progress index. In effect, countries that address the social and environmental needs of their citizens effectively correlate to countries that are identified as having high Appeal in the world talent pool. This again suggests that non-social progress factors (such as wages) can only go so far in attracting talent to a country.

Figure 7. Attractiveness and social progress



Source IMD World Competitiveness Center (2018), Social Progress Index (2018)

#### 4. Concluding remarks

This essay outlines some important trends that the 2018 edition of the IMD World Talent Ranking presents. We show that improving the skills of the labor force as well as the quality of life are associated with higher levels of talent competitiveness. To reach this inference we examined the strengths and weaknesses at the sub-region level. Within each sub-region we identified the criteria that changed the most from the previous year and how they were related to the final ranking of the countries.

The identification of the common characteristics of the high performing countries allowed us to continue exploring correlations between the ranking and other variables. We find that there is a positive relationship between the levels of readiness of a country and the efficiency of SMEs.

With respect to criteria that are associated with the appeal of a country we find that income is an important variable but not the only one. Issues related to corruption levels, accountability of the decision makers, social and environmental provision by a country are also correlated with higher levels of appeal. Therefore, to attract and retain talent, decision makers must emphasize and develop aspects beyond wage incentives.

#### References

IMD World Competitiveness Center (2018). World Competitiveness Online database. Retrieved from https://worldcompetitiveness.imd.org/

OECD (2017). Enhancing the Contributions of SMEs in a Global and Digitalised Economy. Report for the Meeting of the OECD Council at Ministerial Level (Paris, 7-8 June 2017). Retrieved from https://www.oecd.org/mcm/documents/C-MIN-2017-8-EN.pdf

Social Progress Index. (2018). Social Progress Imperative index - Results. Retrieved from https://www.socialprogress.org/index/results

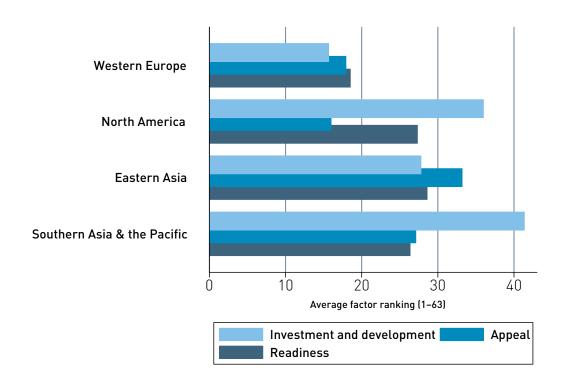
World Justice Project. (2018). Rule of Law Index 2017-2018. Retrieved from https://worldjusticeproject.org/our-work/wjp-rule-law-index/wjp-rule-law-index-2017%E2%80%932018

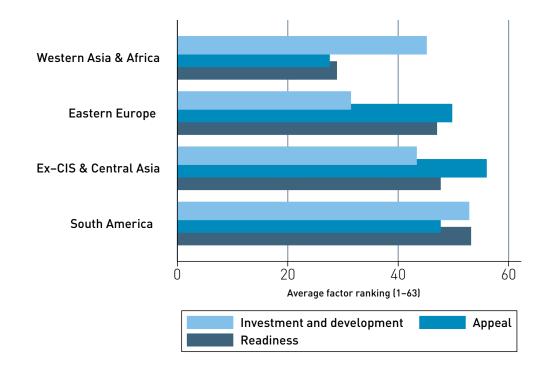
### **Appendices**

#### Appendix 1. Sub-regions

|                             | <ul><li>Austria</li></ul>        | <ul><li>Italy</li></ul>           |
|-----------------------------|----------------------------------|-----------------------------------|
|                             | <ul><li>Belgium</li></ul>        | <ul><li>Luxembourg</li></ul>      |
|                             | <ul><li>Cyprus</li></ul>         | <ul><li>Netherlands</li></ul>     |
|                             | <ul><li>Denmark</li></ul>        | <ul><li>Norway</li></ul>          |
| Western Europe              | <ul><li>Finland</li></ul>        | <ul><li>Portugal</li></ul>        |
| western Europe              | <ul><li>France</li></ul>         | <ul><li>Spain</li></ul>           |
|                             | <ul><li>Germany</li></ul>        | <ul><li>Sweden</li></ul>          |
|                             | <ul><li>Greece</li></ul>         | <ul><li>Switzerland</li></ul>     |
|                             | Iceland                          | <ul><li>United Kingdom</li></ul>  |
|                             | <ul><li>Ireland</li></ul>        |                                   |
|                             | <ul><li>Bulgaria</li></ul>       | <ul><li>Latvia</li></ul>          |
|                             | <ul><li>Czech Republic</li></ul> | <ul><li>Poland</li></ul>          |
| Factors Furance             | Estonia                          | Romania                           |
| Eastern Europe              | Croatia                          | Slovenia                          |
|                             | <ul><li>Hungary</li></ul>        | <ul><li>Slovak Republic</li></ul> |
|                             | <ul><li>Lithuania</li></ul>      | <ul><li>Ukraine</li></ul>         |
|                             | <ul><li>Israel</li></ul>         | South Africa                      |
| Western Asia &              | <ul><li>Jordan</li></ul>         | Turkey                            |
| Africa                      | <ul><li>Qatar</li></ul>          | <ul><li>UAE</li></ul>             |
|                             | <ul><li>Saudi Arabia</li></ul>   |                                   |
| Ex-CIS &                    | Kazakhstan                       | Russia                            |
| Central Asia                | <ul><li>Mongolia</li></ul>       |                                   |
|                             | China Mainland                   | Korea Rep.                        |
| Eastern Asia                | Hong Kong SAR                    | ⁼ Taiwan                          |
|                             | <ul><li>Japan</li></ul>          |                                   |
|                             | <ul><li>Australia</li></ul>      | New Zealand                       |
| Southern Asia & The Pacific | India                            | Philippines                       |
|                             | Indonesia                        | <ul><li>Singapore</li></ul>       |
|                             | <ul><li>Malaysia</li></ul>       | <ul><li>Thailand</li></ul>        |
| North America               | <ul><li>Canada</li></ul>         | " USA                             |
| NOITH AIRCING               | <ul><li>Mexico</li></ul>         |                                   |
|                             | <ul><li>Argentina</li></ul>      | <ul><li>Colombia</li></ul>        |
| South America               | <ul><li>Brazil</li></ul>         | Peru                              |
|                             | <ul><li>Chile</li></ul>          | <ul><li>Venezuela</li></ul>       |

Appendix 2. Factor-level talent competitiveness ranking, by sub-regions





# WORLD TALENT RANKINGS 2018

All data are available from the World Competitiveness Online.

Visit our eShop www.wcceshop.org

# The 2018 IMD World

| Overall      |                |                    | Overall       |
|--------------|----------------|--------------------|---------------|
| Rank<br>2018 |                | One Year<br>Change | Score<br>2018 |
| 1            | Switzerland    | -                  | 100.00        |
| 2            | Denmark        | -                  | 91.97         |
| 3            | Norway         | + 4                | 86.37         |
| 4            | Austria        | -                  | 86.10         |
| 5            | Netherlands    | + 1                | 85.25         |
| 6            | Canada         | + 5                | 84.50         |
| 7            | Finland        | - 2                | 83.00         |
| 8            | Sweden         | + 1                | 82.45         |
| 9            | Luxembourg     | + 1                | 81.63         |
| 10           | Germany        | - 2                | 81.11         |
| 11           | Belgium        | - 8                | 80.54         |
| 12           | USA            | + 4                | 79.22         |
| 13           | Singapore      | -                  | 78.66         |
| 14           | Australia      | + 5                | 78.57         |
| 15           | Cyprus         | + 2                | 77.34         |
| 16           | Iceland        | + 2                | 77.21         |
| 17           | Portugal       | + 7                | 76.76         |
| 18           | Hong Kong SAR  | - 6                | 76.62         |
| 19           | Israel         | + 1                | 75.86         |
| 20           | New Zealand    | - 5                | 74.12         |
| 21           | Ireland        | - 7                | 73.93         |
| 22           | Malaysia       | + 6                | 72.77         |
| 23           | United Kingdom | - 2                | 72.63         |
| 24           | Qatar          | - 2                | 71.99         |
| 25           | France         | + 2                | 70.85         |
| 26           | UAE            | - 1                | 70.38         |
| 27           | Taiwan         | - 4                | 68.28         |
| 28           | Estonia        | + 1                | 67.92         |
| 29           | Japan          | + 2                | 64.95         |
| 30           | Slovenia       | + 7                | 64.69         |

| Factor Ranks 2018           |        |           |  |
|-----------------------------|--------|-----------|--|
| Investment &<br>Development | Appeal | Readiness |  |
| 4                           | 1      | 1         |  |
| 1                           | 7      | 8         |  |
| 3                           | 12     | 10        |  |
| 2                           | 13     | 18        |  |
| 15                          | 10     | 3         |  |
| 19                          | 3      | 5<br>7    |  |
| 6                           | 21     | 7         |  |
| 9                           | 9      | 15        |  |
| 18                          | 4      | 11        |  |
| 10                          | 6      | 21        |  |
| 8                           | 16     | 14        |  |
| 28                          | 2      | 23        |  |
| 34                          | 15     | 2         |  |
| 26                          | 19     | 6         |  |
| 5                           | 27     | 26        |  |
| 12                          | 20     | 19        |  |
| 7                           | 29     | 22        |  |
| 31                          | 14     | 9         |  |
| 14                          | 23     | 16        |  |
| 32                          | 17     | 13        |  |
| 42                          | 11     | 12        |  |
| 17                          | 26     | 24        |  |
| 37                          | 18     | 17        |  |
| 44                          | 8      | 20        |  |
| 21                          | 22     | 28        |  |
| 59                          | 5      | 4         |  |
| 25                          | 32     | 27        |  |
| 16                          | 33     | 31        |  |
| 23                          | 28     | 41        |  |
| 27                          | 42     | 29        |  |

The IMD World Talent Ranking 2018 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.

# Talent Ranking

| Overall<br>Rank<br>2018 |                 | One Year<br>Change | Overall<br>Score<br>2018 |
|-------------------------|-----------------|--------------------|--------------------------|
| 31                      | Spain           | + 1                | 63.34                    |
| 32                      | Italy           | + 4                | 62.42                    |
| 33                      | Korea Rep.      | + 6                | 62.32                    |
| 34                      | Saudi Arabia    | - 8                | 61.95                    |
| 35                      | Latvia          | -                  | 61.67                    |
| 36                      | Lithuania       | - 3                | 61.51                    |
| 37                      | Czech Republic  | + 1                | 61.02                    |
| 38                      | Poland          | - 4                | 60.81                    |
| 39                      | China Mainland  | + 1                | 58.60                    |
| 40                      | Kazakhstan      | - 10               | 57.94                    |
| 41                      | Jordan          | + 8                | 57.28                    |
| 42                      | Thailand        | -                  | 55.81                    |
| 43                      | Chile           | + 1                | 55.07                    |
| 44                      | Greece          | - 3                | 54.98                    |
| 45                      | Indonesia       | + 2                | 51.34                    |
| 46                      | Russia          | - 3                | 48.58                    |
| 47                      | Argentina       | + 3                | 48.07                    |
| 48                      | Ukraine         | + 11               | 47.87                    |
| 49                      | Hungary         | + 5                | 47.76                    |
| 50                      | South Africa    | - 2                | 47.14                    |
| 51                      | Turkey          | + 2                | 45.94                    |
| 52                      | Peru            | + 5                | 44.28                    |
| 53                      | India           | - 2                | 43.28                    |
| 54                      | Croatia         | + 6                | 42.74                    |
| 55                      | Philippines     | - 10               | 42.11                    |
| 56                      | Romania         | + 5                | 41.35                    |
| 57                      | Bulgaria        | + 1                | 41.34                    |
| 58                      | Brazil          | - 6                | 40.32                    |
| 59                      | Slovak Republic | - 13               | 39.63                    |
| 60                      | Colombia        | - 5                | 39.37                    |
| 61                      | Mexico          | - 5                | 38.86                    |
| 62                      | Mongolia        | -                  | 33.35                    |
| 63                      | Venezuela       | -                  | 31.91                    |

| Facto                       | r Ranks | s 2018    |
|-----------------------------|---------|-----------|
| Investment &<br>Development | Appeal  | Readiness |
| 36                          | 25      | 40        |
| 33                          | 36      | 33        |
| 20                          | 41      | 34        |
| 35                          | 31      | 38        |
| 11                          | 52      | 43        |
| 13                          | 46      | 45        |
| 38                          | 35      | 36        |
| 24                          | 40      | 39        |
| 40                          | 51      | 32        |
| 30                          | 49      | 42        |
| 50                          | 39      | 25        |
| 46                          | 24      | 50        |
| 55                          | 30      | 35        |
| 29                          | 54      | 47        |
| 51                          | 34      | 49        |
| 43                          | 57      | 46        |
| 53                          | 48      | 44        |
| 22                          | 61      | 56        |
| 41                          | 59      | 53        |
| 56                          | 37      | 51        |
| 58                          | 50      | 48        |
| 52                          | 47      | 57        |
| 63                          | 44      | 30        |
| 39                          | 60      | 62        |
| 62                          | 38      | 37        |
| 54                          | 55      | 52        |
| 45                          | 58      | 58        |
| 49                          | 53      | 61        |
| 47                          | 56      | 60        |
| 60                          | 45      | 59        |
| 61                          | 43      | 54        |
| 57                          | 62      | 55        |
| 48                          | 63      | 63        |

# 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.
- 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 30 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 (3x33.3 ~100).
- 5. Criteria can be hard data, which analyze the amount of investments in 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). Being a sub-set of the IMD World Competitivness Ranking, the survey data weighting is preserved at 0.56.
- 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**

# Investment and development

The investment in and development of home-grown talent

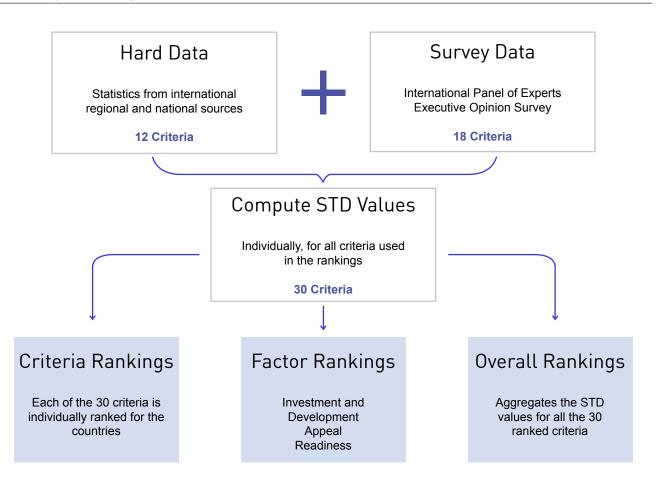
#### **Appeal**

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

#### Readiness

The availability of skills and competencies in the talent pool

#### **Computing the Rankings**



# The 2018 IMD World Talent Rankings: Selected Breakdowns

#### **Talent Ranking Leaderboard**

|    | Overall Rank | stment &<br>elopment | Appeal | Readiness              |
|----|--------------|----------------------|--------|------------------------|
| 1  | Switzerland  | 4                    | 1      | 1                      |
| 2  | Denmark      | 1                    | 7 ——   | - 8                    |
| 3  | Norway       | <br>3                | 12 ——— | — 10 ———               |
| 4  | Austria      | 2                    | 13 ——— | <b>—</b> 18 <b>———</b> |
| 5  | Netherlands  | <br>15               | 10     | 3                      |
| 6  | Canada       | <br>19               | 3      | 5                      |
| 9  | Luxembourg   | <br>18               | 4      | — 11 ———               |
| 12 | USA          | <br>28 ———           | 2      | _ 23                   |
| 13 | Singapore    | <br>34               | 15 ——— | 2                      |
|    | Cyprus       | 5                    | 27 ——— | — 26 ———               |
| 26 | UAE          | <br>59 ———           | 5      | 4                      |

| Rank |                 |    | e Yea |   | Scor |
|------|-----------------|----|-------|---|------|
| 2018 | D 1             | Cł | nange |   | 2018 |
| 1    | Denmark         |    | 1     |   | 97.9 |
| 2    | Austria         | +  | 1     |   | 91.7 |
| 3    | Norway          | +  | 3     |   | 85.9 |
| 4    | Switzerland     | +  | 1     |   | 83.9 |
| 5    | Cyprus          | +  | 3     |   | 82.6 |
| 6    | Finland         | -  | 2     |   | 82.4 |
| 7    | Portugal        |    | -     |   | 78.3 |
| 8    | Belgium         | -  | 6     |   | 77.6 |
| 9    | Sweden          |    | -     |   | 76.7 |
| 10   | Germany         |    | -     |   | 75.0 |
| 11   | Latvia          | +  | 2     |   | 73.1 |
| 12   | Iceland         | -  | 1     |   | 72.8 |
| 13   | Lithuania       | -  | 1     |   | 70.8 |
| 14   | Israel          | +  | 3     |   | 70.6 |
| 15   | Netherlands     |    | -     |   | 70.1 |
| 16   | Estonia         | -  | 2     |   | 69.8 |
| 17   | Malaysia        | +  | 2     |   | 66.9 |
| 18   | Luxembourg      | -  | 2     |   | 66.8 |
| 19   | Canada          | +  | 3     |   | 65.3 |
| 20   | Korea Rep.      | +  | 18    |   | 63.7 |
| 21   | France          | -  | 1     |   | 63.6 |
| 22   | Ukraine         | +  | 13    |   | 63.4 |
| 23   | Japan           | -  | 5     |   | 63.2 |
| 24   | Poland          | -  | 3     |   | 63.2 |
| 25   | Taiwan          |    | -     |   | 63.1 |
| 26   | Australia       | +  | 10    |   | 62.6 |
| 27   | Slovenia        |    | -     |   | 62.5 |
| 28   | USA             | +  | 1     |   | 62.2 |
| 29   | Greece          | +  | 2     |   | 59.9 |
| 30   | Kazakhstan      | -  | 7     |   | 59.1 |
| 31   | Hong Kong SAR   | -  | 7     |   | 59.0 |
| 32   | New Zealand     | -  | 4     |   | 58.0 |
| 33   | Italy           |    | -     |   | 57.6 |
| 34   | Singapore       | +  | 7     |   | 57.0 |
| 35   | Saudi Arabia    | -  | 9     |   | 56.8 |
| 36   | Spain           | -  | 6     |   | 56.5 |
| 37   | United Kingdom  |    | -     |   | 55.9 |
| 38   | Czech Republic  | +  | 1     |   | 55.5 |
| 39   | Croatia         | -  | 7     |   | 55.4 |
| 40   | China Mainland  | +  | 2     |   | 55.1 |
| 41   | Hungary         | +  | 5     |   | 54.2 |
| 42   | Ireland         | -  | 8     |   | 49.7 |
| 43   | Russia          | -  | 3     |   | 47.9 |
| 44   | Qatar           | +  | 3     |   | 47.5 |
| 45   | Bulgaria        | -  | 1     |   | 42.3 |
| 46   | Thailand        | +  | 2     |   | 41.1 |
| 47   | Slovak Republic | _  | 4     |   | 40.3 |
| 48   | Venezuela       | +  | 1     |   | 38.0 |
| 49   | Brazil          | _  | 4     |   | 35.4 |
| 50   | Jordan          | +  | 10    |   | 35.0 |
| 51   | Indonesia       | +  | 5     |   | 34.9 |
| 52   | Peru            |    | 2     |   | 32.0 |
| 53   | Argentina       | +  | 2     |   | 31.7 |
| 54   | Romania         |    | 3     |   | 31.3 |
| 55   | Chile           |    | 2     |   | 30.8 |
| 56   | South Africa    | +  | 1     |   | 29.8 |
| 57   | Mongolia        | -  | 3     |   | 28.9 |
| 58   | Turkey          |    | 6     |   | 28.4 |
| 59   | UAE             |    | 1     | _ |      |
|      |                 |    |       |   | 24.8 |
| 60   | Colombia        | -  | 1     | _ | 24.5 |
| 61   | Mexico          |    | -     | _ | 11.9 |
| 62   | Philippines     | +  | 1     |   | 3.1  |

| Rank | The extent to which a | One        |          | Score          |
|------|-----------------------|------------|----------|----------------|
| 2018 |                       | Cha        | nge      | 2018           |
| 1    | Switzerland           | -          |          | 100.00         |
| 2    | USA                   | -          |          | 83.40          |
| 3    | Canada                | + 3        |          | 80.31          |
| 4    | Luxembourg<br>UAE     | - 2        |          | 78.68          |
| 5    | Germany               | _          |          | 77.65<br>75.67 |
| 7    | Denmark               | + 2        |          | 75.34          |
| -/-8 | Qatar                 | + 1        |          | 75.03          |
| 9    | Sweden                | + 3        |          | 74.94          |
| 10   | Netherlands           | - 3        |          | 74.85          |
| 11   | Ireland               | - 6        |          | 73.30          |
| 12   | Norway                | + 1        |          | 72.95          |
| 13   | Austria               | + 2        | 2        | 71.92          |
| 14   | Hong Kong SAR         | - 3        | 3        | 69.09          |
| 15   | Singapore             | + 2        | )        | 67.31          |
| 16   | Belgium               | -          |          | 67.28          |
| 17   | New Zealand           | - 3        | 3        | 66.95          |
| 18   | United Kingdom        | + 1        |          | 66.92          |
| 19   | Australia             | - 1        |          | 65.26          |
| 20   | Iceland               | -          |          | 64.60          |
| 21   | Finland               | + 3        |          | 63.27          |
| 22   | France                | + 7        |          | 62.97          |
| 23   | Israel                | + 5        |          | 61.39          |
| 24   | Thailand              | - 1        |          | 61.32          |
| 25   | Spain                 | -          |          | 61.20          |
| 26   | Malaysia              | + 4        |          | 61.06          |
| 27   | Cyprus<br>Japan       | - 6        |          | 60.99<br>59.83 |
| 29   | Portugal              | + 7        |          | 59.83          |
| 30   | Chile                 | - 3        |          | 58.00          |
| 31   | Saudi Arabia          |            |          | 56.23          |
| 32   | Taiwan                | - 6        | 5        | 54.50          |
| 33   | Estonia               | + 5        | 5        | 54.22          |
| 34   | Indonesia             | - 2        | 2        | 53.97          |
| 35   | Czech Republic        | + 5        | 5        | 52.70          |
| 36   | Italy                 | + 5        | 5        | 52.20          |
| 37   | South Africa          | - 2        | 2        | 49.68          |
| 38   | Philippines           | - 4        |          | 49.62          |
| 39   | Jordan                | + 5        |          | 47.21          |
| 40   | Poland                | + 5        | 5        | 46.91          |
| 41   | Korea Rep.            | + 1        |          | 46.71          |
| 42   | Slovenia              | + 7        |          | 46.63          |
| 43   | Mexico                | - 1        |          | 46.62          |
| 44   | India                 | - 1        |          | 46.22          |
| 45   | Colombia              | - 6        |          | 46.08          |
| 46   | Lithuania             | + 2        |          | 45.58<br>45.42 |
| 48   | Peru<br>Argentina     | - 1<br>+ 5 |          | 44.25          |
| 49   | Kazakhstan            | + :<br>- 1 |          | 43.23          |
| 50   | Turkey                | + 1        |          | 43.16          |
| 51   | China Mainland        | + 3        |          | 43.07          |
| 52   | Latvia                | -          |          | 41.46          |
| 53   | Brazil                | - 6        |          | 39.47          |
| 54   | Greece                | + 2        |          | 38.53          |
| 55   | Romania               | + 3        |          | 33.45          |
| 56   | Slovak Republic       | - 6        | <b>S</b> | 31.90          |
| 57   | Russia                | - 2        | 2        | 30.72          |
| 58   | Bulgaria              | - 1        |          | 30.50          |
| 59   | Hungary               | + 2        | 2        | 30.15          |
| 60   | Croatia               | - 1        |          | 27.53          |
| 61   | Ukraine               | + 1        |          | 24.40          |
| 62   | Mongolia              | - 2        |          | 15.02          |
| 63   | Venezuela             | -          |          | 13.32          |

| Rank | The availability of sk     |     | e Yea | Score          |
|------|----------------------------|-----|-------|----------------|
| 2018 |                            |     | nange | 2018           |
| 1    | Switzerland                |     | -     | 90.90          |
| 2    | Singapore                  |     | -     | 86.40          |
| 3    | Netherlands                |     | -     | 85.63          |
| 4    | UAE                        | +   | 3     | 83.42          |
| 5    | Canada                     | +   | 4     | 82.70          |
| 6    | Australia                  | +   | 7     | 82.63          |
| 7    | Finland                    | -   | 2     | 78.09          |
| 8    | Denmark                    | -   | 4     | 77.42          |
| 9    | Hong Kong SAR              | -   | 3     | 76.57          |
| 10   | Norway                     | +   | 4     | 75.02          |
| 11   | Luxembourg                 | +   | 6     | 74.20          |
| 12   | Ireland                    | -   | 2     | 73.60          |
| 13   | New Zealand                | -   | 5     | 72.22          |
| 14   | Belgium                    | -   | 2     | 71.49          |
| 15   | Sweden                     | +   | 4     | 70.45          |
| 16   | Israel                     | +   | 7     | 70.34          |
| 17   | United Kingdom             | +   | 3     | 69.80          |
| 18   | Austria                    | -   | 2     | 69.44          |
| 19   | Iceland                    | +   | 2     | 68.95          |
| 20   | Qatar                      | -   | 2     | 68.22          |
| 21   | Germany                    | -   | 6     | 67.39          |
| 22   | Portugal                   | +   | 9     | 66.92          |
| 23   | USA                        | +   | 1     | 66.87          |
| 24   | Malaysia                   | +   | 3     | 65.10          |
| 25   | Jordan                     | +   |       | 64.45          |
| 26   | Cyprus                     | -   | 1     | 63.21          |
| 27   | Taiwan                     | -   | 5     | 62.04          |
| 28   | France                     |     | -     | 60.78          |
| 29   | Slovenia                   | +   | 8     | 59.75          |
| 30   | India                      | -   | 1     | 58.44          |
| 31   | Estonia                    | +   | 4     | 54.50          |
| 32   | China Mainland             | -   | 2     | 52.35          |
| 33   | Italy                      | +   | 1     | 52.29          |
| 34   | Korea Rep.                 | +   | 8     | 51.29          |
| 36   |                            | +   | 8     | 51.14<br>49.65 |
| 37   | Czech Republic Philippines |     | 26    | 49.65          |
| 38   | Saudi Arabia               |     | 12    | 47.60          |
| 39   | Poland                     | -   | 6     | 47.00          |
| 40   | Spain                      | -+  | 1     | 47.13          |
| 41   | Japan                      | +   |       | 46.59          |
| 42   | Kazakhstan                 |     |       | 46.29          |
| 43   | Latvia                     |     |       | 45.19          |
| 44   | Argentina                  | +   | 2     | 43.17          |
| 45   | Lithuania                  | · ' | -     | 42.94          |
| 46   | Russia                     | _   | 7     | 41.90          |
| 47   | Greece                     | -   | 7     | 41.25          |
| 48   | Turkey                     | +   |       | 40.99          |
| 49   | Indonesia                  | -   | 2     | 39.93          |
| 50   | Thailand                   |     | -     | 39.80          |
| 51   | South Africa               | +   | 1     | 36.74          |
| 52   | Romania                    | +   | 3     | 34.11          |
| 53   | Hungary                    | +   |       | 33.74          |
| 54   | Mexico                     | -   | 1     | 32.81          |
| 55   | Mongolia                   | +   | 1     | 30.89          |
| 56   | Ukraine                    | +   | 4     | 30.56          |
| 57   | Peru                       | +   | 1     | 30.25          |
| 58   | Bulgaria                   | +   | 1     | 26.03          |
| 59   | Colombia                   | -   | 2     | 22.26          |
| 60   | Slovak Republic            | -   | 11    | 21.43          |
| 61   | Brazil                     |     | -     | 20.84          |
|      |                            |     |       |                |
| 62   | Croatia<br>Venezuela       |     | -     | 20.08          |

|                            |      |         | OVERALI |      |      |
|----------------------------|------|---------|---------|------|------|
|                            | 2014 | 2015    | 2016    | 2017 | 2018 |
| Argentina                  | 53   | 51      | 52      | 50   | 47   |
| Australia                  | 16   | 13      | 16      | 19   | 14   |
| Austria                    | 6    | 12      | 5       | 4    | 4    |
| Belgium                    | 7    | 3       | 3       | 3    | 11   |
| Brazil                     | 51   | 54      | 45      | 52   | 58   |
| Bulgaria                   | 60   | 61      | 58      | 58   | 57   |
| Canada                     | 10   | 10      | 12      | 11   | 6    |
| Chile                      | 48   | 41      | 48      | 44   | 43   |
| China Mainland             | 44   | 40      | 42      | 40   | 39   |
| Colombia                   | 56   | 52      | 57      | 55   | 60   |
| Croatia                    | 50   | 53      | 53      | 60   | 54   |
| Cyprus                     | -    | -       | -       | 17   | 15   |
| Czech Republic             | 35   | 33      | 33      | 38   | 37   |
| Denmark                    | 2    | 2       | 2       | 2    | 2    |
| Estonia                    | 27   | 28      | 26      | 29   | 28   |
| Finland                    | 3    | 4       | 6       | 5    | 7    |
| France                     | 20   | 25      | 28      | 27   | 25   |
| Germany                    | 5    | 9       | 10      | 8    | 10   |
| Greece                     | 38   | 34      | 35      | 41   | 44   |
| Hong Kong SAR              | 19   | 17      | 9       | 12   | 18   |
| Hungary                    | 45   | 49      | 51      | 54   | 49   |
| Iceland                    | 15   | 15      | 18      | 18   | 16   |
| India                      | 57   | 56      | 54      | 51   | 53   |
| Indonesia                  | 40   | 43      | 47      | 47   | 45   |
| Ireland                    | 8    | 20      | 17      | 14   | 21   |
| Israel                     | 21   | 21      | 19      | 20   | 19   |
| Italy                      | 37   | 38      | 32      | 36   | 32   |
| Japan                      | 24   | 26      | 31      | 31   | 29   |
| Jordan                     | 42   | 42      | 40      | 49   | 41   |
| Kazakhstan                 | 36   | 36      | 44      | 30   | 40   |
| Korea Rep.                 | 34   | 32      | 38      | 39   | 33   |
| Latvia                     | 28   | 27      | 30      | 35   | 35   |
| Lithuania                  | 30   | 23      | 24      | 33   | 36   |
| Luxembourg                 | 14   | 5       | 11      | 10   | 9    |
| Malaysia                   | 13   | 19      | 21      | 28   | 22   |
| Mexico                     | 52   | 55      | 50      | 56   | 61   |
|                            | -    |         |         | 62   | 62   |
| Mongolia                   |      | 60<br>8 | 60<br>8 |      |      |
| Netherlands<br>New Zealand | 11   | -       | -       | 6    | 5    |
|                            | 22   | 16      | 14      | 15   | 20   |
| Norway                     | 12   | 6       | 7       | 7    | 3    |
| Peru                       | 59   | 59      | 59      | 57   | 52   |
| Philippines                | 55   | 57      | 55      | 45   | 55   |
| Poland                     | 32   | 29      | 29      | 34   | 38   |
| Portugal                   | 26   | 22      | 25      | 24   | 17   |
| Qatar                      | 29   | 30      | 22      | 22   | 24   |
| Romania                    | 54   | 50      | 56      | 61   | 56   |
| Russia                     | 49   | 45      | 41      | 43   | 46   |
| Saudi Arabia               | -    | -       | -       | 26   | 34   |
| Singapore                  | 18   | 14      | 15      | 13   | 13   |
| Slovak Republic            | 43   | 44      | 39      | 46   | 59   |
| Slovenia                   | 39   | 37      | 36      | 37   | 30   |
| South Africa               | 46   | 47      | 43      | 48   | 50   |
| Spain                      | 31   | 35      | 34      | 32   | 31   |
| Sweden                     | 4    | 7       | 4       | 9    | 8    |
| Switzerland                | 1    | 1       | 1       | 1    | 1    |
| Taiwan                     | 25   | 24      | 23      | 23   | 27   |
| Thailand                   | 41   | 39      | 37      | 42   | 42   |
| Turkey                     | 47   | 48      | 46      | 53   | 51   |
| UAE                        | 23   | 31      | 27      | 25   | 26   |
| Ukraine                    | 33   | 46      | 49      | 59   | 48   |
| United Kingdom             | 17   | 18      | 20      | 21   | 23   |
| USA                        | 9    | 11      | 13      | 16   | 12   |
| Venezuela                  | 58   | 58      | 61      | 63   | 63   |

|       | Investme | nt & Deve | elopment |      |
|-------|----------|-----------|----------|------|
| 2014  | 2015     | 2016      | 2017     | 2018 |
| 45    | 45       | 51        | 55       | 53   |
| 30    | 30       | 29        | 36       | 26   |
| 4     | 4        | 3         | 3        | 2    |
| 5     | 1        | 2         | 2        | 8    |
| 40    | 39       | 39        | 45       | 49   |
| 47    | 47       | 44        | 44       | 45   |
| 28    | 26       | 22        | 22       | 19   |
| 53    | 51       | 59        | 53       | 55   |
| 44    | 46       | 45        | 42       | 40   |
| 56    | 54       | 57        | 59       | 60   |
| 35    | 35       | 38        | 32       | 39   |
| -     | -        | -         | 8        | 5    |
| 37    | 36       | 35        | 39       | 38   |
| 1     | 2        | 1         | 1        | 1    |
| 12    | 12       | 13        | 14       | 16   |
| 3     | 3        | 4         | 4        | 6    |
| 17    | 22       | 24        | 20       | 21   |
| 14    | 14       | 11        | 10       | 10   |
| 32    | 31       | 23        | 31       | 29   |
| 36    | 32       | 27        | 24       | 31   |
| 29    | 34       | 41        | 46       | 41   |
|       |          |           |          |      |
| 8     | 11       | 12        | 11       | 12   |
| 60    | 60       | 60        | 62       | 63   |
| 48    | 52       | 55        | 56       | 51   |
| 20    | 33       | 30        | 34       | 42   |
| 24    | 19       | 19        | 17       | 14   |
| 34    | 37       | 32        | 33       | 33   |
| 23    | 23       | 20        | 18       | 23   |
| 52    | 55       | 56        | 60       | 50   |
| 25    | 24       | 34        | 23       | 30   |
| 39    | 38       | 33        | 38       | 20   |
| 11    | 9        | 9         | 13       | 11   |
| 13    | 10       | 10        | 12       | 13   |
| 18    | 13       | 15        | 16       | 18   |
| 15    | 17       | 17        | 19       | 17   |
| 55    | 58       | 58        | 61       | 61   |
| -     | 48       | 49        | 54       | 57   |
| 16    | 15       | 14        | 15       | 15   |
| 33    | 21       | 25        | 28       | 32   |
| 9     | 8        | 6         | 6        | 3    |
| 58    | 57       | 54        | 50       | 52   |
| 59    | 61       | 61        | 63       | 62   |
| 21    | 18       | 18        | 21       | 24   |
| 6     | 6        | 8         | 7        | 7    |
| 51    | 49       | 48        | 47       | 44   |
| 49    | 50       | 47        | 51       | 54   |
| 38    | 40       | 42        | 40       | 43   |
| - (2) | - (2)    | - /0      | 26       | 35   |
| 43    | 42       | 40        | 41       | 34   |
| 41    | 41       | 37        | 43       | 47   |
| 22    | 25       | 21        | 27       | 27   |
| 50    | 53       | 50        | 57       | 56   |
| 26    | 29       | 31        | 30       | 36   |
| 2     | 5        | 7         | 9        | 9    |
| 7     | 7        | 5         | 5        | 4    |
| 31    | 28       | 28        | 25       | 25   |
| 46    | 44       | 43        | 48       | 46   |
| 54    | 56       | 52        | 52       | 58   |
| 57    | 59       | 53        | 58       | 59   |
| 10    | 16       | 16        | 35       | 22   |
| 27    | 27       | 36        | 37       | 37   |
| 19    | 20       | 26        | 29       | 28   |
| 42    | 43       | 46        | 49       | 48   |

|         |         | Appeal  |          |          |
|---------|---------|---------|----------|----------|
| 2014    | 2015    | 2016    | 2017     | 2018     |
| 52      | 55      | 52      | 53       | 48       |
| 17      | 15      | 17      | 18       | 19       |
| 13      | 20      | 18      | 15       | 13       |
| 16      | 17      | 14      | 16       | 16       |
| 39      | 44      | 47      | 47       | 53       |
| 59      | 60      | 57      | 57       | 58       |
| 5       | 5       | 7       | 6        | 3        |
| 30      | 27      | 28      | 27       | 30       |
| 49      | 49      | 55      | 54       | 51       |
| 34      | 36      | 39      | 39       | 45       |
| 56      | 57      | 58      | 59       | 60       |
| -       | -       | -       | 21       | 27       |
| 45      | 39      | 34      | 40       | 35       |
| 11      | 14      | 11      | 10       | 7        |
| 40      | 40      | 35      | 38       | 33       |
| 18      | 22      | 24      | 24       | 21       |
| 22      | 30      | 30      | 29       | 22       |
| 3       | 4       | 9       | 8        | 6        |
| 50      | 48      | 50      | 56       | 54       |
| 20      | 16      | 4       | 11       | 14       |
| 58      | 59      | 60      | 61       | 59       |
| 31      | 24      | 20      | 20       | 20       |
| 35      | 38      | 41      | 43       | 44       |
| 32      | 29      | 31      | 32       | 34       |
| 4       | 7       | 5       | 5        | 11       |
| 28      | 31      | 25      | 28       | 23       |
| 42      | 45      | 37      | 41       | 36       |
| 10      | 13      | 21      | 22       | 28       |
| 29      | 28      | 32      | 44       | 39       |
| 48      | 46      | 54      | 37       | 49       |
| 36      | 34      | 42      | 42       | 41       |
| 44      | 50      | 46      | 52       | 52       |
| 46      | 41      | 36      | 48       | 46       |
| 7       | 3       | 3       | 4        | 4        |
| 19      | 19      | 22      | 30       | 26       |
| 33      | 33      | 33      | 33       | 43       |
| -       | 53      | 56      | 60       | 62       |
| 14      | 11      | 13      | 7        | 10       |
| 23      | 18      | 12      | 14       | 17       |
| 15      | 9       | 15      | 13       | 12       |
| 38      | 42      | 44      | 46       | 47       |
| 37      | 35      | 38      | 34       | 38       |
| 54      | 51      | 45      | 45       | 40       |
| 41      | 37      | 40      | 36       | 29       |
| 12      | 10      | 10      | 9        | 8        |
| 53      | 47      | 51      | 58       | 55       |
| 57      | 56      | 53      | 55       | 57       |
| - 21    | - 01    | - 10    | 31       | 31       |
| 21      | 21      | 19      | 17       | 15       |
| 47      | 52      | 49      | 50       | 56       |
| 55      | 54      | 48      | 49       | 42       |
| 27      | 23      | 29      | 35       | 37       |
| 26      | 32      | 27      | 25       | 25       |
| 9       | 12      | 6       | 12       | 9        |
| 1 25    | 1       | 1 24    | 1        | 1 22     |
| 25      | 26      | 26      | 26       | 32       |
| 24      | 25      | 23      | 23       | 24       |
| 43      | 43      | 43      | 51<br>3  | 50<br>5  |
| 6       | 6       | 8<br>59 |          |          |
| 51<br>8 | 58<br>8 | 16      | 62<br>19 | 61<br>18 |
| 2       | 2       | 2       | 2        | 2        |
| 60      | 61      | 61      | 63       | 63       |
| 00      | ΟĪ      | ΟI      | UU       | UJ       |

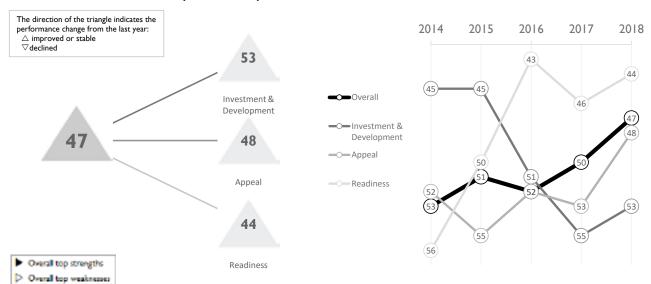
|                 | 2018 | 2017 | Readines<br>2016 | 2015 | 2014 |
|-----------------|------|------|------------------|------|------|
| Argentina       | 44   | 46   | 43               | 50   | 56   |
| Australia       | 6    | 13   | 6                | 3    | 8    |
| Austria         | 18   | 16   | 19               | 26   | 15   |
| Belgium         | 14   | 12   | 7                | 9    | 20   |
| Brazil          | 61   | 61   | 54               | 61   | 59   |
| Bulgaria        | 58   | 59   | 57               | 59   | 60   |
| Canada          | 5    | 9    | 11               | 4    | 5    |
| Chile           | 35   | 43   | 49               | 43   | 49   |
| China Mainland  | 32   | 30   | 36               | 34   | 35   |
| Colombia        | 59   | 57   | 55               | 54   | 57   |
| Croatia         | 62   | 62   | 58               | 57   | 54   |
| Cyprus          | 26   | 25   | -                | -    | -    |
| Czech Republic  | 36   | 36   | 30               | 31   | 30   |
| Denmark         | 8    | 4    | 4                | 8    | 11   |
| Estonia         | 31   | 35   | 34               | 42   | 39   |
| Finland         | 7    | 5    | 9                | 5    | 6    |
| France          | 28   | 28   | 29               | 25   | 25   |
| Germany         | 21   | 15   | 18               | 15   | 12   |
| Greece          | 47   | 40   | 35               | 29   | 33   |
| Hong Kong SAR   | 9    | 6    | 5                | 7    | 9    |
| Hungary         | 53   | 54   | 53               | 49   | 43   |
| Iceland         | 19   | 21   | 17               | 18   | 13   |
| India           | 30   | 29   | 28               | 32   | 28   |
| Indonesia       | 49   | 47   | 45               | 44   | 31   |
| Indonesia       | 12   | 10   | 13               | 17   | 4    |
| Israel          | 16   | 23   | 22               | 14   | 21   |
|                 | 33   | 34   | 33               | 40   | 41   |
| Italy           | 41   | 48   | 51               | 47   | 36   |
| Japan           | 25   |      | 25               |      |      |
| Jordan          |      | 44   | 52               | 36   | 34   |
| Kazakhstan      | 42   | 32   |                  | 39   | 37   |
| Korea Rep.      | 34   | 42   | 42               | 28   | 29   |
| Latvia          | 43   | 38   | 41               | 37   | 38   |
| Lithuania       | 45   | 45   | 32               | 30   | 47   |
| Luxembourg      | 11   | 17   | 16               | 10   | 18   |
| Malaysia        | 24   | 27   | 26               | 20   | 10   |
| Mexico          | 54   | 53   | 46               | 55   | 48   |
| Mongolia        | 55   | 56   | 56               | 60   | -    |
| Netherlands     | 3    | 3    | 3                | 6    | 7    |
| New Zealand     | 13   | 8    | 8                | 11   | 16   |
| Norway          | 10   | 14   | 14               | 12   | 19   |
| Peru            | 57   | 58   | 60               | 58   | 58   |
| Philippines     | 37   | 11   | 23               | 27   | 26   |
| Poland          | 39   | 33   | 24               | 24   | 27   |
| Portugal        | 22   | 31   | 31               | 33   | 46   |
| Qatar           | 20   | 18   | 10               | 21   | 23   |
| Romania         | 52   | 55   | 47               | 46   | 44   |
| Russia          | 46   | 39   | 38               | 41   | 40   |
| Saudi Arabia    | 38   | 26   | -                | -    | -    |
| Singapore       | 2    | 2    | 2                | 1    | 1    |
| Slovak Republic | 60   | 49   | 39               | 45   | 45   |
| Slovenia        | 29   | 37   | 37               | 38   | 42   |
| South Africa    | 51   | 52   | 50               | 52   | 51   |
| Spain           | 40   | 41   | 44               | 48   | 50   |
| Sweden          | 15   | 19   | 15               | 16   | 14   |
| Switzerland     | 1    | 1    | 1                | 2    | 2    |
| Taiwan          | 27   | 22   | 27               | 23   | 24   |
| Thailand        | 50   | 50   | 48               | 51   | 52   |
| Turkey          | 48   | 51   | 40               | 35   | 32   |
| UAE             | 4    | 7    | 12               | 13   | 3    |
| Ukraine         | 56   | 60   | 59               | 56   | 53   |
| United Kingdom  | 17   | 20   | 20               | 19   | 17   |
|                 | 23   | 24   | 21               | 22   | 22   |
| USA             |      |      |                  |      |      |

# TALENT COUNTRY PROFILES

All data are available from the World Competitiveness Online.

Visit our eShop www.wcceshop.org

# **ARGENTINA**

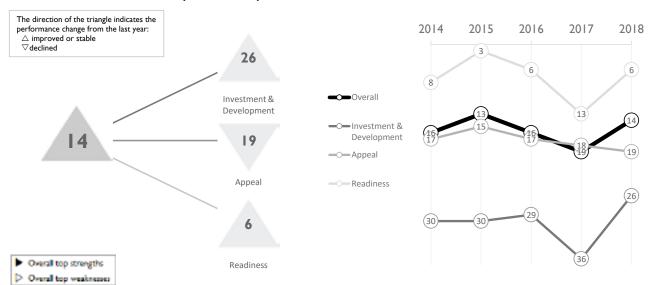


|                       | Investment & Development                  |  | Value | :            | 2018 Rank |
|-----------------------|---|--|-------|--------------|-----------|
| $\triangleright$      | Total public expenditure on education     | Percentage of GDP                                  | 1.2   | %            | 62        |
| $\blacktriangleright$ | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 23.4  | %            | 19        |
| $\blacktriangleright$ | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 13.00 | ratio        | 20        |
| $\triangleright$      | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 23.82 | ratio        | 56        |
| $\triangleright$      | Apprenticeships                           | are sufficiently implemented                       | 4.00  | Survey [010] | 50        |
|                       | Employee training                         | is a high priority in companies                    | 5.41  | Survey [010] | 40        |
|                       | Female labor force                        | Percentage of total labor force                    | 40.88 | %            | 49        |
|                       | Health infrastructure                     | meets the needs of society                         | 4.70  | Survey [010] | 40        |

|                  | Appeal  |   | Value   | :            | 2018 Rank |
|------------------|---|---|---------|--------------|-----------|
|                  | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 82.60   | index        | 45        |
|                  | Attracting and retaining talents              | is a priority in companies  | 6.49    | Survey [010] | 37        |
|                  | Worker motivation                             | in companies is high  | 5.38    | Survey [010] | 40        |
| ▶                | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 5.24    | Survey [010] | 26        |
|                  | Quality of life                               | is high   | 5.79    | Survey [010] | 42        |
|                  | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 4.93    | Survey [010] | 37        |
|                  | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 14,700  | US\$         | 40        |
|                  | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 101,273 | US\$         | 47        |
| ▶                | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 13.10   | %            | 21        |
| $\triangleright$ | Personal security and private property rights | are adequately protected  | 4.49    | Survey [010] | 51        |

|                       | Readiness                     |   | Value |              | 2018 Rank |
|-----------------------|-------------------------------|---|-------|--------------|-----------|
|                       | Labor force growth            | Percentage change   | 1.00  | %            | 28        |
|                       | Skilled labor                 | is readily available  | 4.83  | Survey [010] | 47        |
|                       | Finance skills                | are readily available   | 6.18  | Survey [010] | 38        |
| $\blacktriangleright$ | International experience      | of senior managers is generally significant                     | 6.18  | Survey [010] | 18        |
|                       | Competent senior managers     | are readily available   | 5.17  | Survey [010] | 42        |
|                       | Educational system            | The educational system meets the needs of a competitive economy | 4.24  | Survey [010] | 48        |
| $\triangleright$      | Science in schools            | is sufficiently emphasized                                      | 3.68  | Survey [010] | 51        |
|                       | University education          | meets the needs of a competitive economy                        | 5.54  | Survey [010] | 36        |
|                       | Management education          | meets the needs of the business community                       | 5.89  | Survey [010] | 36        |
|                       | Language skills               | are meeting the needs of enterprises                            | 5.55  | Survey [010] | 39        |
|                       | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 1.23  | number       | 43        |
|                       | Educational assessment - PISA | PISA survey of 15-year olds                                     | 421   | Average      | 48        |

# **AUSTRALIA**

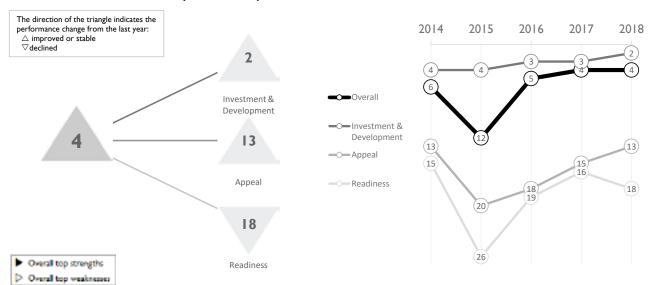


|                  | Investment & Development                  |  | Value | <b>!</b>     | 2018 Rank |
|------------------|---|--|-------|--------------|-----------|
|                  | Total public expenditure on education     | Percentage of GDP                                  | 5.0   | %            | 28        |
|                  | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | -     | %            | -         |
|                  | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 15.43 | ratio        | 27        |
|                  | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 12.25 | ratio        | 31        |
| $\triangleright$ | Apprenticeships                           | are sufficiently implemented                       | 4.53  | Survey [010] | 35        |
| $\triangleright$ | Employee training                         | is a high priority in companies                    | 5.45  | Survey [010] | 38        |
|                  | Female labor force                        | Percentage of total labor force                    | 46.91 | %            | 19        |
|                  | Health infrastructure                     | meets the needs of society                         | 7.40  | Survey [010] | 19        |

|                       | Appeal  |   | Value   | !            | 2018 Rank |
|-----------------------|---|---|---------|--------------|-----------|
| $\triangleright$      | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 87.00   | index        | 49        |
|                       | Attracting and retaining talents              | is a priority in companies  | 6.82    | Survey [010] | 29        |
|                       | Worker motivation                             | in companies is high  | 6.12    | Survey [010] | 28        |
|                       | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 5.34    | Survey [010] | 25        |
| $\blacktriangleright$ | Quality of life                               | is high   | 9.24    | Survey [010] | 8         |
|                       | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 7.28    | Survey [010] | 12        |
| $\blacktriangleright$ | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 51,497  | US\$         | 5         |
|                       | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 172,458 | US\$         | 28        |
| $\triangleright$      | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 21.54   | %            | 45        |
|                       | Personal security and private property rights | are adequately protected  | 8.58    | Survey [010] | 12        |

|                  | Readiness                     |   | Value |              | 2018 Rank |
|------------------|-------------------------------|---|-------|--------------|-----------|
| •                | Labor force growth            | Percentage change   | 3.20  | %            | 6         |
|                  | Skilled labor                 | is readily available  | 6.24  | Survey [010] | 16        |
| ▶                | Finance skills                | are readily available   | 7.39  | Survey [010] | 10        |
|                  | International experience      | of senior managers is generally significant                     | 5.36  | Survey [010] | 32        |
|                  | Competent senior managers     | are readily available   | 6.02  | Survey [010] | 24        |
|                  | Educational system            | The educational system meets the needs of a competitive economy | 7.36  | Survey [010] | 12        |
|                  | Science in schools            | is sufficiently emphasized                                      | 5.92  | Survey [010] | 25        |
|                  | University education          | meets the needs of a competitive economy                        | 6.80  | Survey [010] | 22        |
|                  | Management education          | meets the needs of the business community                       | 6.66  | Survey [010] | 23        |
| $\triangleright$ | Language skills               | are meeting the needs of enterprises                            | 5.94  | Survey [010] | 34        |
| ▶                | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 13.91 | number       | I         |
|                  | Educational assessment - PISA | PISA survey of 15-year olds                                     | 502   | Average      | 19        |
|                  |                               |   |       |              |           |

# **AUSTRIA**

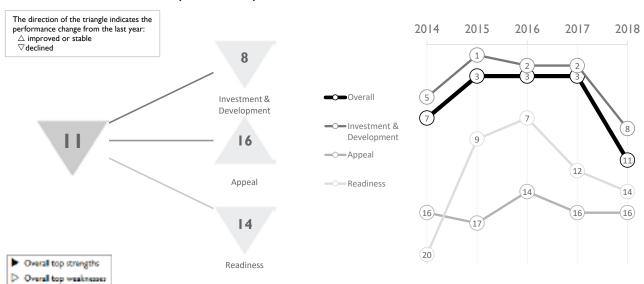


| Investment & Development                  |  | Value | 2018 R       | ₹ank |
|---|--|-------|--------------|------|
| Total public expenditure on education     | Percentage of GDP                                  | 5.4   | %            | 21   |
| Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 26.9  | %            | 6    |
| Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 11.84 | ratio        | 13   |
| Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 9.31  | ratio        | 7    |
| Apprenticeships                           | are sufficiently implemented                       | 7.84  | Survey [010] | 3    |
| Employee training                         | is a high priority in companies                    | 7.69  | Survey [010] | 2    |
| Female labor force                        | Percentage of total labor force                    | 46.85 | %            | 22   |
| Health infrastructure                     | meets the needs of society                         | 8.46  | Survey [010] | 5    |

|                  | Appeal  |   | Value   | :            | 2018 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        | 34        |
| ▶                | Attracting and retaining talents              | is a priority in companies  | 7.92    | Survey [010] | 4         |
|                  | Worker motivation                             | in companies is high  | 7.53    | Survey [010] | 5         |
|                  | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 5.65    | Survey [010] | 22        |
| ▶                | Quality of life                               | is high   | 9.75    | Survey [010] | I         |
|                  | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 6.04    | Survey [010] | 22        |
|                  | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 40,720  | US\$         | 17        |
|                  | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 271,715 | US\$         | 6         |
| $\triangleright$ | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 28.82   | %            | 61        |
|                  | Personal security and private property rights | are adequately protected  | 8.72    | Survey [010] | 8         |

|                       | Readiness                     |   | Value |              | 2018 Rank |
|-----------------------|-------------------------------|---|-------|--------------|-----------|
| $\triangleright$      | Labor force growth            | Percentage change   | 0.40  | %            | 42        |
| $\triangleright$      | Skilled labor                 | is readily available  | 4.74  | Survey [010] | 48        |
|                       | Finance skills                | are readily available   | 6.78  | Survey [010] | 23        |
|                       | International experience      | of senior managers is generally significant                     | 6.31  | Survey [010] | 16        |
| $\triangleright$      | Competent senior managers     | are readily available   | 5.55  | Survey [010] | 36        |
|                       | Educational system            | The educational system meets the needs of a competitive economy | 6.94  | Survey [010] | 15        |
|                       | Science in schools            | is sufficiently emphasized                                      | 5.83  | Survey [010] | 28        |
|                       | University education          | meets the needs of a competitive economy                        | 7.40  | Survey [010] | 15        |
|                       | Management education          | meets the needs of the business community                       | 7.18  | Survey [010] | 13        |
|                       | Language skills               | are meeting the needs of enterprises                            | 7.09  | Survey [010] | 24        |
| $\blacktriangleright$ | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 8.06  | number       | 5         |
|                       | Educational assessment - PISA | PISA survey of 15-year olds                                     | 496   | Average      | 23        |

# **BELGIUM**

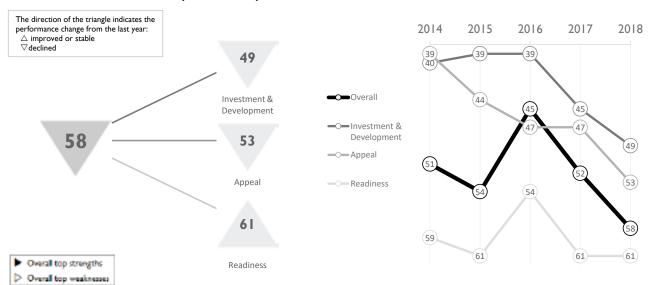


|                  | Investment & Development                  |  | Value | 9            | 2018 Rank |
|------------------|---|--|-------|--------------|-----------|
| ▶                | Total public expenditure on education     | Percentage of GDP                                  | 6.4   | %            | 8         |
|                  | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 25.7  | %            | 10        |
|                  | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 12.78 | ratio        | 18        |
| ▶                | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 9.77  | ratio        | 8         |
| $\triangleright$ | Apprenticeships                           | are sufficiently implemented                       | 3.81  | Survey [010] | 52        |
|                  | Employee training                         | is a high priority in companies                    | 5.97  | Survey [010] | 27        |
|                  | Female labor force                        | Percentage of total labor force                    | 46.33 | %            | 30        |
| ▶                | Health infrastructure                     | meets the needs of society                         | 8.67  | Survey [010] | 3         |

| Appeal  |   | Value   | 2            | 2018 Rank |
|---|---|---------|--------------|-----------|
| Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 70.70   | index        | 26        |
| Attracting and retaining talents              | is a priority in companies  | 7.51    | Survey [010] | 13        |
| Worker motivation                             | in companies is high  | 5.97    | Survey [010] | 31        |
| Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 5.17    | Survey [010] | 28        |
| Quality of life                               | is high   | 8.79    | Survey [010] | 13        |
| Foreign highly-skilled personnel              | are attracted to your country's business environment  | 5.51    | Survey [010] | 30        |
| Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 41,133  | US\$         | 16        |
| Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 251,606 | US\$         | 10        |
| Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 24.73   | %            | 51        |
| Personal security and private property rights | are adequately protected  | 8.25    | Survey [010] | 15        |

|                  | Readiness                     |   | Value |              | 2018 Rank |
|------------------|-------------------------------|---|-------|--------------|-----------|
| $\triangleright$ | Labor force growth            | Percentage change   | -0.08 | %            | 49        |
|                  | Skilled labor                 | is readily available  | 5.64  | Survey [010] | 31        |
|                  | Finance skills                | are readily available   | 7.00  | Survey [010] | 16        |
|                  | International experience      | of senior managers is generally significant                     | 6.68  | Survey [010] | 10        |
| ▶                | Competent senior managers     | are readily available   | 6.79  | Survey [010] | 9         |
|                  | Educational system            | The educational system meets the needs of a competitive economy | 6.86  | Survey [010] | 18        |
|                  | Science in schools            | is sufficiently emphasized                                      | 6.20  | Survey [010] | 22        |
|                  | University education          | meets the needs of a competitive economy                        | 7.67  | Survey [010] | П         |
|                  | Management education          | meets the needs of the business community                       | 7.22  | Survey [010] | 12        |
|                  | Language skills               | are meeting the needs of enterprises                            | 7.78  | Survey [010] | 14        |
|                  | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 5.01  | number       | 13        |
|                  | Educational assessment - PISA | PISA survey of 15-year olds                                     | 504   | Average      | 15        |
|                  |                               |   |       |              |           |

### **BRAZIL**

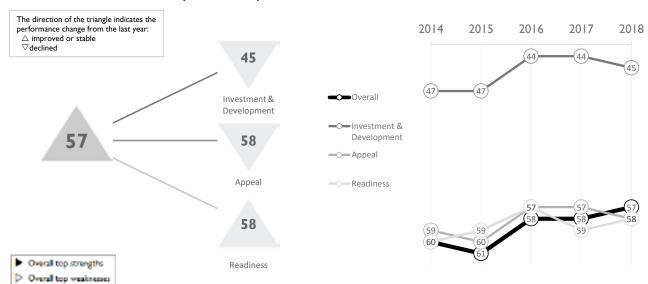


|                  | Investment & Development                  |  | Value             | 2018 Rank     |
|------------------|---|--|-------------------|---------------|
| •                | Total public expenditure on education     | Percentage of GDP                                  | 6.2 %             | 10            |
| •                | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 21.6 %            | 30            |
|                  | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | <b>24.79</b> rati | 。 57          |
|                  | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | <b>24.40</b> rati | 。 57          |
|                  | Apprenticeships                           | are sufficiently implemented                       | <b>4.50</b> Sur   | vey [010] 37  |
|                  | Employee training                         | is a high priority in companies                    | 5.02 Sur          | vey [010] 5 I |
| ▶                | Female labor force                        | Percentage of total labor force                    | 44.50 %           | 39            |
| $\triangleright$ | Health infrastructure                     | meets the needs of society                         | 1. <b>99</b> Sur  | vey [010] 62  |

| Appeal  |   | Value   | 2            | 2018 Rank |
|---|---|---------|--------------|-----------|
| Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 86.30   | index        | 48        |
| Attracting and retaining talents              | is a priority in companies  | 6.06    | Survey [010] | 48        |
| Worker motivation                             | in companies is high  | 5.04    | Survey [010] | 50        |
| Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 4.36    | Survey [010] | 39        |
| Quality of life                               | is high   | 3.90    | Survey [010] | 58        |
| Foreign highly-skilled personnel              | are attracted to your country's business environment  | 3.77    | Survey [010] | 52        |
| Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 17,117  | US\$         | 38        |
| Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 123,050 | US\$         | 42        |
| Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 8.47    | %            | П         |
| Personal security and private property rights | are adequately protected  | 3.63    | Survey [010] | 59        |

|                       | Readiness                     |   | Value |              | 2018 Rank |
|-----------------------|-------------------------------|---|-------|--------------|-----------|
| $\blacktriangleright$ | Labor force growth            | Percentage change   | 1.97  | %            | 16        |
|                       | Skilled labor                 | is readily available  | 4.06  | Survey [010] | 52        |
|                       | Finance skills                | are readily available   | 4.79  | Survey [010] | 58        |
|                       | International experience      | of senior managers is generally significant                     | 4.66  | Survey [010] | 53        |
|                       | Competent senior managers     | are readily available   | 4.56  | Survey [010] | 52        |
| $\triangleright$      | Educational system            | The educational system meets the needs of a competitive economy | 2.27  | Survey [010] | 62        |
| $\triangleright$      | Science in schools            | is sufficiently emphasized                                      | 2.20  | Survey [010] | 63        |
|                       | University education          | meets the needs of a competitive economy                        | 3.46  | Survey [010] | 58        |
|                       | Management education          | meets the needs of the business community                       | 4.02  | Survey [010] | 58        |
| $\triangleright$      | Language skills               | are meeting the needs of enterprises                            | 2.89  | Survey [010] | 63        |
|                       | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 0.10  | number       | 57        |
|                       | Educational assessment - PISA | PISA survey of 15-year olds                                     | 389   | Average      | 56        |

# **BULGARIA**

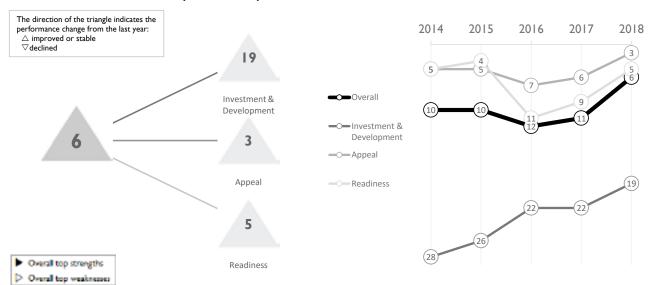


|   | Investment & Development                  |  | Value | 20           | 018 Rank |
|---|---|--|-------|--------------|----------|
|   | Total public expenditure on education     | Percentage of GDP                                  | 3.9   | %            | 41       |
| • | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 21.7  | %            | 27       |
|   | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 17.73 | ratio        | 46       |
|   | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 13.23 | ratio        | 39       |
|   | Apprenticeships                           | are sufficiently implemented                       | 3.40  | Survey [010] | 58       |
|   | Employee training                         | is a high priority in companies                    | 4.73  | Survey [010] | 56       |
| ▶ | Female labor force                        | Percentage of total labor force                    | 46.48 | %            | 27       |
|   | Health infrastructure                     | meets the needs of society                         | 2.27  | Survey [010] | 59       |

| Appeal  |   | Value  | 2            | 2018 Rank |
|---|---|--------|--------------|-----------|
| Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 54.90  | index        | 2         |
| Attracting and retaining talents              | is a priority in companies  | 6.00   | Survey [010] | 49        |
| Worker motivation                             | in companies is high  | 4.47   | Survey [010] | 55        |
| Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 2.13   | Survey [010] | 59        |
| Quality of life                               | is high   | 4.13   | Survey [010] | 56        |
| Foreign highly-skilled personnel              | are attracted to your country's business environment  | 3.00   | Survey [010] | 57        |
| Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 7,891  | US\$         | 58        |
| Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 48,391 | US\$         | 59        |
| Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 20.32  | %            | 37        |
| Personal security and private property rights | are adequately protected  | 3.80   | Survey [010] | 58        |

|                  | Readiness                     |   | Value       | 2018 Rank |
|------------------|-------------------------------|---|-------------|-----------|
| •                | Labor force growth            | Percentage change   | 2.86 %      | П         |
|                  | Skilled labor                 | is readily available  | 3.47 Survey | ([010] 57 |
| $\triangleright$ | Finance skills                | are readily available   | 3.93 Survey | ([010] 62 |
|                  | International experience      | of senior managers is generally significant                     | 4.47 Survey | ([010] 54 |
|                  | Competent senior managers     | are readily available   | 3.87 Survey | ([010] 57 |
| $\triangleright$ | Educational system            | The educational system meets the needs of a competitive economy | 2.27 Survey | ([010] 63 |
| $\triangleright$ | Science in schools            | is sufficiently emphasized                                      | 2.55 Survey | (010] 61  |
| $\triangleright$ | University education          | meets the needs of a competitive economy                        | 2.53 Survey | ([010] 63 |
| $\triangleright$ | Management education          | meets the needs of the business community                       | 2.87 Survey | ([010] 63 |
| •                | Language skills               | are meeting the needs of enterprises                            | 6.47 Survey | ([010] 30 |
|                  | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 1.71 numbe  | er 35     |
|                  | Educational assessment - PISA | PISA survey of I5-year olds                                     | 443 Avera   | ge 42     |
|                  |                               |   |             |           |

### **CANADA**

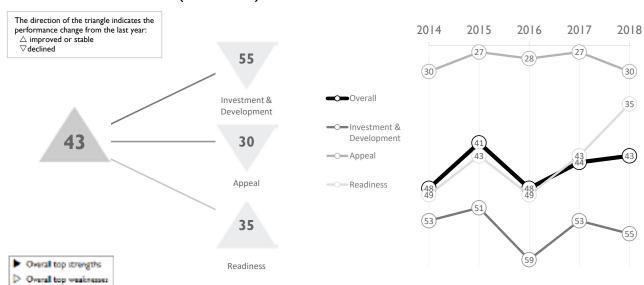


|                  | Investment & Development                  |  | Value |              | 2018 Rank |
|------------------|---|--|-------|--------------|-----------|
|                  | Total public expenditure on education     | Percentage of GDP                                  | 5.4   | %            | 17        |
| $\triangleright$ | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 18.3  | %            | 40        |
| $\triangleright$ | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 16.98 | ratio        | 44        |
|                  | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 12.97 | ratio        | 37        |
|                  | Apprenticeships                           | are sufficiently implemented                       | 5.96  | Survey [010] | П         |
|                  | Employee training                         | is a high priority in companies                    | 6.39  | Survey [010] | 17        |
|                  | Female labor force                        | Percentage of total labor force                    | 47.43 | %            | 13        |
|                  | Health infrastructure                     | meets the needs of society                         | 7.70  | Survey [010] | 18        |

|                       | Appeal  |   | Value   |              | 2018 Rank |
|-----------------------|---|---|---------|--------------|-----------|
|                       | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 70.50   | index        | 23        |
| $\blacktriangleright$ | Attracting and retaining talents              | is a priority in companies  | 8.00    | Survey [010] | 3         |
|                       | Worker motivation                             | in companies is high  | 7.13    | Survey [010] | 9         |
|                       | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 6.08    | Survey [010] | 18        |
|                       | Quality of life                               | is high   | 9.09    | Survey [010] | 10        |
| $\blacktriangleright$ | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 8.11    | Survey [010] | 4         |
|                       | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 45,701  | US\$         | 9         |
|                       | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 203,003 | US\$         | 18        |
|                       | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 16.53   | %            | 27        |
| $\blacktriangleright$ | Personal security and private property rights | are adequately protected  | 9.13    | Survey [010] | 3         |

|   | Readiness                     |   | Value |              | 2018 Rank |
|---|-------------------------------|---|-------|--------------|-----------|
|   | Labor force growth            | Percentage change   | 1.14  | %            | 26        |
|   | Skilled labor                 | is readily available  | 6.79  | Survey [010] | 4         |
|   | Finance skills                | are readily available   | 7.43  | Survey [010] | 9         |
|   | International experience      | of senior managers is generally significant                     | 5.77  | Survey [010] | 23        |
|   | Competent senior managers     | are readily available   | 6.91  | Survey [010] | 6         |
| ▶ | Educational system            | The educational system meets the needs of a competitive economy | 8.30  | Survey [010] | 4         |
|   | Science in schools            | is sufficiently emphasized                                      | 7.40  | Survey [010] | 5         |
| ▶ | University education          | meets the needs of a competitive economy                        | 8.34  | Survey [010] | 3         |
|   | Management education          | meets the needs of the business community                       | 7.92  | Survey [010] | 4         |
|   | Language skills               | are meeting the needs of enterprises                            | 7.81  | Survey [010] | 13        |
|   | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 5.24  | number       | 12        |
|   | Educational assessment - PISA | PISA survey of 15-year olds                                     | 522   | Average      | 7         |

# **CHILE**

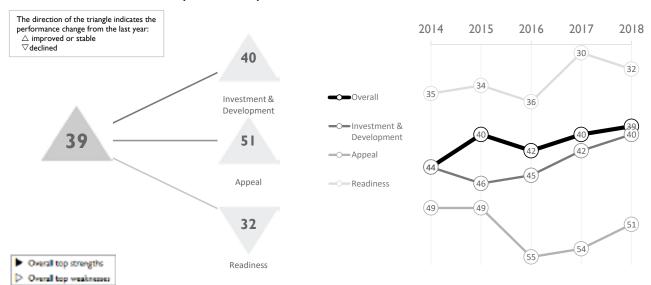


|                  | Investment & Development                  |  | Value | <u>.</u>     | 2018 Rank |
|------------------|---|--|-------|--------------|-----------|
|                  | Total public expenditure on education     | Percentage of GDP                                  | 4.6   | %            | 30        |
|                  | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 16.5  | %            | 45        |
| $\triangleright$ | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 20.89 | ratio        | 54        |
| $\triangleright$ | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 22.60 | ratio        | 55        |
|                  | Apprenticeships                           | are sufficiently implemented                       | 4.07  | Survey [010] | 48        |
|                  | Employee training                         | is a high priority in companies                    | 5.24  | Survey [010] | 46        |
| $\triangleright$ | Female labor force                        | Percentage of total labor force                    | 40.61 | %            | 51        |
|                  | Health infrastructure                     | meets the needs of society                         | 4.78  | Survey [010] | 39        |

|   | Appeal  |   | Value   |              | 2018 Rank |
|---|---|---|---------|--------------|-----------|
|   | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 77.20   | index        | 36        |
|   | Attracting and retaining talents              | is a priority in companies  | 6.22    | Survey [010] | 41        |
|   | Worker motivation                             | in companies is high  | 5.42    | Survey [010] | 39        |
| ▶ | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 6.11    | Survey [010] | 16        |
|   | Quality of life                               | is high   | 7.31    | Survey [010] | 30        |
| ▶ | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 7.35    | Survey [010] | 11        |
|   | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 16,341  | US\$         | 39        |
|   | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 199,832 | US\$         | 21        |
|   | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 16.57   | %            | 28        |
|   | Personal security and private property rights | are adequately protected  | 7.24    | Survey [010] | 32        |
|   |   |   |         |              |           |

|                  | Readiness                     |   | Value          | 2018 Rank |
|------------------|-------------------------------|---|----------------|-----------|
| •                | Labor force growth            | Percentage change   | 2.99 %         | 9         |
|                  | Skilled labor                 | is readily available  | 5.64 Survey [0 | 10] 32    |
|                  | Finance skills                | are readily available   | 6.58 Survey [0 | 10] 29    |
|                  | International experience      | of senior managers is generally significant                     | 6.11 Survey [0 | 10] 19    |
|                  | Competent senior managers     | are readily available   | 6.55 Survey [0 | 10] 13    |
|                  | Educational system            | The educational system meets the needs of a competitive economy | 4.91 Survey [0 | 10] 41    |
|                  | Science in schools            | is sufficiently emphasized                                      | 4.07 Survey [0 | 10] 50    |
|                  | University education          | meets the needs of a competitive economy                        | 5.85 Survey [0 | 10] 33    |
|                  | Management education          | meets the needs of the business community                       | 6.69 Survey [0 | 10] 22    |
| $\triangleright$ | Language skills               | are meeting the needs of enterprises                            | 3.26 Survey [0 | 10] 60    |
| $\triangleright$ | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 0.25 number    | 52        |
|                  | Educational assessment - PISA | PISA survey of 15-year olds                                     | 435 Average    | 45        |
|                  |                               |   |                |           |

### **CHINA MAINLAND**

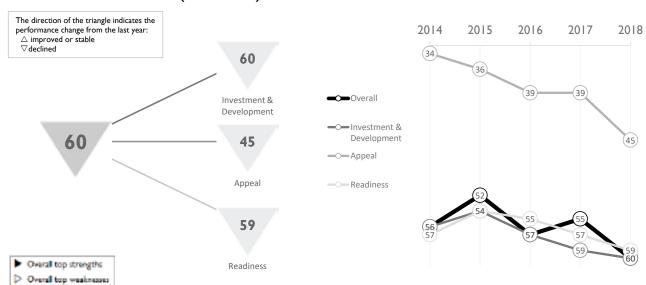


|                       | Investment & Development                  |  | Value | 9            | 2018 Rank |
|-----------------------|---|--|-------|--------------|-----------|
|                       | Total public expenditure on education     | Percentage of GDP                                  | 3.8   | %            | 46        |
|                       | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | -     | %            | -         |
|                       | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 16.29 | ratio        | 35        |
|                       | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 13.82 | ratio        | 42        |
| $\blacktriangleright$ | Apprenticeships                           | are sufficiently implemented                       | 5.31  | Survey [010] | 20        |
| $\blacktriangleright$ | Employee training                         | is a high priority in companies                    | 6.46  | Survey [010] | 15        |
|                       | Female labor force                        | Percentage of total labor force                    | -     | %            | -         |
|                       | Health infrastructure                     | meets the needs of society                         | 5.69  | Survey [010] | 36        |

|                       | Appeal  |   | Value   |              | 2018 Rank |
|-----------------------|---|---|---------|--------------|-----------|
| $\triangleright$      | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 100.90  | index        | 55        |
| $\blacktriangleright$ | Attracting and retaining talents              | is a priority in companies  | 7.21    | Survey [010] | 21        |
|                       | Worker motivation                             | in companies is high  | 6.55    | Survey [010] | 21        |
|                       | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 4.23    | Survey [010] | 40        |
|                       | Quality of life                               | is high   | 6.27    | Survey [010] | 38        |
|                       | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 5.59    | Survey [010] | 28        |
| $\triangleright$      | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 12,355  | US\$         | 51        |
|                       | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 142,463 | US\$         | 38        |
|                       | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 20.14   | %            | 36        |
|                       | Personal security and private property rights | are adequately protected  | 5.93    | Survey [010] | 42        |

|                       | Readiness                     |   | Value |              | 2018 Rank |
|-----------------------|-------------------------------|---|-------|--------------|-----------|
| $\triangleright$      | Labor force growth            | Percentage change   | -0.17 | %            | 51        |
|                       | Skilled labor                 | is readily available  | 5.61  | Survey [010] | 35        |
|                       | Finance skills                | are readily available   | 6.20  | Survey [010] | 35        |
| $\triangleright$      | International experience      | of senior managers is generally significant                     | 4.76  | Survey [010] | 50        |
|                       | Competent senior managers     | are readily available   | 5.37  | Survey [010] | 38        |
|                       | Educational system            | The educational system meets the needs of a competitive economy | 5.68  | Survey [010] | 34        |
| $\blacktriangleright$ | Science in schools            | is sufficiently emphasized                                      | 6.57  | Survey [010] | П         |
|                       | University education          | meets the needs of a competitive economy                        | 5.86  | Survey [010] | 32        |
|                       | Management education          | meets the needs of the business community                       | 6.03  | Survey [010] | 33        |
|                       | Language skills               | are meeting the needs of enterprises                            | 5.80  | Survey [010] | 36        |
| $\triangleright$      | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 0.10  | number       | 56        |
| $\blacktriangleright$ | Educational assessment - PISA | PISA survey of 15-year olds                                     | 525   | Average      | 6         |

# **COLOMBIA**

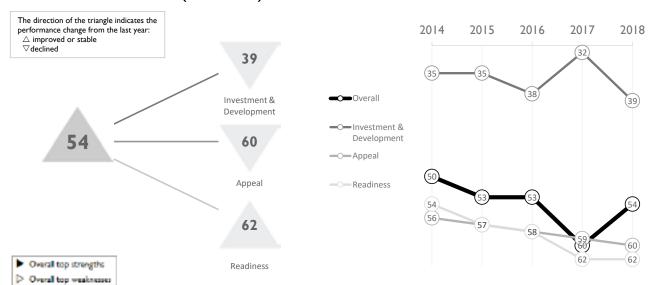


|                  | Investment & Development                  |  | Value | 2            | 2018 Rank |
|------------------|---|--|-------|--------------|-----------|
|                  | Total public expenditure on education     | Percentage of GDP                                  | 4.5   | %            | 32        |
|                  | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 16.0  | %            | 47        |
|                  | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 23.80 | ratio        | 56        |
| $\triangleright$ | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 25.58 | ratio        | 58        |
|                  | Apprenticeships                           | are sufficiently implemented                       | 4.54  | Survey [010] | 34        |
|                  | Employee training                         | is a high priority in companies                    | 5.29  | Survey [010] | 45        |
| ▶                | Female labor force                        | Percentage of total labor force                    | 43.82 | %            | 44        |
|                  | Health infrastructure                     | meets the needs of society                         | 2.52  | Survey [010] | 56        |

|                  | Appeal  |   | Value   |              | 2018 Rank |
|------------------|---|---|---------|--------------|-----------|
| •                | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 62.80   | index        | 15        |
| $\triangleright$ | Attracting and retaining talents              | is a priority in companies  | 5.05    | Survey [010] | 61        |
|                  | Worker motivation                             | in companies is high  | 5.06    | Survey [010] | 49        |
|                  | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 3.59    | Survey [010] | 50        |
|                  | Quality of life                               | is high   | 3.95    | Survey [010] | 57        |
|                  | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 5.24    | Survey [010] | 32        |
|                  | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 20,538  | US\$         | 33        |
|                  | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 144,303 | US\$         | 37        |
| ▶                | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 8.60    | %            | 12        |
|                  | Personal security and private property rights | are adequately protected  | 3.84    | Survey [010] | 57        |

|                  | Readiness                     |   | Value | 2            | 2018 Rank |
|------------------|-------------------------------|---|-------|--------------|-----------|
|                  | Labor force growth            | Percentage change   | 0.34  | %            | 44        |
|                  | Skilled labor                 | is readily available  | 4.85  | Survey [010] | 46        |
|                  | Finance skills                | are readily available   | 5.13  | Survey [010] | 53        |
|                  | International experience      | of senior managers is generally significant                     | 4.29  | Survey [010] | 55        |
|                  | Competent senior managers     | are readily available   | 3.98  | Survey [010] | 56        |
|                  | Educational system            | The educational system meets the needs of a competitive economy | 3.38  | Survey [010] | 54        |
| $\triangleright$ | Science in schools            | is sufficiently emphasized                                      | 2.69  | Survey [010] | 60        |
|                  | University education          | meets the needs of a competitive economy                        | 4.09  | Survey [010] | 54        |
|                  | Management education          | meets the needs of the business community                       | 4.53  | Survey [010] | 56        |
| $\triangleright$ | Language skills               | are meeting the needs of enterprises                            | 3.01  | Survey [010] | 62        |
| $\triangleright$ | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 0.08  | number       | 58        |
|                  | Educational assessment - PISA | PISA survey of 15-year olds                                     | 403   | Average      | 52        |
|                  |                               |   |       |              |           |

# **CROATIA**

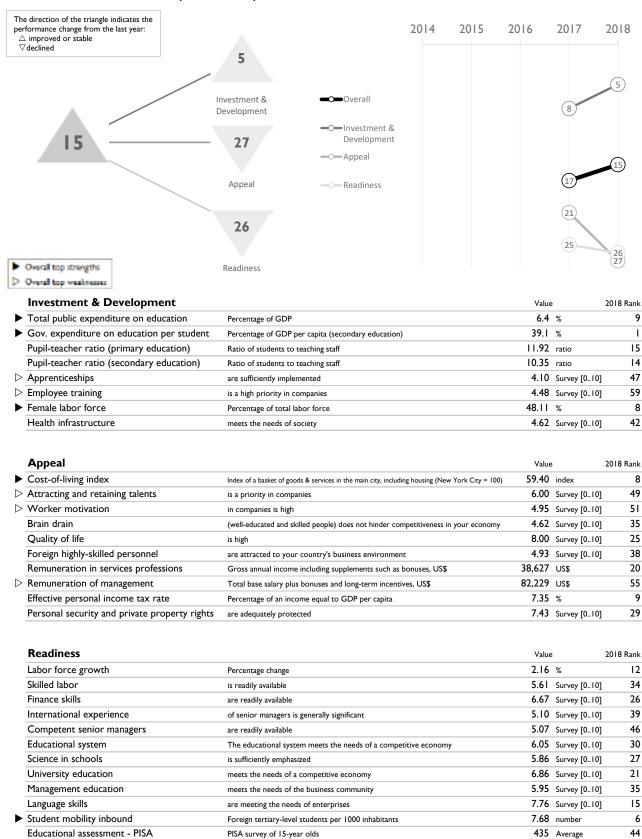


|                       | Investment & Development                  |  | Value | :            | 2018 Rank |
|-----------------------|---|--|-------|--------------|-----------|
|                       | Total public expenditure on education     | Percentage of GDP                                  | 4.4   | %            | 33        |
| $\blacktriangleright$ | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 25.3  | %            | - 11      |
| $\blacktriangleright$ | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 11.70 | ratio        | 12        |
| $\blacktriangleright$ | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 9.80  | ratio        | 9         |
|                       | Apprenticeships                           | are sufficiently implemented                       | 3.25  | Survey [010] | 60        |
| $\triangleright$      | Employee training                         | is a high priority in companies                    | 3.59  | Survey [010] | 63        |
|                       | Female labor force                        | Percentage of total labor force                    | 45.85 | %            | 32        |
|                       | Health infrastructure                     | meets the needs of society                         | 4.55  | Survey [010] | 44        |

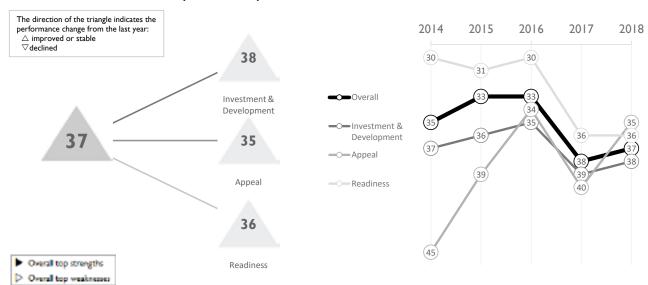
| Appeal  |   | Value            | 2018 Rank |
|---|---|------------------|-----------|
| Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 61.80 index      | 14        |
| Attracting and retaining talents              | is a priority in companies  | 3.74 Survey [010 | 0] 63     |
| Worker motivation                             | in companies is high  | 3.91 Survey [010 | 0] 62     |
| Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 2.43 Survey [010 | )] 57     |
| Quality of life                               | is high   | 5.50 Survey [010 | )] 45     |
| Foreign highly-skilled personnel              | are attracted to your country's business environment  | 1.97 Survey [010 | 0] 62     |
| Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 17,634 US\$      | 37        |
| Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 85,342 US\$      | 52        |
| Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 19.45 %          | 33        |
| Personal security and private property rights | are adequately protected  | 4.47 Survey [010 | 53        |
|   |   |                  |           |

|                  | Readiness                     |   | Value | 2            | 2018 Rank |
|------------------|-------------------------------|---|-------|--------------|-----------|
|                  | Labor force growth            | Percentage change   | 0.00  | %            | 46        |
|                  | Skilled labor                 | is readily available  | 3.53  | Survey [010] | 56        |
| $\triangleright$ | Finance skills                | are readily available   | 3.53  | Survey [010] | 63        |
| $\triangleright$ | International experience      | of senior managers is generally significant                     | 3.22  | Survey [010] | 63        |
| $\triangleright$ | Competent senior managers     | are readily available   | 3.10  | Survey [010] | 63        |
|                  | Educational system            | The educational system meets the needs of a competitive economy | 3.25  | Survey [010] | 55        |
|                  | Science in schools            | is sufficiently emphasized                                      | 3.13  | Survey [010] | 56        |
|                  | University education          | meets the needs of a competitive economy                        | 3.19  | Survey [010] | 60        |
|                  | Management education          | meets the needs of the business community                       | 3.71  | Survey [010] | 59        |
| •                | Language skills               | are meeting the needs of enterprises                            | 6.41  | Survey [010] | 31        |
|                  | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 0.17  | number       | 54        |
|                  | Educational assessment - PISA | PISA survey of 15-year olds                                     | 470   | Average      | 36        |

#### **CYPRUS**



### **CZECH REPUBLIC**

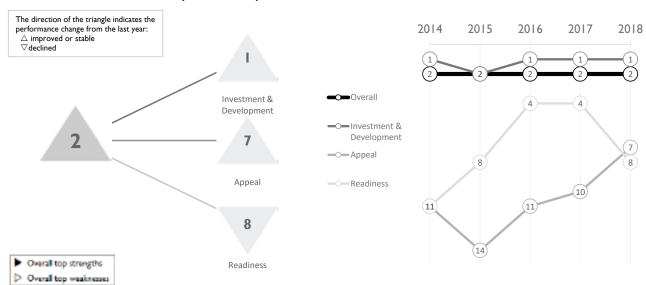


|                       | Investment & Development                  |  | Value | 9            | 2018 Rank |
|-----------------------|---|--|-------|--------------|-----------|
| $\triangleright$      | Total public expenditure on education     | Percentage of GDP                                  | 3.6   | %            | 50        |
| ▶                     | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 23.4  | %            | 17        |
| $\triangleright$      | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 18.97 | ratio        | 51        |
|                       | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 11.46 | ratio        | 22        |
|                       | Apprenticeships                           | are sufficiently implemented                       | 4.50  | Survey [010] | 36        |
|                       | Employee training                         | is a high priority in companies                    | 6.00  | Survey [010] | 24        |
|                       | Female labor force                        | Percentage of total labor force                    | 44.48 | %            | 40        |
| $\blacktriangleright$ | Health infrastructure                     | meets the needs of society                         | 7.27  | Survey [010] | 20        |

|   | Appeal  |   | Value   | 2            | 2018 Rank |
|---|---|---|---------|--------------|-----------|
| • | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 65.80   | index        | 20        |
| ▶ | Attracting and retaining talents              | is a priority in companies  | 7.38    | Survey [010] | 16        |
|   | Worker motivation                             | in companies is high  | 5.96    | Survey [010] | 32        |
|   | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 4.96    | Survey [010] | 33        |
|   | Quality of life                               | is high   | 7.76    | Survey [010] | 27        |
|   | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 4.50    | Survey [010] | 41        |
|   | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 12,607  | US\$         | 48        |
|   | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 104,114 | US\$         | 46        |
|   | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 20.99   | %            | 42        |
|   | Personal security and private property rights | are adequately protected  | 7.65    | Survey [010] | 27        |

|                       | Readiness                     |   | Value |              | 2018 Rank |
|-----------------------|-------------------------------|---|-------|--------------|-----------|
|                       | Labor force growth            | Percentage change   | 0.51  | %            | 41        |
| $\triangleright$      | Skilled labor                 | is readily available  | 3.14  | Survey [010] | 60        |
| $\triangleright$      | Finance skills                | are readily available   | 5.18  | Survey [010] | 51        |
|                       | International experience      | of senior managers is generally significant                     | 5.38  | Survey [010] | 31        |
| $\triangleright$      | Competent senior managers     | are readily available   | 4.96  | Survey [010] | 49        |
|                       | Educational system            | The educational system meets the needs of a competitive economy | 5.77  | Survey [010] | 33        |
|                       | Science in schools            | is sufficiently emphasized                                      | 5.62  | Survey [010] | 32        |
|                       | University education          | meets the needs of a competitive economy                        | 6.08  | Survey [010] | 29        |
|                       | Management education          | meets the needs of the business community                       | 5.96  | Survey [010] | 34        |
|                       | Language skills               | are meeting the needs of enterprises                            | 5.77  | Survey [010] | 37        |
| $\blacktriangleright$ | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 3.96  | number       | 20        |
|                       | Educational assessment - PISA | PISA survey of 15-year olds                                     | 493   | Average      | 26        |

# **DENMARK**

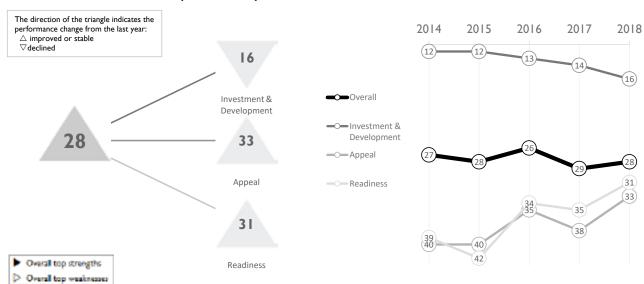


|   | Investment & Development                  |  | Value | 2018 Rank      |
|---|---|--|-------|----------------|
|   | Total public expenditure on education     | Percentage of GDP                                  | 6.9   | % 4            |
| • | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 31.1  | % 2            |
|   | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 11.86 | ratio 14       |
|   | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 12.10 | ratio 28       |
|   | Apprenticeships                           | are sufficiently implemented                       | 7.07  | Survey [010] 4 |
| ▶ | Employee training                         | is a high priority in companies                    | 7.70  | Survey [010]   |
|   | Female labor force                        | Percentage of total labor force                    | 47.76 | % 11           |
|   | Health infrastructure                     | meets the needs of society                         | 8.34  | Survey [010] 7 |

|                  | Appeal  |   | Value   |              | 2018 Rank |
|------------------|---|---|---------|--------------|-----------|
| $\triangleright$ | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 86.10   | index        | 47        |
| ▶                | Attracting and retaining talents              | is a priority in companies  | 8.13    | Survey [010] | I         |
| ▶                | Worker motivation                             | in companies is high  | 8.25    | Survey [010] | I         |
|                  | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 7.32    | Survey [010] | 3         |
|                  | Quality of life                               | is high   | 9.41    | Survey [010] | 5         |
|                  | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 6.21    | Survey [010] | 18        |
|                  | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 59,093  | US\$         | 3         |
|                  | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 215,474 | US\$         | 16        |
| $\triangleright$ | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 29.80   | %            | 62        |
|                  | Personal security and private property rights | are adequately protected  | 9.24    | Survey [010] | 2         |

| Readiness                     |   | Value             | 2018 Rank |
|-------------------------------|---|-------------------|-----------|
|                               | Percentage change   | -0.95 %           | 60        |
| Skilled labor                 | is readily available  | 6.33 Survey [010] | ] 13      |
| Finance skills                | are readily available   | 7.66 Survey [010] | ] 6       |
| International experience      | of senior managers is generally significant                     | 6.75 Survey [010] | 9         |
| Competent senior managers     | are readily available   | 6.88 Survey [010] | ] 8       |
| Educational system            | The educational system meets the needs of a competitive economy | 8.24 Survey [010] | ] 5       |
| Science in schools            | is sufficiently emphasized                                      | 6.84 Survey [010] | ] 8       |
| University education          | meets the needs of a competitive economy                        | 8.10 Survey [010] | ] 7       |
| Management education          | meets the needs of the business community                       | 8.13 Survey [010] | ] 2       |
| Language skills               | are meeting the needs of enterprises                            | 8.96 Survey [010] | ] 2       |
| Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 5.96 number       | 9         |
| Educational assessment - PISA | PISA survey of 15-year olds                                     | 507 Average       | 14        |

# **ESTONIA**

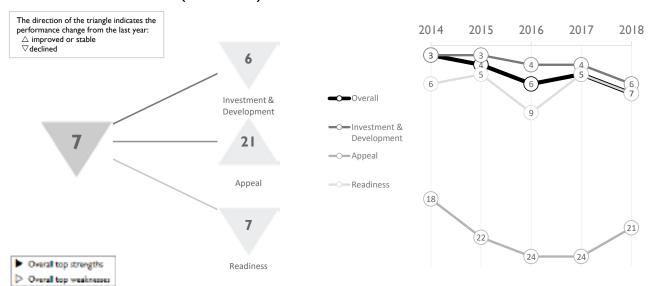


|   | Investment & Development                  |  | Value | . 2          | 2018 Rank |
|---|---|--|-------|--------------|-----------|
| • | Total public expenditure on education     | Percentage of GDP                                  | 6.1   | %            | 12        |
|   | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 19.9  | %            | 35        |
|   | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 13.35 | ratio        | 21        |
|   | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 12.18 | ratio        | 29        |
|   | Apprenticeships                           | are sufficiently implemented                       | 4.81  | Survey [010] | 28        |
| • | Employee training                         | is a high priority in companies                    | 6.50  | Survey [010] | 14        |
| • | Female labor force                        | Percentage of total labor force                    | 48.48 | %            | 6         |
|   | Health infrastructure                     | meets the needs of society                         | 6.16  | Survey [010] | 32        |

|                       | Appeal  |   | Value  |              | 2018 Rank |
|-----------------------|---|---|--------|--------------|-----------|
| $\blacktriangleright$ | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 61.70  | index        | 13        |
|                       | Attracting and retaining talents              | is a priority in companies  | 6.91   | Survey [010] | 27        |
|                       | Worker motivation                             | in companies is high  | 6.25   | Survey [010] | 25        |
|                       | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 4.19   | Survey [010] | 41        |
|                       | Quality of life                               | is high   | 6.50   | Survey [010] | 35        |
|                       | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 5.11   | Survey [010] | 34        |
|                       | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 13,655 | US\$         | 44        |
| $\triangleright$      | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 96,024 | US\$         | 49        |
|                       | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 14.68  | %            | 25        |
|                       | Personal security and private property rights | are adequately protected  | 7.38   | Survey [010] | 30        |

|                  | Readiness                     |   | Value |              | 2018 Rank |
|------------------|-------------------------------|---|-------|--------------|-----------|
|                  | Labor force growth            | Percentage change   | 1.13  | %            | 27        |
| $\triangleright$ | Skilled labor                 | is readily available  | 3.06  | Survey [010] | 61        |
| $\triangleright$ | Finance skills                | are readily available   | 5.30  | Survey [010] | 50        |
| $\triangleright$ | International experience      | of senior managers is generally significant                     | 4.94  | Survey [010] | 47        |
| $\triangleright$ | Competent senior managers     | are readily available   | 4.23  | Survey [010] | 54        |
|                  | Educational system            | The educational system meets the needs of a competitive economy | 6.91  | Survey [010] | 16        |
|                  | Science in schools            | is sufficiently emphasized                                      | 6.31  | Survey [010] | 18        |
|                  | University education          | meets the needs of a competitive economy                        | 6.53  | Survey [010] | 24        |
|                  | Management education          | meets the needs of the business community                       | 6.25  | Survey [010] | 28        |
|                  | Language skills               | are meeting the needs of enterprises                            | 7.19  | Survey [010] | 22        |
|                  | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 2.18  | number       | 31        |
| •                | Educational assessment - PISA | PISA survey of 15-year olds                                     | 527   | Average      | 5         |

# **FINLAND**

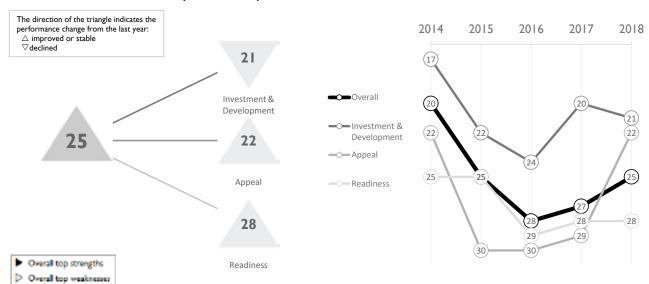


|   | Investment & Development                  |  | Value | 2            | 2018 Rank |
|---|---|--|-------|--------------|-----------|
| ▶ | Total public expenditure on education     | Percentage of GDP                                  | 6.8   | %            | 6         |
| ▶ | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 27.2  | %            | 5         |
|   | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 13.58 | ratio        | 22        |
|   | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 12.91 | ratio        | 35        |
|   | Apprenticeships                           | are sufficiently implemented                       | 4.87  | Survey [010] | 27        |
|   | Employee training                         | is a high priority in companies                    | 6.69  | Survey [010] | П         |
|   | Female labor force                        | Percentage of total labor force                    | 48.02 | %            | 10        |
|   | Health infrastructure                     | meets the needs of society                         | 8.39  | Survey [010] | 6         |

|                  | Appeal  |   | Value   | 2            | 2018 Rank |
|------------------|---|---|---------|--------------|-----------|
|                  | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 73.90   | index        | 30        |
|                  | Attracting and retaining talents              | is a priority in companies  | 7.17    | Survey [010] | 22        |
|                  | Worker motivation                             | in companies is high  | 6.69    | Survey [010] | 18        |
|                  | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 6.17    | Survey [010] | 13        |
|                  | Quality of life                               | is high   | 9.25    | Survey [010] | 7         |
| $\triangleright$ | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 4.74    | Survey [010] | 40        |
|                  | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 36,759  | US\$         | 23        |
|                  | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 177,832 | US\$         | 23        |
| $\triangleright$ | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 27.27   | %            | 59        |
| ▶                | Personal security and private property rights | are adequately protected  | 9.33    | Survey [010] | I         |

| Readiness                     |   | Value            | 2018 Rank |
|-------------------------------|---|------------------|-----------|
| Labor force growth            | Percentage change   | 0.82 %           | 30        |
| Skilled labor                 | is readily available  | 6.48 Survey [010 | ] 10      |
| Finance skills                | are readily available   | 7.10 Survey [010 | ] [4      |
| International experience      | of senior managers is generally significant                     | 5.63 Survey [010 | ] 27      |
| Competent senior managers     | are readily available   | 6.13 Survey [010 | ] 22      |
| Educational system            | The educational system meets the needs of a competitive economy | 8.54 Survey [010 | j 2       |
| Science in schools            | is sufficiently emphasized                                      | 7.77 Survey [010 | ] 3       |
| University education          | meets the needs of a competitive economy                        | 8.12 Survey [010 | ) 6       |
| Management education          | meets the needs of the business community                       | 7.53 Survey [010 | )] 9      |
| Language skills               | are meeting the needs of enterprises                            | 8.08 Survey [010 | n II      |
| Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 4.22 number      | 18        |
| Educational assessment - PISA | PISA survey of 15-year olds                                     | 521 Average      | 8         |
|                               |   |                  |           |

# **FRANCE**

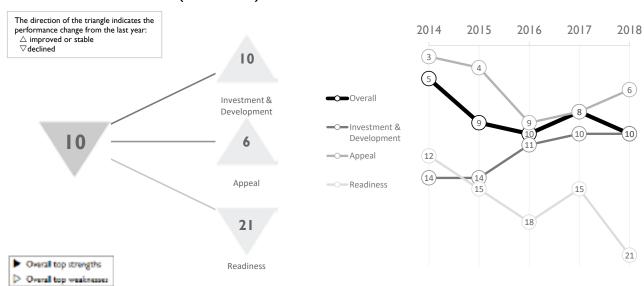


|                  | Investment & Development                  |  | Value | 2            | 2018 Rank |
|------------------|---|--|-------|--------------|-----------|
|                  | Total public expenditure on education     | Percentage of GDP                                  | 5.4   | %            | 16        |
| ▶                | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 26.9  | %            | 7         |
| $\triangleright$ | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 18.99 | ratio        | 52        |
|                  | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 12.75 | ratio        | 34        |
| $\triangleright$ | Apprenticeships                           | are sufficiently implemented                       | 3.52  | Survey [010] | 56        |
|                  | Employee training                         | is a high priority in companies                    | 5.36  | Survey [010] | 43        |
| ▶                | Female labor force                        | Percentage of total labor force                    | 48.08 | %            | 9         |
| ▶                | Health infrastructure                     | meets the needs of society                         | 8.06  | Survey [010] | 10        |

|                       | Appeal  |   | Value   |              | 2018 Rank |
|-----------------------|---|---|---------|--------------|-----------|
|                       | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 77.90   | index        | 39        |
|                       | Attracting and retaining talents              | is a priority in companies  | 6.50    | Survey [010] | 35        |
| $\triangleright$      | Worker motivation                             | in companies is high  | 5.26    | Survey [010] | 44        |
|                       | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 6.12    | Survey [010] | 15        |
|                       | Quality of life                               | is high   | 8.69    | Survey [010] | 16        |
|                       | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 5.52    | Survey [010] | 29        |
|                       | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 38,787  | US\$         | 19        |
| $\blacktriangleright$ | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 255,620 | US\$         | 8         |
| $\triangleright$      | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 22.82   | %            | 47        |
|                       | Personal security and private property rights | are adequately protected  | 8.02    | Survey [010] | 22        |

| Readiness                     |   | Value |              | 2018 Rank |
|-------------------------------|---|-------|--------------|-----------|
| Labor force growth            | Percentage change   | 0.39  | %            | 43        |
| Skilled labor                 | is readily available  | 6.71  | Survey [010] | 6         |
| Finance skills                | are readily available   | 6.72  | Survey [010] | 24        |
| International experience      | of senior managers is generally significant                     | 5.03  | Survey [010] | 43        |
| Competent senior managers     | are readily available   | 6.23  | Survey [010] | 19        |
| Educational system            | The educational system meets the needs of a competitive economy | 6.33  | Survey [010] | 24        |
| Science in schools            | is sufficiently emphasized                                      | 6.41  | Survey [010] | 15        |
| University education          | meets the needs of a competitive economy                        | 6.21  | Survey [010] | 28        |
| Management education          | meets the needs of the business community                       | 6.72  | Survey [010] | 21        |
| > Language skills             | are meeting the needs of enterprises                            | 4.23  | Survey [010] | 54        |
| Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 3.60  | number       | 23        |
| Educational assessment - PISA | PISA survey of 15-year olds                                     | 494   | Average      | 24        |

# **GERMANY**

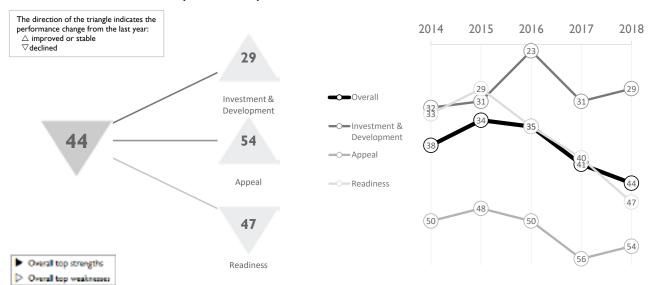


|                       | Investment & Development                  |  | Value | 2018 Ra      | ınk |
|-----------------------|---|--|-------|--------------|-----|
| $\triangleright$      | Total public expenditure on education     | Percentage of GDP                                  | 4.2   | % 3          | 37  |
|                       | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 23.3  | % 2          | 20  |
|                       | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 15.45 | ratio 2      | 29  |
|                       | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 13.18 | ratio 3      | 38  |
| ▶                     | Apprenticeships                           | are sufficiently implemented                       | 8.04  | Survey [010] | 2   |
| $\blacktriangleright$ | Employee training                         | is a high priority in companies                    | 7.36  | Survey [010] | 3   |
|                       | Female labor force                        | Percentage of total labor force                    | 46.29 | % 3          | 3 I |
| •                     | Health infrastructure                     | meets the needs of society                         | 8.25  | Survey [010] | 8   |

|                  | Appeal  |   | Value   | è            | 2018 Rank |
|------------------|---|---|---------|--------------|-----------|
|                  | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 71.70   | index        | 28        |
|                  | Attracting and retaining talents              | is a priority in companies  | 7.65    | Survey [010] | 8         |
| ▶                | Worker motivation                             | in companies is high  | 7.21    | Survey [010] | 7         |
|                  | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 6.57    | Survey [010] | 9         |
|                  | Quality of life                               | is high   | 9.14    | Survey [010] | 9         |
|                  | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 6.32    | Survey [010] | 16        |
|                  | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 42,280  | US\$         | 15        |
| ▶                | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 300,309 | US\$         | 3         |
| $\triangleright$ | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 26.72   | %            | 57        |
|                  | Personal security and private property rights | are adequately protected  | 8.68    | Survey [010] | 9         |

| Readiness                     |   | Value           | 2018 Rank |
|-------------------------------|---|-----------------|-----------|
| > Labor force growth          | Percentage change   | 0.57 %          | 39        |
| Skilled labor                 | is readily available  | 5.68 Survey [01 | 0] 29     |
| Finance skills                | are readily available   | 6.83 Survey [01 | 0] 20     |
| International experience      | of senior managers is generally significant                     | 6.41 Survey [01 | 0] 14     |
| Competent senior managers     | are readily available   | 6.18 Survey [01 | 0] 21     |
| Educational system            | The educational system meets the needs of a competitive economy | 7.38 Survey [01 | 0] [[     |
| Science in schools            | is sufficiently emphasized                                      | 5.87 Survey [01 | 0] 26     |
| University education          | meets the needs of a competitive economy                        | 7.52 Survey [01 | 0] 12     |
| Management education          | meets the needs of the business community                       | 6.72 Survey [01 | 0] 20     |
| Language skills               | are meeting the needs of enterprises                            | 6.96 Survey [01 | 0] 26     |
| > Student mobility inbound    | Foreign tertiary-level students per 1000 inhabitants            | 2.80 number     | 25        |
| Educational assessment - PISA | PISA survey of 15-year olds                                     | 508 Average     | 13        |
|                               |   |                 |           |

# **GREECE**

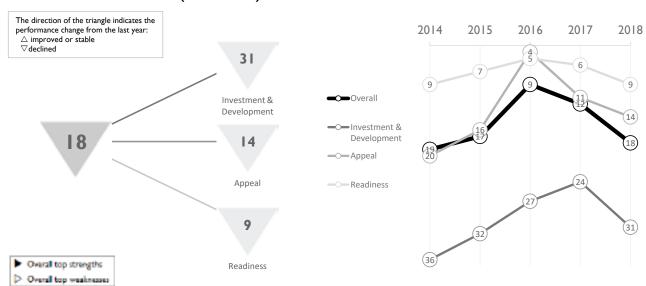


|                  | Investment & Development                  |  | Value | 2            | 2018 Rank |
|------------------|---|--|-------|--------------|-----------|
|                  | Total public expenditure on education     | Percentage of GDP                                  | 4.3   | %            | 34        |
|                  | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | -     | %            | -         |
| ▶                | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 9.45  | ratio        | - 1       |
| $\triangleright$ | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 7.30  | ratio        | 2         |
|                  | Apprenticeships                           | are sufficiently implemented                       | 4.20  | Survey [010] | 46        |
| $\triangleright$ | Employee training                         | is a high priority in companies                    | 4.45  | Survey [010] | 61        |
|                  | Female labor force                        | Percentage of total labor force                    | 44.30 | %            | 42        |
|                  | Health infrastructure                     | meets the needs of society                         | 4.08  | Survey [010] | 47        |

|                  | Appeal  |   | Value   |              | 2018 Rank |
|------------------|---|---|---------|--------------|-----------|
| ▶                | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 64.20   | index        | 17        |
|                  | Attracting and retaining talents              | is a priority in companies  | 5.90    | Survey [010] | 52        |
| $\triangleright$ | Worker motivation                             | in companies is high  | 4.28    | Survey [010] | 57        |
| $\triangleright$ | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 2.40    | Survey [010] | 58        |
|                  | Quality of life                               | is high   | 5.75    | Survey [010] | 43        |
| $\triangleright$ | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 2.53    | Survey [010] | 60        |
|                  | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 19,055  | US\$         | 36        |
|                  | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 177,294 | US\$         | 24        |
|                  | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 22.38   | %            | 46        |
|                  | Personal security and private property rights | are adequately protected  | 5.24    | Survey [010] | 49        |

| Readiness       | <b>;</b>          |   | Value |              | 2018 Rank |
|-----------------|-------------------|---|-------|--------------|-----------|
|                 | growth            | Percentage change   | -1.27 | %            | 61        |
| ► Skilled labor |                   | is readily available  | 6.13  | Survey [010] | 18        |
| Finance skill   | S                 | are readily available   | 6.26  | Survey [010] | 34        |
| Internationa    | l experience      | of senior managers is generally significant                     | 5.05  | Survey [010] | 42        |
| Competent       | senior managers   | are readily available   | 5.55  | Survey [010] | 35        |
| Educational     | system            | The educational system meets the needs of a competitive economy | 4.10  | Survey [010] | 50        |
| Science in so   | hools             | is sufficiently emphasized                                      | 5.04  | Survey [010] | 41        |
| University e    | ducation          | meets the needs of a competitive economy                        | 4.65  | Survey [010] | 52        |
| Managemen       | t education       | meets the needs of the business community                       | 4.78  | Survey [010] | 52        |
| ► Language sk   | ills              | are meeting the needs of enterprises                            | 7.73  | Survey [010] | 17        |
| Student mol     | oility inbound    | Foreign tertiary-level students per 1000 inhabitants            | 2.49  | number       | 30        |
| Educational     | assessment - PISA | PISA survey of 15-year olds                                     | 454   | Average      | 40        |

# **HONG KONG SAR**

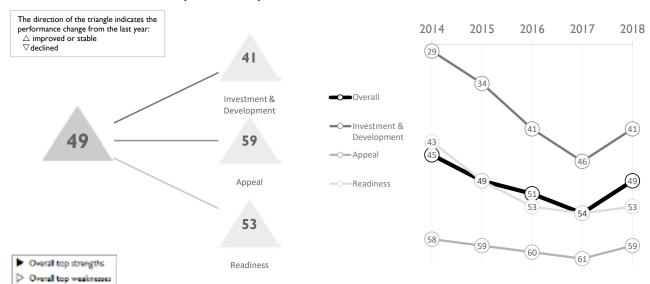


|                  | Investment & Development                  |  | Value | 20           | 18 Rank |
|------------------|---|--|-------|--------------|---------|
| $\triangleright$ | Total public expenditure on education     | Percentage of GDP                                  | 3.3   | %            | 56      |
| $\triangleright$ | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 20.3  | %            | 33      |
|                  | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 13.60 | ratio        | 23      |
|                  | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 12.96 | ratio        | 36      |
|                  | Apprenticeships                           | are sufficiently implemented                       | 5.11  | Survey [010] | 23      |
|                  | Employee training                         | is a high priority in companies                    | 5.97  | Survey [010] | 26      |
| ▶                | Female labor force                        | Percentage of total labor force                    | 49.46 | %            | 3       |
|                  | Health infrastructure                     | meets the needs of society                         | 6.73  | Survey [010] | 26      |

|                       | Appeal  |   | Value   |              | 2018 Rank |
|-----------------------|---|---|---------|--------------|-----------|
| $\triangleright$      | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 126.40  | index        | 61        |
|                       | Attracting and retaining talents              | is a priority in companies  | 7.38    | Survey [010] | 17        |
|                       | Worker motivation                             | in companies is high  | 6.86    | Survey [010] | 13        |
|                       | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 6.35    | Survey [010] | П         |
|                       | Quality of life                               | is high   | 6.86    | Survey [010] | 32        |
|                       | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 7.40    | Survey [010] | 9         |
|                       | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 45,050  | US\$         | П         |
| $\blacktriangleright$ | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 273,765 | US\$         | 5         |
|                       | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 4.71    | %            | 7         |
|                       | Personal security and private property rights | are adequately protected  | 8.60    | Survey [010] | П         |

|                       | Readiness                     |   | Value | !            | 2018 Rank |
|-----------------------|-------------------------------|---|-------|--------------|-----------|
| $\triangleright$      | Labor force growth            | Percentage change   | 0.69  | %            | 34        |
|                       | Skilled labor                 | is readily available  | 6.03  | Survey [010] | 22        |
| $\blacktriangleright$ | Finance skills                | are readily available   | 8.00  | Survey [010] | 3         |
| $\blacktriangleright$ | International experience      | of senior managers is generally significant                     | 7.64  | Survey [010] | 3         |
|                       | Competent senior managers     | are readily available   | 6.96  | Survey [010] | 5         |
|                       | Educational system            | The educational system meets the needs of a competitive economy | 6.52  | Survey [010] | 22        |
|                       | Science in schools            | is sufficiently emphasized                                      | 6.29  | Survey [010] | 20        |
|                       | University education          | meets the needs of a competitive economy                        | 6.91  | Survey [010] | 19        |
|                       | Management education          | meets the needs of the business community                       | 7.00  | Survey [010] | 17        |
|                       | Language skills               | are meeting the needs of enterprises                            | 6.23  | Survey [010] | 32        |
|                       | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 4.36  | number       | 17        |
| ▶                     | Educational assessment - PISA | PISA survey of 15-year olds                                     | 536   | Average      | 3         |
|                       |                               |   |       |              |           |

### **HUNGARY**

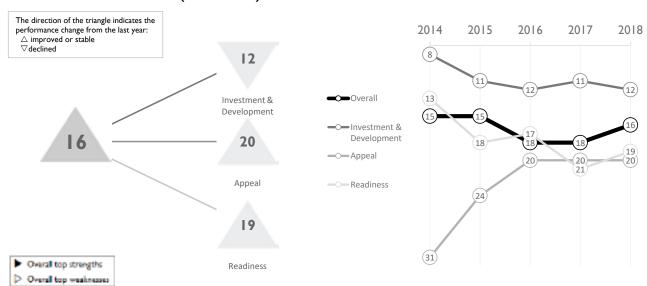


| Investment & Development                    |   | Value             | 2018 Rank |
|---|---|-------------------|-----------|
| Total public expenditure on education       | Percentage of GDP                                     | 4.2 %             | 36        |
| ► Gov. expenditure on education per stude   | nt Percentage of GDP per capita (secondary education) | 22.8 %            | 22        |
| ► Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                   | 11.24 ratio       | 8         |
| ► Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                   | 10.29 ratio       | 13        |
| Apprenticeships                             | are sufficiently implemented                          | 3.70 Survey [010] | 54        |
| Employee training                           | is a high priority in companies                       | 4.52 Survey [010] | 57        |
| Female labor force                          | Percentage of total labor force                       | 45.52 %           | 34        |
| Health infrastructure                       | meets the needs of society                            | 3.10 Survey [010] | 53        |

|                  | Appeal  |   | Value  | !            | 2018 Rank |
|------------------|---|---|--------|--------------|-----------|
| ▶                | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 59.10  | index        | 6         |
|                  | Attracting and retaining talents              | is a priority in companies  | 5.53   | Survey [010] | 57        |
|                  | Worker motivation                             | in companies is high  | 4.38   | Survey [010] | 56        |
| $\triangleright$ | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 1.88   | Survey [010] | 61        |
|                  | Quality of life                               | is high   | 4.56   | Survey [010] | 52        |
|                  | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 3.76   | Survey [010] | 53        |
|                  | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 12,168 | US\$         | 52        |
|                  | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 84,812 | US\$         | 53        |
| $\triangleright$ | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 27.53  | %            | 60        |
|                  | Personal security and private property rights | are adequately protected  | 5.52   | Survey [010] | 47        |

|                  | Readiness                     |   | Value |              | 2018 Rank |
|------------------|-------------------------------|---|-------|--------------|-----------|
|                  | Labor force growth            | Percentage change   | 0.59  | %            | 36        |
| $\triangleright$ | Skilled labor                 | is readily available  | 3.02  | Survey [010] | 63        |
| $\triangleright$ | Finance skills                | are readily available   | 4.61  | Survey [010] | 59        |
|                  | International experience      | of senior managers is generally significant                     | 4.89  | Survey [010] | 48        |
| $\triangleright$ | Competent senior managers     | are readily available   | 3.38  | Survey [010] | 59        |
|                  | Educational system            | The educational system meets the needs of a competitive economy | 4.32  | Survey [010] | 47        |
|                  | Science in schools            | is sufficiently emphasized                                      | 4.42  | Survey [010] | 46        |
|                  | University education          | meets the needs of a competitive economy                        | 5.14  | Survey [010] | 43        |
|                  | Management education          | meets the needs of the business community                       | 4.89  | Survey [010] | 48        |
|                  | Language skills               | are meeting the needs of enterprises                            | 3.59  | Survey [010] | 59        |
|                  | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 2.66  | number       | 27        |
|                  | Educational assessment - PISA | PISA survey of 15-year olds                                     | 477   | Average      | 35        |

### **ICELAND**

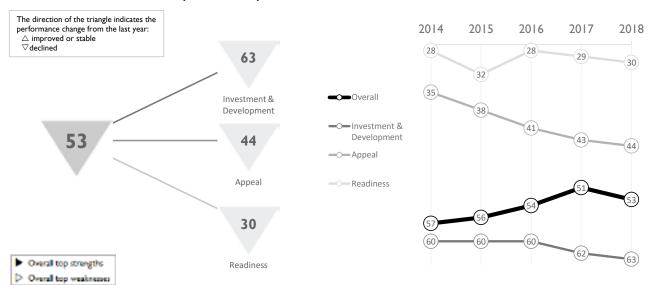


|                       | Investment & Development                  |  | Value |              | 2018 Rank |
|-----------------------|---|--|-------|--------------|-----------|
| $\blacktriangleright$ | Total public expenditure on education     | Percentage of GDP                                  | 7.2   | %            | 2         |
|                       | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 18.4  | %            | 39        |
| $\blacktriangleright$ | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 10.74 | ratio        | 5         |
|                       | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 10.48 | ratio        | 16        |
| $\triangleright$      | Apprenticeships                           | are sufficiently implemented                       | 4.32  | Survey [010] | 43        |
|                       | Employee training                         | is a high priority in companies                    | 5.59  | Survey [010] | 37        |
|                       | Female labor force                        | Percentage of total labor force                    | 46.44 | %            | 29        |
|                       | Health infrastructure                     | meets the needs of society                         | 7.15  | Survey [010] | 21        |

|                       | Appeal  |   | Value  | 2            | 2018 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  | 7.65   | Survey [010] | 10        |
|                       | Worker motivation                             | in companies is high  | 6.88   | Survey [010] | П         |
|                       | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 6.56   | Survey [010] | 10        |
| $\blacktriangleright$ | Quality of life                               | is high   | 9.41   | Survey [010] | 6         |
| $\triangleright$      | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 4.27   | Survey [010] | 44        |
|                       | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 43,467 | US\$         | 14        |
| $\triangleright$      | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 94,496 | US\$         | 50        |
| $\triangleright$      | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 21.32  | %            | 44        |
|                       | Personal security and private property rights | are adequately protected  | 8.16   | Survey [010] | 20        |

|                  | Readiness                     |   | Value |              | 2018 Rank |
|------------------|-------------------------------|---|-------|--------------|-----------|
|                  | Labor force growth            | Percentage change   | 1.54  | %            | 23        |
|                  | Skilled labor                 | is readily available  | 6.40  | Survey [010] | 12        |
|                  | Finance skills                | are readily available   | 7.36  | Survey [010] | 11        |
| $\triangleright$ | International experience      | of senior managers is generally significant                     | 4.72  | Survey [010] | 51        |
|                  | Competent senior managers     | are readily available   | 6.19  | Survey [010] | 20        |
|                  | Educational system            | The educational system meets the needs of a competitive economy | 6.80  | Survey [010] | 21        |
|                  | Science in schools            | is sufficiently emphasized                                      | 5.52  | Survey [010] | 35        |
|                  | University education          | meets the needs of a competitive economy                        | 7.05  | Survey [010] | 17        |
|                  | Management education          | meets the needs of the business community                       | 6.96  | Survey [010] | 18        |
| ▶                | Language skills               | are meeting the needs of enterprises                            | 8.49  | Survey [010] | 6         |
|                  | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 4.50  | number       | 16        |
|                  | Educational assessment - PISA | PISA survey of 15-year olds                                     | 481   | Average      | 33        |
|                  |                               |   |       |              |           |

### **INDIA**

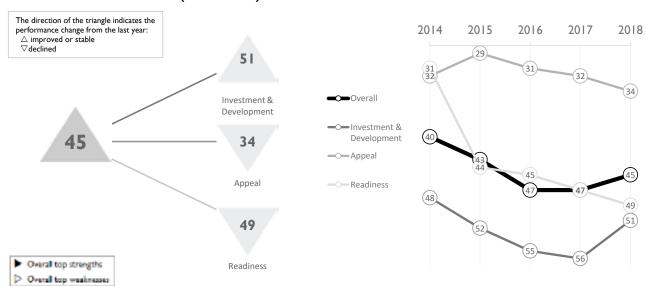


|                       | Investment & Development                  |  | Value              | 2018 Rank    |
|-----------------------|---|--|--------------------|--------------|
| $\triangleright$      | Total public expenditure on education     | Percentage of GDP                                  | 3.0 %              | 59           |
|                       | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 16.8 %             | 43           |
| $\triangleright$      | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | <b>29.06</b> ratio | 60           |
| $\triangleright$      | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 31.65 ratio        | 63           |
| $\blacktriangleright$ | Apprenticeships                           | are sufficiently implemented                       | 5.38 Surv          | rey [010] 18 |
|                       | Employee training                         | is a high priority in companies                    | 5.37 Surv          | rey [010] 42 |
|                       | Female labor force                        | Percentage of total labor force                    | 23.19 %            | 58           |
|                       | Health infrastructure                     | meets the needs of society                         | 4.29 Surv          | vey [010] 45 |

| Appeal  |   | Value   |              | 2018 Rank |
|---|---|---------|--------------|-----------|
| Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 78.90   | index        | 42        |
| Attracting and retaining talents              | is a priority in companies  | 6.56    | Survey [010] | 34        |
| Worker motivation                             | in companies is high  | 5.82    | Survey [010] | 34        |
| Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 5.03    | Survey [010] | 31        |
| Quality of life                               | is high   | 4.55    | Survey [010] | 54        |
| Foreign highly-skilled personnel              | are attracted to your country's business environment  | 5.02    | Survey [010] | 36        |
| Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 7,062   | US\$         | 59        |
| Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 105,656 | US\$         | 44        |
| Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 11.14   | %            | 17        |
| Personal security and private property rights | are adequately protected  | 6.22    | Survey [010] | 40        |

|                  | Readiness                     |   | Value |              | 2018 Rank |
|------------------|-------------------------------|---|-------|--------------|-----------|
| •                | Labor force growth            | Percentage change   | 1.82  | %            | 20        |
| ▶                | Skilled labor                 | is readily available  | 6.12  | Survey [010] | 19        |
|                  | Finance skills                | are readily available   | 6.80  | Survey [010] | 22        |
|                  | International experience      | of senior managers is generally significant                     | 4.94  | Survey [010] | 46        |
|                  | Competent senior managers     | are readily available   | 5.92  | Survey [010] | 27        |
|                  | Educational system            | The educational system meets the needs of a competitive economy | 5.63  | Survey [010] | 35        |
| ▶                | Science in schools            | is sufficiently emphasized                                      | 6.49  | Survey [010] | 13        |
|                  | University education          | meets the needs of a competitive economy                        | 5.88  | Survey [010] | 31        |
|                  | Management education          | meets the needs of the business community                       | 6.41  | Survey [010] | 26        |
|                  | Language skills               | are meeting the needs of enterprises                            | 6.96  | Survey [010] | 27        |
| $\triangleright$ | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 0.03  | number       | 59        |
|                  | Educational assessment - PISA | PISA survey of I5-year olds                                     | -     | Average      | -         |

# **INDONESIA**

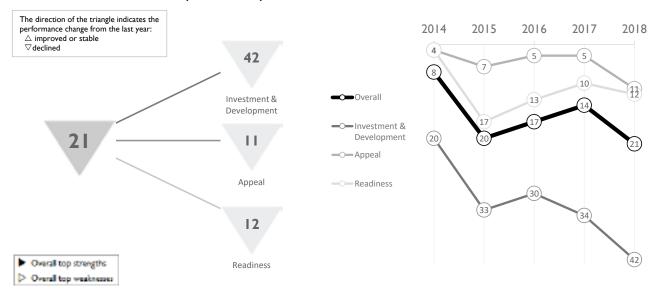


|                  | Investment & Development                  |  | Value | 2            | 2018 Rank |
|------------------|---|--|-------|--------------|-----------|
|                  | Total public expenditure on education     | Percentage of GDP                                  | 3.4   | %            | 53        |
|                  | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 10.5  | %            | 52        |
|                  | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 16.56 | ratio        | 38        |
|                  | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 15.47 | ratio        | 51        |
| ▶                | Apprenticeships                           | are sufficiently implemented                       | 5.25  | Survey [010] | 21        |
|                  | Employee training                         | is a high priority in companies                    | 5.93  | Survey [010] | 31        |
| $\triangleright$ | Female labor force                        | Percentage of total labor force                    | 38.22 | %            | 55        |
|                  | Health infrastructure                     | meets the needs of society                         | 4.95  | Survey [010] | 38        |

|                  | Appeal  |   | Value  | 9            | 2018 Rank |
|------------------|---|---|--------|--------------|-----------|
|                  | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 73.90  | index        | 30        |
|                  | Attracting and retaining talents              | is a priority in companies  | 6.59   | Survey [010] | 32        |
|                  | Worker motivation                             | in companies is high  | 6.11   | Survey [010] | 29        |
|                  | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 5.45   | Survey [010] | 23        |
|                  | Quality of life                               | is high   | 5.20   | Survey [010] | 46        |
|                  | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 6.09   | Survey [010] | 19        |
| $\triangleright$ | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 4,993  | US\$         | 61        |
| $\triangleright$ | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 84,313 | US\$         | 54        |
|                  | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 1.85   | %            | 4         |
|                  | Personal security and private property rights | are adequately protected  | 5.84   | Survey [010] | 44        |

| Readiness                     |   | Value           | 2018 Rank |
|-------------------------------|---|-----------------|-----------|
| Labor force growth            | Percentage change   | 2.09 %          | 14        |
| Skilled labor                 | is readily available  | 4.87 Survey [01 | 0] 45     |
| Finance skills                | are readily available   | 5.34 Survey [01 | 0] 49     |
| International experience      | of senior managers is generally significant                     | 5.31 Survey [01 | 0] 33     |
| Competent senior managers     | are readily available   | 5.52 Survey [01 | 0] 37     |
| Educational system            | The educational system meets the needs of a competitive economy | 4.82 Survey [01 | 0] 43     |
| Science in schools            | is sufficiently emphasized                                      | 5.16 Survey [01 | 0] 40     |
| University education          | meets the needs of a competitive economy                        | 5.16 Survey [01 | 0] 42     |
| Management education          | meets the needs of the business community                       | 5.25 Survey [01 | 0] 46     |
| Language skills               | are meeting the needs of enterprises                            | 5.26 Survey [01 | 0] 44     |
| Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 0.03 number     | 60        |
| Educational assessment - PISA | PISA survey of 15-year olds                                     | 395 Average     | 53        |
|                               |   |                 |           |

### **IRELAND**

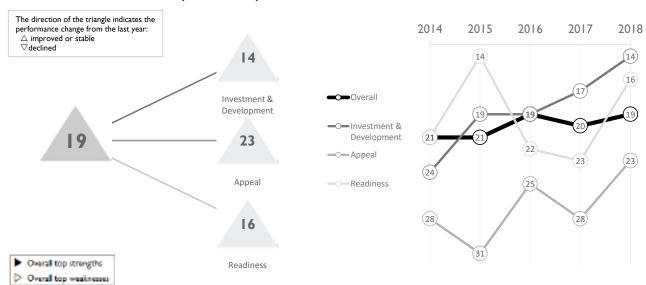


|                  | Investment & Development                  |  | Value |              | 2018 Rank |
|------------------|---|--|-------|--------------|-----------|
| $\triangleright$ | Total public expenditure on education     | Percentage of GDP                                  | 3.3   | %            | 55        |
|                  | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 21.6  | %            | 29        |
|                  | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 16.20 | ratio        | 34        |
|                  | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 13.87 | ratio        | 43        |
| $\triangleright$ | Apprenticeships                           | are sufficiently implemented                       | 4.48  | Survey [010] | 38        |
|                  | Employee training                         | is a high priority in companies                    | 5.96  | Survey [010] | 29        |
|                  | Female labor force                        | Percentage of total labor force                    | 45.69 | %            | 33        |
| $\triangleright$ | Health infrastructure                     | meets the needs of society                         | 4.28  | Survey [010] | 46        |

|                  | Appeal  |   | Value   | 2            | 2018 Rank |
|------------------|---|---|---------|--------------|-----------|
|                  | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 77.50   | index        | 38        |
| ▶                | Attracting and retaining talents              | is a priority in companies  | 7.80    | Survey [010] | 5         |
|                  | Worker motivation                             | in companies is high  | 7.56    | Survey [010] | 3         |
|                  | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 5.88    | Survey [010] | 20        |
|                  | Quality of life                               | is high   | 8.68    | Survey [010] | 17        |
|                  | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 7.48    | Survey [010] | 8         |
|                  | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 43,862  | US\$         | 13        |
|                  | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 205,126 | US\$         | 17        |
| $\triangleright$ | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 21.20   | %            | 43        |
|                  | Personal security and private property rights | are adequately protected  | 8.20    | Survey [010] | 17        |

|                  | Readiness                     |   | Value |              | 2018 Rank |
|------------------|-------------------------------|---|-------|--------------|-----------|
|                  | Labor force growth            | Percentage change   | 1.87  | %            | 19        |
|                  | Skilled labor                 | is readily available  | 6.12  | Survey [010] | 20        |
| ▶                | Finance skills                | are readily available   | 7.52  | Survey [010] | 7         |
|                  | International experience      | of senior managers is generally significant                     | 6.56  | Survey [010] | 13        |
|                  | Competent senior managers     | are readily available   | 6.40  | Survey [010] | 16        |
|                  | Educational system            | The educational system meets the needs of a competitive economy | 7.55  | Survey [010] | 10        |
|                  | Science in schools            | is sufficiently emphasized                                      | 6.80  | Survey [010] | 10        |
| ▶                | University education          | meets the needs of a competitive economy                        | 7.92  | Survey [010] | 9         |
|                  | Management education          | meets the needs of the business community                       | 7.12  | Survey [010] | 14        |
| $\triangleright$ | Language skills               | are meeting the needs of enterprises                            | 4.80  | Survey [010] | 46        |
|                  | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 3.77  | number       | 22        |
|                  | Educational assessment - PISA | PISA survey of 15-year olds                                     | 503   | Average      | 17        |

### **ISRAEL**

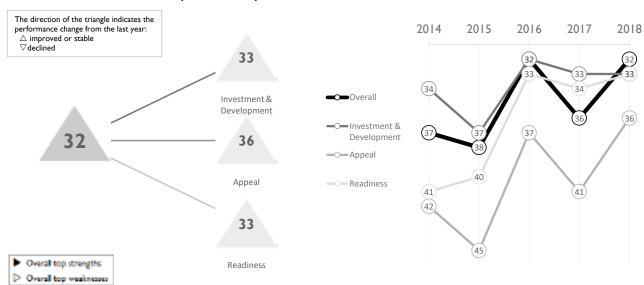


|                  | Investment & Development                  |  | Value | 2            | 2018 Rank |
|------------------|---|--|-------|--------------|-----------|
| •                | Total public expenditure on education     | Percentage of GDP                                  | 6.8   | %            | 5         |
| $\triangleright$ | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 17.9  | %            | 42        |
|                  | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 15.43 | ratio        | 28        |
|                  | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 11.22 | ratio        | 21        |
| •                | Apprenticeships                           | are sufficiently implemented                       | 6.05  | Survey [010] | 8         |
|                  | Employee training                         | is a high priority in companies                    | 6.00  | Survey [010] | 24        |
|                  | Female labor force                        | Percentage of total labor force                    | 47.26 | %            | 15        |
|                  | Health infrastructure                     | meets the needs of society                         | 6.63  | Survey [010] | 27        |

|                  | Appeal  |   | Value   |              | 2018 Rank |
|------------------|---|---|---------|--------------|-----------|
| $\triangleright$ | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 94.70   | index        | 52        |
|                  | Attracting and retaining talents              | is a priority in companies  | 7.41    | Survey [010] | 14        |
|                  | Worker motivation                             | in companies is high  | 6.88    | Survey [010] | 12        |
|                  | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 6.15    | Survey [010] | 14        |
|                  | Quality of life                               | is high   | 8.25    | Survey [010] | 20        |
| $\triangleright$ | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 5.07    | Survey [010] | 35        |
|                  | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 35,176  | US\$         | 25        |
|                  | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 173,512 | US\$         | 27        |
|                  | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 16.89   | %            | 29        |
|                  | Personal security and private property rights | are adequately protected  | 8.00    | Survey [010] | 23        |

|                       | Readiness                     |   | Value |              | 2018 Rank |
|-----------------------|-------------------------------|---|-------|--------------|-----------|
|                       | Labor force growth            | Percentage change   | 1.73  | %            | 21        |
|                       | Skilled labor                 | is readily available  | 6.30  | Survey [010] | 14        |
|                       | Finance skills                | are readily available   | 6.88  | Survey [010] | 18        |
|                       | International experience      | of senior managers is generally significant                     | 6.59  | Survey [010] | 12        |
| ▶                     | Competent senior managers     | are readily available   | 6.78  | Survey [010] | 10        |
|                       | Educational system            | The educational system meets the needs of a competitive economy | 6.83  | Survey [010] | 19        |
|                       | Science in schools            | is sufficiently emphasized                                      | 6.34  | Survey [010] | 17        |
| ▶                     | University education          | meets the needs of a competitive economy                        | 8.20  | Survey [010] | 4         |
| $\blacktriangleright$ | Management education          | meets the needs of the business community                       | 7.55  | Survey [010] | 7         |
|                       | Language skills               | are meeting the needs of enterprises                            | 7.76  | Survey [010] | 16        |
| $\triangleright$      | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 1.26  | number       | 42        |
| $\triangleright$      | Educational assessment - PISA | PISA survey of 15-year olds                                     | 468   | Average      | 37        |

# **ITALY**

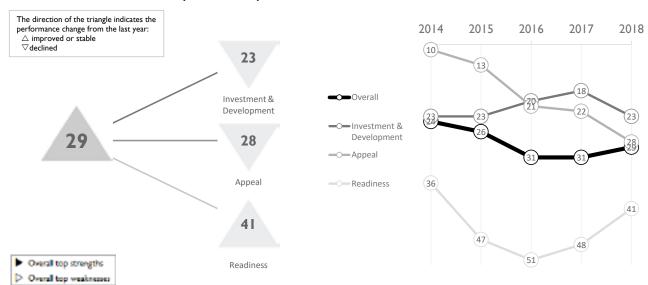


|                  | Investment & Development                  |  | Value |              | 2018 Rank |
|------------------|---|--|-------|--------------|-----------|
|                  | Total public expenditure on education     | Percentage of GDP                                  | 3.9   | %            | 40        |
| •                | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 22.9  | %            | 21        |
| •                | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 12.36 | ratio        | 16        |
|                  | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 12.08 | ratio        | 26        |
|                  | Apprenticeships                           | are sufficiently implemented                       | 4.88  | Survey [010] | 26        |
| $\triangleright$ | Employee training                         | is a high priority in companies                    | 4.83  | Survey [010] | 55        |
|                  | Female labor force                        | Percentage of total labor force                    | 42.58 | %            | 47        |
| •                | Health infrastructure                     | meets the needs of society                         | 6.90  | Survey [010] | 23        |

|                  | Appeal  |   | Value   |              | 2018 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        | 35        |
| $\triangleright$ | Attracting and retaining talents              | is a priority in companies  | 5.84    | Survey [010] | 53        |
|                  | Worker motivation                             | in companies is high  | 5.69    | Survey [010] | 35        |
|                  | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 4.50    | Survey [010] | 37        |
|                  | Quality of life                               | is high   | 7.63    | Survey [010] | 28        |
| $\triangleright$ | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 3.72    | Survey [010] | 54        |
|                  | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 32,479  | US\$         | 28        |
| ▶                | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 254,489 | US\$         | 9         |
| $\triangleright$ | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 23.85   | %            | 48        |
|                  | Personal security and private property rights | are adequately protected  | 6.30    | Survey [010] | 38        |

|                       | Readiness                     |   | Value |              | 2018 Rank |
|-----------------------|-------------------------------|---|-------|--------------|-----------|
|                       | Labor force growth            | Percentage change   | 0.62  | %            | 35        |
| $\blacktriangleright$ | Skilled labor                 | is readily available  | 6.10  | Survey [010] | 21        |
|                       | Finance skills                | are readily available   | 5.87  | Survey [010] | 43        |
| $\triangleright$      | International experience      | of senior managers is generally significant                     | 4.68  | Survey [010] | 52        |
|                       | Competent senior managers     | are readily available   | 5.73  | Survey [010] | 30        |
|                       | Educational system            | The educational system meets the needs of a competitive economy | 6.33  | Survey [010] | 25        |
|                       | Science in schools            | is sufficiently emphasized                                      | 5.45  | Survey [010] | 38        |
|                       | University education          | meets the needs of a competitive economy                        | 6.26  | Survey [010] | 25        |
|                       | Management education          | meets the needs of the business community                       | 6.04  | Survey [010] | 32        |
|                       | Language skills               | are meeting the needs of enterprises                            | 4.63  | Survey [010] | 47        |
|                       | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 1.49  | number       | 38        |
|                       | Educational assessment - PISA | PISA survey of 15-year olds                                     | 485   | Average      | 30        |

# **JAPAN**

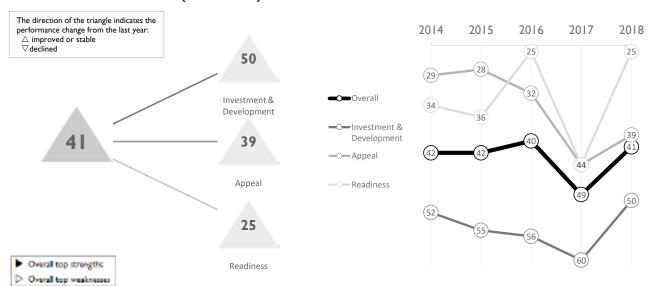


|                  | Investment & Development                  |  | Value | 2            | 2018 Rank |
|------------------|---|--|-------|--------------|-----------|
| $\triangleright$ | Total public expenditure on education     | Percentage of GDP                                  | 3.3   | %            | 57        |
|                  | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 23.9  | %            | 16        |
|                  | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 16.91 | ratio        | 42        |
|                  | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 12.72 | ratio        | 33        |
| ▶                | Apprenticeships                           | are sufficiently implemented                       | 5.98  | Survey [010] | 10        |
| ▶                | Employee training                         | is a high priority in companies                    | 7.09  | Survey [010] | 6         |
|                  | Female labor force                        | Percentage of total labor force                    | 43.70 | %            | 45        |
|                  | Health infrastructure                     | meets the needs of society                         | 7.95  | Survey [010] | 12        |

|                  | Appeal  |   | Value   |              | 2018 Rank |
|------------------|---|---|---------|--------------|-----------|
| $\triangleright$ | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 109.60  | index        | 60        |
| ▶                | Attracting and retaining talents              | is a priority in companies  | 7.65    | Survey [010] | 9         |
|                  | Worker motivation                             | in companies is high  | 6.85    | Survey [010] | 15        |
|                  | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 5.20    | Survey [010] | 27        |
|                  | Quality of life                               | is high   | 7.92    | Survey [010] | 26        |
|                  | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 3.88    | Survey [010] | 50        |
| ▶                | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 48,177  | US\$         | 7         |
|                  | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 247,877 | US\$         | П         |
|                  | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 19.61   | %            | 34        |
|                  | Personal security and private property rights | are adequately protected  | 7.98    | Survey [010] | 24        |

|                  | Readiness                     |   | Value |              | 2018 Rank |
|------------------|-------------------------------|---|-------|--------------|-----------|
|                  | Labor force growth            | Percentage change   | 0.70  | %            | 33        |
|                  | Skilled labor                 | is readily available  | 5.68  | Survey [010] | 30        |
|                  | Finance skills                | are readily available   | 5.70  | Survey [010] | 45        |
| $\triangleright$ | International experience      | of senior managers is generally significant                     | 3.67  | Survey [010] | 62        |
| $\triangleright$ | Competent senior managers     | are readily available   | 4.22  | Survey [010] | 55        |
|                  | Educational system            | The educational system meets the needs of a competitive economy | 6.25  | Survey [010] | 28        |
|                  | Science in schools            | is sufficiently emphasized                                      | 6.38  | Survey [010] | 16        |
|                  | University education          | meets the needs of a competitive economy                        | 5.10  | Survey [010] | 45        |
|                  | Management education          | meets the needs of the business community                       | 4.70  | Survey [010] | 53        |
| $\triangleright$ | Language skills               | are meeting the needs of enterprises                            | 3.24  | Survey [010] | 61        |
|                  | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 1.04  | number       | 47        |
| ▶                | Educational assessment - PISA | PISA survey of 15-year olds                                     | 535   | Average      | 4         |
|                  |                               |   |       |              |           |

# **JORDAN**

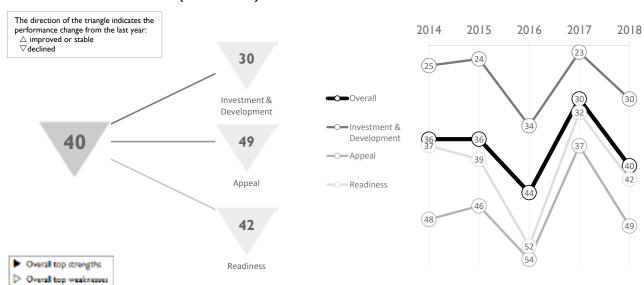


|                  | Investment & Development                  |  | Value | 2            | 2018 Rank |
|------------------|---|--|-------|--------------|-----------|
|                  | Total public expenditure on education     | Percentage of GDP                                  | 3.9   | %            | 43        |
|                  | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 18.5  | %            | 38        |
|                  | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 16.91 | ratio        | 43        |
| $\triangleright$ | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 14.59 | ratio        | 47        |
|                  | Apprenticeships                           | are sufficiently implemented                       | 5.24  | Survey [010] | 22        |
|                  | Employee training                         | is a high priority in companies                    | 6.10  | Survey [010] | 22        |
| $\triangleright$ | Female labor force                        | Percentage of total labor force                    | 18.21 | %            | 60        |
|                  | Health infrastructure                     | meets the needs of society                         | 6.27  | Survey [010] | 30        |

|                       | Appeal  |   | Value  | 2            | 2018 Rank |
|-----------------------|---|---|--------|--------------|-----------|
|                       | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 78.70  | index        | 41        |
|                       | Attracting and retaining talents              | is a priority in companies  | 6.19   | Survey [010] | 43        |
|                       | Worker motivation                             | in companies is high  | 5.26   | Survey [010] | 45        |
| $\triangleright$      | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 3.62   | Survey [010] | 49        |
|                       | Quality of life                               | is high   | 5.66   | Survey [010] | 44        |
|                       | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 4.89   | Survey [010] | 39        |
|                       | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | -      | US\$         | -         |
| $\triangleright$      | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 52,451 | US\$         | 57        |
| $\blacktriangleright$ | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 7.43   | %            | 10        |
|                       | Personal security and private property rights | are adequately protected  | 6.71   | Survey [010] | 35        |

|                  | Readiness                     |   | Value |              | 2018 Rank |
|------------------|-------------------------------|---|-------|--------------|-----------|
| <b>&gt;</b>      | Labor force growth            | Percentage change   | 2.86  | %            | 10        |
| $\triangleright$ | Skilled labor                 | is readily available  | 6.76  | Survey [010] | 5         |
|                  | Finance skills                | are readily available   | 6.63  | Survey [010] | 27        |
|                  | International experience      | of senior managers is generally significant                     | 6.37  | Survey [010] | 15        |
| ▶                | Competent senior managers     | are readily available   | 6.70  | Survey [010] | 12        |
|                  | Educational system            | The educational system meets the needs of a competitive economy | 6.29  | Survey [010] | 26        |
|                  | Science in schools            | is sufficiently emphasized                                      | 6.29  | Survey [010] | 19        |
|                  | University education          | meets the needs of a competitive economy                        | 6.25  | Survey [010] | 26        |
|                  | Management education          | meets the needs of the business community                       | 6.46  | Survey [010] | 24        |
|                  | Language skills               | are meeting the needs of enterprises                            | 6.80  | Survey [010] | 28        |
| ▶                | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 4.86  | number       | 15        |
| $\triangleright$ | Educational assessment - PISA | PISA survey of 15-year olds                                     | 394   | Average      | 54        |
|                  |                               |   |       |              |           |

# **KAZAKHSTAN**

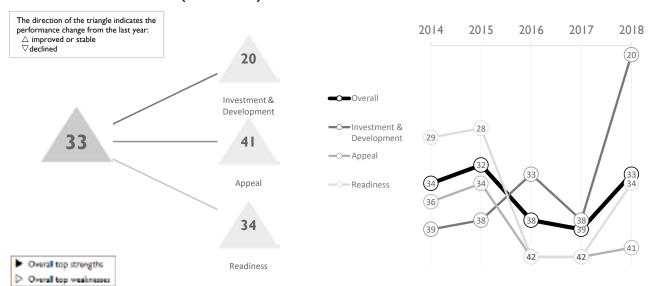


|                  | Investment & Development                  |  | Value | 2            | 2018 Rank |
|------------------|---|--|-------|--------------|-----------|
| $\triangleright$ | Total public expenditure on education     | Percentage of GDP                                  | 3.6   | %            | 52        |
|                  | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 19.2  | %            | 36        |
|                  | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 16.20 | ratio        | 33        |
| <b>&gt;</b>      | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 7.51  | ratio        | 3         |
| <b>&gt;</b>      | Apprenticeships                           | are sufficiently implemented                       | 5.71  | Survey [010] | 14        |
|                  | Employee training                         | is a high priority in companies                    | 5.94  | Survey [010] | 30        |
| <b>&gt;</b>      | Female labor force                        | Percentage of total labor force                    | 48.37 | %            | 7         |
|                  | Health infrastructure                     | meets the needs of society                         | 4.63  | Survey [010] | 41        |

|                  | Appeal  |   | Value  | 2            | 2018 Rank |
|------------------|---|---|--------|--------------|-----------|
| •                | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 59.20  | index        | 7         |
|                  | Attracting and retaining talents              | is a priority in companies  | 6.08   | Survey [010] | 46        |
|                  | Worker motivation                             | in companies is high  | 5.44   | Survey [010] | 38        |
|                  | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 4.38   | Survey [010] | 38        |
|                  | Quality of life                               | is high   | 5.07   | Survey [010] | 48        |
|                  | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 5.69   | Survey [010] | 26        |
| $\triangleright$ | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 11,593 | US\$         | 54        |
| $\triangleright$ | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 19,106 | US\$         | 62        |
| •                | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 15.96  | %            | 26        |
|                  | Personal security and private property rights | are adequately protected  | 5.38   | Survey [010] | 48        |

|   | Value  | 2018 Rank  |
|---|--|--|
| Percentage change   | -0.09 %  | 50   |
| is readily available  | 5.81 Survey [0   | 10] 27   |
| are readily available   | 6.60 Survey [0   | 10] 28   |
| of senior managers is generally significant                     | 5.40 Survey [0   | 10] 30   |
| are readily available   | 5.85 Survey [0   | 10] 28   |
| The educational system meets the needs of a competitive economy | 4.81 Survey [0   | 10] 45   |
| is sufficiently emphasized                                      | 5.50 Survey [0   | 10] 36   |
| meets the needs of a competitive economy                        | 5.10 Survey [0   | 10] 44   |
| meets the needs of the business community                       | 5.41 Survey [0   | 10] 44   |
| are meeting the needs of enterprises                            | 5.33 Survey [0   | 10] 43   |
| Foreign tertiary-level students per 1000 inhabitants            | 0.71 number  | 50   |
| PISA survey of 15-year olds                                     | 458 Average  | 39   |
|   | is readily available are readily available of senior managers is generally significant are readily available The educational system meets the needs of a competitive economy is sufficiently emphasized meets the needs of a competitive economy meets the needs of the business community are meeting the needs of enterprises Foreign tertiary-level students per 1000 inhabitants | Percentage change -0.09 %  is readily available 5.81 Survey [0 are readily available 6.60 Survey [0 of senior managers is generally significant 5.40 Survey [0 are readily available 5.85 Survey [0 The educational system meets the needs of a competitive economy 4.81 Survey [0 is sufficiently emphasized 5.50 Survey [0 meets the needs of a competitive economy 5.10 Survey [0 meets the needs of the business community 5.41 Survey [0 are meeting the needs of enterprises 5.33 Survey [0 Foreign tertiary-level students per 1000 inhabitants 0.71 number |

### **KOREA REP.**

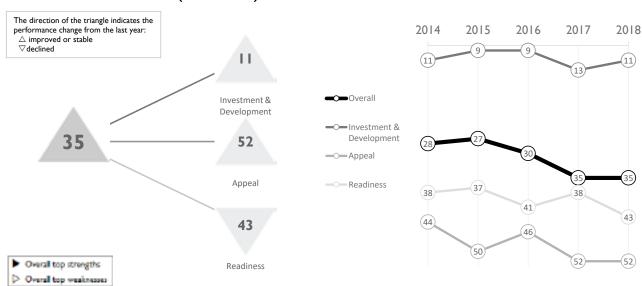


|                       | Investment & Development                  |  | Value | 2            | 2018 Rank |
|-----------------------|---|--|-------|--------------|-----------|
|                       | Total public expenditure on education     | Percentage of GDP                                  | 5.1   | %            | 27        |
| $\triangleright$      | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 28.3  | %            | 4         |
|                       | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 16.79 | ratio        | 39        |
|                       | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 14.79 | ratio        | 48        |
|                       | Apprenticeships                           | are sufficiently implemented                       | 4.69  | Survey [010] | 30        |
|                       | Employee training                         | is a high priority in companies                    | 5.68  | Survey [010] | 35        |
|                       | Female labor force                        | Percentage of total labor force                    | 42.43 | %            | 48        |
| $\blacktriangleright$ | Health infrastructure                     | meets the needs of society                         | 7.73  | Survey [010] | 17        |

|                  | Appeal  |   | Value   | 2            | 2018 Rank |
|------------------|---|---|---------|--------------|-----------|
| $\triangleright$ | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 105.20  | index        | 57        |
|                  | Attracting and retaining talents              | is a priority in companies  | 6.49    | Survey [010] | 36        |
| $\triangleright$ | Worker motivation                             | in companies is high  | 3.95    | Survey [010] | 61        |
|                  | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 4.00    | Survey [010] | 43        |
|                  | Quality of life                               | is high   | 5.20    | Survey [010] | 47        |
| $\triangleright$ | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 4.10    | Survey [010] | 49        |
|                  | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 32,849  | US\$         | 26        |
| •                | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 238,538 | US\$         | 13        |
| •                | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 9.24    | %            | 13        |
|                  | Personal security and private property rights | are adequately protected  | 6.17    | Survey [010] | 41        |

| Readiness                     |   | Value             | 2018 Rank |
|-------------------------------|---|-------------------|-----------|
| Labor force growth            | Percentage change   | 1.20 %            | 25        |
| Skilled labor                 | is readily available  | 5.57 Survey [010] | 37        |
| Finance skills                | are readily available   | 5.67 Survey [010] | ] 47      |
| International experience      | of senior managers is generally significant                     | 5.03 Survey [010] | ] 45      |
| Competent senior managers     | are readily available   | 4.96 Survey [010] | 1 48      |
| Educational system            | The educational system meets the needs of a competitive economy | 5.16 Survey [010] | ] 38      |
| Science in schools            | is sufficiently emphasized                                      | 5.63 Survey [010] | 31        |
| □ University education        | meets the needs of a competitive economy                        | 4.84 Survey [010] | ] 49      |
| Management education          | meets the needs of the business community                       | 5.14 Survey [010] | ] 47      |
| Language skills               | are meeting the needs of enterprises                            | 6.00 Survey [010] | ] 33      |
| Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 1.07 number       | 46        |
| Educational assessment - PISA | PISA survey of 15-year olds                                     | 520 Average       | 9         |

### **LATVIA**

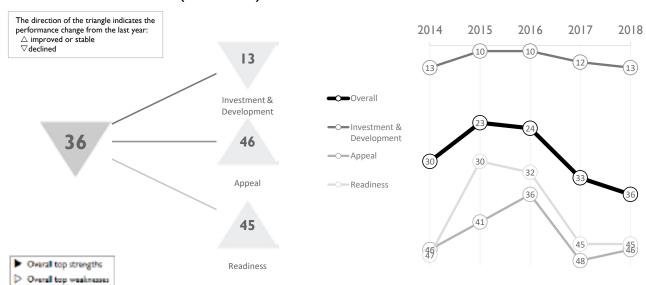


|                       | Investment & Development                  |  | Value | 2            | 2018 Rank |
|-----------------------|---|--|-------|--------------|-----------|
|                       | Total public expenditure on education     | Percentage of GDP                                  | 5.3   | %            | 22        |
| $\blacktriangleright$ | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 24.1  | %            | 15        |
| $\blacktriangleright$ | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 11.60 | ratio        | 10        |
| $\blacktriangleright$ | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 8.67  | ratio        | 6         |
| $\blacktriangleright$ | Apprenticeships                           | are sufficiently implemented                       | 5.58  | Survey [010] | 16        |
|                       | Employee training                         | is a high priority in companies                    | 5.74  | Survey [010] | 33        |
| $\blacktriangleright$ | Female labor force                        | Percentage of total labor force                    | 50.15 | %            | 2         |
| $\triangleright$      | Health infrastructure                     | meets the needs of society                         | 3.53  | Survey [010] | 51        |

|                  | Appeal  |   | Value  | !            | 2018 Rank |
|------------------|---|---|--------|--------------|-----------|
|                  | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 67.20  | index        | 21        |
|                  | Attracting and retaining talents              | is a priority in companies  | 6.72   | Survey [010] | 30        |
|                  | Worker motivation                             | in companies is high  | 5.67   | Survey [010] | 36        |
| $\triangleright$ | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 3.29   | Survey [010] | 54        |
|                  | Quality of life                               | is high   | 5.88   | Survey [010] | 41        |
|                  | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 4.21   | Survey [010] | 45        |
|                  | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 12,788 | US\$         | 47        |
|                  | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 96,085 | US\$         | 48        |
| $\triangleright$ | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 23.97  | %            | 49        |
|                  | Personal security and private property rights | are adequately protected  | 6.29   | Survey [010] | 39        |

| Readiness                     |   | Value          | 2018 Rank |
|-------------------------------|---|----------------|-----------|
| Labor force growth            | Percentage change   | -0.88 %        | 59        |
| Skilled labor                 | is readily available  | 4.47 Survey [0 | 10] 49    |
| Finance skills                | are readily available   | 6.00 Survey [0 | 10] 39    |
| International experience      | of senior managers is generally significant                     | 5.96 Survey [0 | 10] 21    |
| Competent senior managers     | are readily available   | 5.11 Survey [0 | 10] 44    |
| Educational system            | The educational system meets the needs of a competitive economy | 4.89 Survey [0 | 10] 42    |
| Science in schools            | is sufficiently emphasized                                      | 4.25 Survey [0 | 10] 47    |
| University education          | meets the needs of a competitive economy                        | 4.94 Survey [0 | 10] 47    |
| Management education          | meets the needs of the business community                       | 5.83 Survey [0 | 10] 39    |
| Language skills               | are meeting the needs of enterprises                            | 7.33 Survey [0 | 10] 21    |
| Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 2.65 number    | 28        |
| Educational assessment - PISA | PISA survey of 15-year olds                                     | 486 Average    | 29        |
|                               |   |                |           |

# **LITHUANIA**

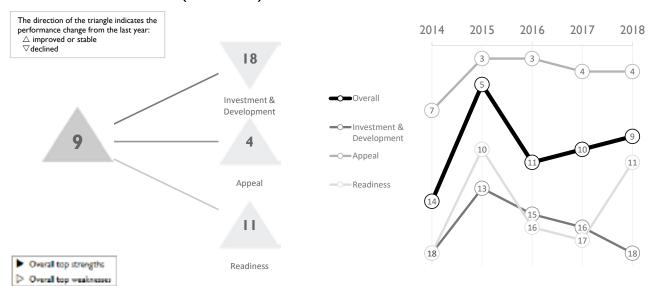


|                       | Investment & Development                  |  | Value | 2            | 2018 Rank |
|-----------------------|---|--|-------|--------------|-----------|
|                       | Total public expenditure on education     | Percentage of GDP                                  | 5.2   | %            | 24        |
|                       | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 16.7  | %            | 44        |
| $\blacktriangleright$ | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 10.26 | ratio        | 2         |
| $\blacktriangleright$ | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 7.89  | ratio        | 4         |
| $\blacktriangleright$ | Apprenticeships                           | are sufficiently implemented                       | 5.39  | Survey [010] | 17        |
|                       | Employee training                         | is a high priority in companies                    | 6.09  | Survey [010] | 23        |
| $\blacktriangleright$ | Female labor force                        | Percentage of total labor force                    | 50.52 | %            | I         |
|                       | Health infrastructure                     | meets the needs of society                         | 5.58  | Survey [010] | 37        |

|                  | Appeal  |   | Value   | !            | 2018 Rank |
|------------------|---|---|---------|--------------|-----------|
| ▶                | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 60.20   | index        | 9         |
|                  | Attracting and retaining talents              | is a priority in companies  | 6.30    | Survey [010] | 39        |
|                  | Worker motivation                             | in companies is high  | 5.58    | Survey [010] | 37        |
| $\triangleright$ | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 3.36    | Survey [010] | 53        |
|                  | Quality of life                               | is high   | 6.52    | Survey [010] | 34        |
|                  | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 4.18    | Survey [010] | 47        |
| $\triangleright$ | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 12,372  | US\$         | 50        |
|                  | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 108,936 | US\$         | 43        |
|                  | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 20.72   | %            | 40        |
|                  | Personal security and private property rights | are adequately protected  | 6.74    | Survey [010] | 34        |

| Readiness                     |   | Value   | !   | 2018 Rank  |
|-------------------------------|---|---|---|--|
| abor force growth             | Percentage change   | -1.33   | %   | 62   |
| Skilled labor                 | is readily available  | 5.51  | Survey [010]  | 39   |
| inance skills                 | are readily available   | 5.52  | Survey [010]  | 48   |
| nternational experience       | of senior managers is generally significant   | 5.70  | Survey [010]  | 25   |
| Competent senior managers     | are readily available   | 5.61  | Survey [010]  | 32   |
| Educational system            | The educational system meets the needs of a competitive economy   | 5.09  | Survey [010]  | 39   |
| Science in schools            | is sufficiently emphasized  | 4.21  | Survey [010]  | 48   |
| Jniversity education          | meets the needs of a competitive economy  | 5.27  | Survey [010]  | 39   |
| Management education          | meets the needs of the business community   | 5.82  | Survey [010]  | 40   |
| anguage skills                | are meeting the needs of enterprises  | 7.48  | Survey [010]  | 19   |
| Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants  | 1.92  | number  | 34   |
| Educational assessment - PISA | PISA survey of 15-year olds   | 477   | Average   | 34   |
|                               | abor force growth ikilled labor finance skills international experience Competent senior managers iducational system icience in schools University education Management education anguage skills itudent mobility inbound | Abor force growth  Percentage change is readily available is readily available are readily available of senior managers is generally significant Competent senior managers are readily available Educational system The educational system meets the needs of a competitive economy is cience in schools University education Management education meets the needs of a competitive economy meets the needs of the business community are meeting the needs of enterprises it udent mobility inbound  Percentage change is readily available are readily available are readily available for educational system meets the needs of a competitive economy meets the needs of a competitive economy for each of the business community are meeting the needs of enterprises for eign tertiary-level students per 1000 inhabitants | Abor force growth Percentage change -1.33  Rikilled labor is readily available 5.51  Finance skills are readily available 5.52  International experience of senior managers is generally significant 5.70  Competent senior managers are readily available 5.61  Educational system The educational system meets the needs of a competitive economy 5.09  Ricience in schools is sufficiently emphasized 4.21  University education meets the needs of a competitive economy 5.27  Management education meets the needs of the business community 5.82  Language skills are meeting the needs of enterprises 7.48  Richard mobility inbound Foreign tertiary-level students per 1000 inhabitants 1.92 | Abor force growth Percentage change -1.33 %  Ekilled labor is readily available 5.51 Survey [0.10]  Finance skills are readily available 5.52 Survey [0.10]  International experience of senior managers is generally significant 5.70 Survey [0.10]  Competent senior managers are readily available 5.61 Survey [0.10]  Educational system The educational system meets the needs of a competitive economy 5.09 Survey [0.10]  Educational system The educational system meets the needs of a competitive economy 5.09 Survey [0.10]  Educational system meets the needs of a competitive economy 5.27 Survey [0.10]  University education meets the needs of a competitive economy 5.27 Survey [0.10]  Management education meets the needs of the business community 5.82 Survey [0.10]  anguage skills are meeting the needs of enterprises 7.48 Survey [0.10]  Educational system 7.48 Survey [0.10]  Foreign tertiary-level students per 1000 inhabitants 1.92 number |

# **LUXEMBOURG**

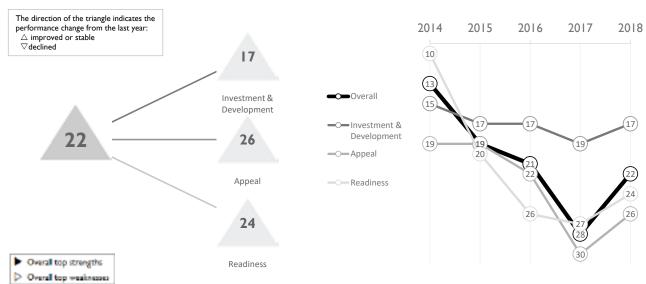


|                       | Investment & Development                  |  | Value | 2            | 2018 Rank |
|-----------------------|---|--|-------|--------------|-----------|
| $\triangleright$      | Total public expenditure on education     | Percentage of GDP                                  | 3.9   | %            | 42        |
| $\triangleright$      | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 20.0  | %            | 34        |
| $\blacktriangleright$ | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 10.74 | ratio        | 4         |
|                       | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 10.85 | ratio        | 18        |
|                       | Apprenticeships                           | are sufficiently implemented                       | 5.80  | Survey [010] | 13        |
|                       | Employee training                         | is a high priority in companies                    | 6.94  | Survey [010] | 7         |
| $\triangleright$      | Female labor force                        | Percentage of total labor force                    | 40.64 | %            | 50        |
|                       | Health infrastructure                     | meets the needs of society                         | 7.94  | Survey [010] | 13        |

| Appeal  |   | Value   | e            | 2018 Rank |
|---|---|---------|--------------|-----------|
| Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 70.50   | index        | 23        |
| Attracting and retaining talents              | is a priority in companies  | 7.57    | Survey [010] | П         |
| Worker motivation                             | in companies is high  | 6.84    | Survey [010] | 16        |
| Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 6.61    | Survey [010] | 7         |
| Quality of life                               | is high   | 9.03    | Survey [010] | - 11      |
| Foreign highly-skilled personnel              | are attracted to your country's business environment  | 7.91    | Survey [010] | 6         |
| Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 58,425  | US\$         | 4         |
| Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 258,404 | US\$         | 7         |
| > Effective personal income tax rate          | Percentage of an income equal to GDP per capita   | 25.96   | %            | 55        |
| Personal security and private property rights | are adequately protected  | 8.17    | Survey [010] | 18        |

|                  | Readiness                     |   | Value           | 2018 Rank |
|------------------|-------------------------------|---|-----------------|-----------|
| ▶                | Labor force growth            | Percentage change   | 4.64 %          | 2         |
| $\triangleright$ | Skilled labor                 | is readily available  | 5.10 Survey [0  | 10] 43    |
|                  | Finance skills                | are readily available   | 6.91 Survey [0  | 10] 17    |
|                  | International experience      | of senior managers is generally significant                     | 7.29 Survey [0  | 10] 6     |
|                  | Competent senior managers     | are readily available   | 5.94 Survey [0  | 10] 26    |
|                  | Educational system            | The educational system meets the needs of a competitive economy | 6.5   Survey [0 | 10] 23    |
|                  | Science in schools            | is sufficiently emphasized                                      | 6.17 Survey [0  | 10] 23    |
|                  | University education          | meets the needs of a competitive economy                        | 6.00 Survey [0  | 10] 30    |
|                  | Management education          | meets the needs of the business community                       | 6.17 Survey [0  | 10] 29    |
|                  | Language skills               | are meeting the needs of enterprises                            | 8.63 Survey [0  | 10] 4     |
|                  | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 5.62 number     | 10        |
|                  | Educational assessment - PISA | PISA survey of 15-year olds                                     | 484 Average     | 31        |
|                  |                               |   |                 |           |

# **MALAYSIA**

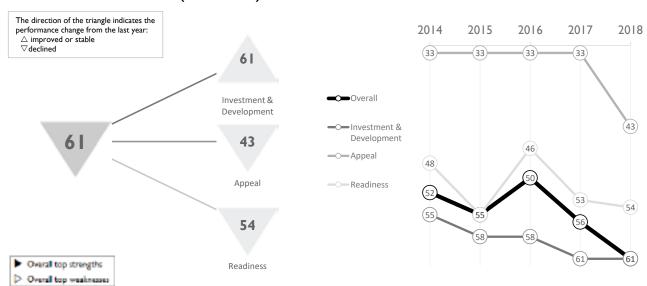


| 31      |
|---------|
| 31      |
| ٥.      |
| 9       |
| 25      |
| 010] 6  |
| 010] 8  |
| 53      |
| 010] 25 |
| [0      |

|                  | Appeal  |   | Value   |              | 2018 Rank |
|------------------|---|---|---------|--------------|-----------|
| ▶                | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 60.60   | index        | 10        |
|                  | Attracting and retaining talents              | is a priority in companies  | 6.97    | Survey [010] | 25        |
|                  | Worker motivation                             | in companies is high  | 6.72    | Survey [010] | 17        |
|                  | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 5.73    | Survey [010] | 21        |
|                  | Quality of life                               | is high   | 6.72    | Survey [010] | 33        |
|                  | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 6.28    | Survey [010] | 17        |
| $\triangleright$ | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 11,436  | US\$         | 55        |
| $\triangleright$ | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 104,352 | US\$         | 45        |
|                  | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 10.09   | %            | 15        |
| $\triangleright$ | Personal security and private property rights | are adequately protected  | 6.50    | Survey [010] | 37        |

| Readiness                     |   | Value          | 2018 Rank |
|-------------------------------|---|----------------|-----------|
| Labor force growth            | Percentage change   | 1.94 %         | 17        |
| Skilled labor                 | is readily available  | 6.45 Survey [0 | 10] [1    |
| Finance skills                | are readily available   | 6.80 Survey [0 | 10] 21    |
| International experience      | of senior managers is generally significant                     | 6.62 Survey [0 | 10] [1    |
| Competent senior managers     | are readily available   | 6.50 Survey [0 | 10] [4    |
| Educational system            | The educational system meets the needs of a competitive economy | 5.98 Survey [0 | 10] 31    |
| Science in schools            | is sufficiently emphasized                                      | 6.12 Survey [0 | 10] 24    |
| University education          | meets the needs of a competitive economy                        | 6.23 Survey [0 | 10] 27    |
| Management education          | meets the needs of the business community                       | 6.42 Survey [0 | 10] 25    |
| Language skills               | are meeting the needs of enterprises                            | 6.72 Survey [0 | 10] 29    |
| Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 3.92 number    | 21        |
| Educational assessment - PISA | PISA survey of 15-year olds                                     | 445 Average    | 41        |

## **MEXICO**

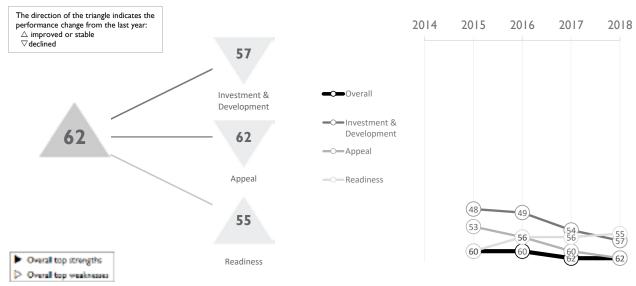


|                  | Investment & Development                  |  | Value | 2            | 2018 Rank |
|------------------|---|--|-------|--------------|-----------|
|                  | Total public expenditure on education     | Percentage of GDP                                  | 3.4   | %            | 54        |
|                  | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 16.3  | %            | 46        |
| $\triangleright$ | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 26.93 | ratio        | 58        |
| $\triangleright$ | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 26.96 | ratio        | 59        |
|                  | Apprenticeships                           | are sufficiently implemented                       | 4.28  | Survey [010] | 45        |
|                  | Employee training                         | is a high priority in companies                    | 4.97  | Survey [010] | 54        |
|                  | Female labor force                        | Percentage of total labor force                    | 38.26 | %            | 54        |
|                  | Health infrastructure                     | meets the needs of society                         | 3.41  | Survey [010] | 52        |

|                       | Appeal  |   | Value   | !            | 2018 Rank |
|-----------------------|---|---|---------|--------------|-----------|
| •                     | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 58.60   | index        | 5         |
| $\triangleright$      | Attracting and retaining talents              | is a priority in companies  | 5.20    | Survey [010] | 60        |
|                       | Worker motivation                             | in companies is high  | 5.35    | Survey [010] | 41        |
|                       | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 3.94    | Survey [010] | 44        |
|                       | Quality of life                               | is high   | 4.94    | Survey [010] | 49        |
| $\blacktriangleright$ | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 5.49    | Survey [010] | 31        |
|                       | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 11,901  | US\$         | 53        |
| $\blacktriangleright$ | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 193,556 | US\$         | 22        |
| $\blacktriangleright$ | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 14.09   | %            | 24        |
| $\triangleright$      | Personal security and private property rights | are adequately protected  | 2.99    | Survey [010] | 60        |

|                  | Readiness                     |   | Value           | 2018 Rank |
|------------------|-------------------------------|---|-----------------|-----------|
| ▶                | Labor force growth            | Percentage change   | 1.23 %          | 24        |
|                  | Skilled labor                 | is readily available  | 5.37 Survey [0. | 10] 41    |
|                  | Finance skills                | are readily available   | 4.91 Survey [0. | 10] 56    |
|                  | International experience      | of senior managers is generally significant                     | 5.52 Survey [0. | 10] 28    |
|                  | Competent senior managers     | are readily available   | 5.14 Survey [0. | 10] 43    |
|                  | Educational system            | The educational system meets the needs of a competitive economy | 3.41 Survey [0. | 10] 53    |
| $\triangleright$ | Science in schools            | is sufficiently emphasized                                      | 2.94 Survey [0. | 10] 57    |
|                  | University education          | meets the needs of a competitive economy                        | 4.79 Survey [0. | 10] 50    |
|                  | Management education          | meets the needs of the business community                       | 4.80 Survey [0. | 10] 51    |
|                  | Language skills               | are meeting the needs of enterprises                            | 4.14 Survey [0. | 10] 55    |
|                  | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 0.10 number     | 55        |
|                  | Educational assessment - PISA | PISA survey of 15-year olds                                     | 412 Average     | 50        |
|                  |                               |   |                 |           |

## **MONGOLIA**

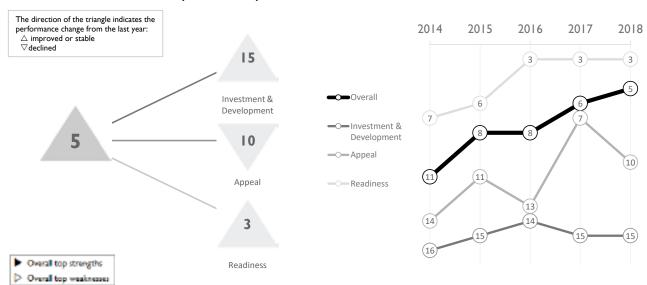


|             | Investment & Development                  |  | Value | . 2          | 2018 Rank |
|-------------|---|--|-------|--------------|-----------|
| <b>&gt;</b> | Total public expenditure on education     | Percentage of GDP                                  | 5.1   | %            | 26        |
|             | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 14.9  | %            | 49        |
|             | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 28.22 | ratio        | 59        |
|             | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 18.80 | ratio        | 54        |
|             | Apprenticeships                           | are sufficiently implemented                       | 3.52  | Survey [010] | 57        |
| ▶           | Employee training                         | is a high priority in companies                    | 5.97  | Survey [010] | 28        |
| ▶           | Female labor force                        | Percentage of total labor force                    | 47.08 | %            | 18        |
|             | Health infrastructure                     | meets the needs of society                         | 2.22  | Survey [010] | 60        |

|                  | Appeal  |   | Value |              | 2018 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  | 6.91  | Survey [010] | 26        |
|                  | Worker motivation                             | in companies is high  | 4.06  | Survey [010] | 59        |
|                  | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 3.42  | Survey [010] | 52        |
| $\triangleright$ | Quality of life                               | is high   | 2.61  | Survey [010] | 62        |
|                  | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 2.91  | Survey [010] | 58        |
|                  | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 5,117 | US\$         | 60        |
| $\triangleright$ | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 6,084 | US\$         | 63        |
| $\triangleright$ | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 30.00 | %            | 63        |
|                  | Personal security and private property rights | are adequately protected  | 4.12  | Survey [010] | 55        |

|                  | Readiness                     |   | Value |              | 2018 Rank |
|------------------|-------------------------------|---|-------|--------------|-----------|
| ▶                | Labor force growth            | Percentage change   | 10.28 | %            | I         |
|                  | Skilled labor                 | is readily available  | 3.23  | Survey [010] | 59        |
| $\triangleright$ | Finance skills                | are readily available   | 3.94  | Survey [010] | 61        |
|                  | International experience      | of senior managers is generally significant                     | 4.00  | Survey [010] | 57        |
|                  | Competent senior managers     | are readily available   | 3.18  | Survey [010] | 61        |
|                  | Educational system            | The educational system meets the needs of a competitive economy | 3.08  | Survey [010] | 56        |
|                  | Science in schools            | is sufficiently emphasized                                      | 3.60  | Survey [010] | 52        |
| $\triangleright$ | University education          | meets the needs of a competitive economy                        | 2.56  | Survey [010] | 62        |
|                  | Management education          | meets the needs of the business community                       | 3.66  | Survey [010] | 61        |
|                  | Language skills               | are meeting the needs of enterprises                            | 4.82  | Survey [010] | 45        |
|                  | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 0.46  | number       | 51        |
|                  | Educational assessment - PISA | PISA survey of 15-year olds                                     | -     | Average      | -         |
|                  |                               |   |       |              |           |

## **NETHERLANDS**

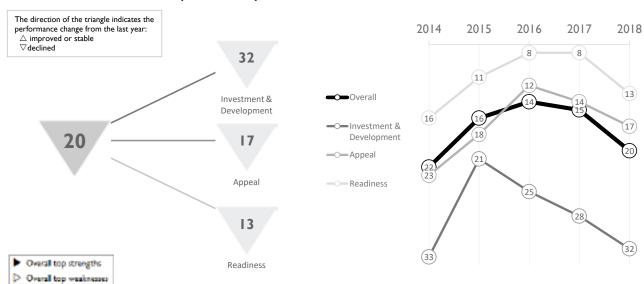


|                  | Investment & Development                  |  | Value | 9            | 2018 Rank |
|------------------|---|--|-------|--------------|-----------|
|                  | Total public expenditure on education     | Percentage of GDP                                  | 5.4   | %            | 20        |
|                  | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | -     | %            | -         |
| $\triangleright$ | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 16.55 | ratio        | 37        |
| $\triangleright$ | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 16.97 | ratio        | 53        |
|                  | Apprenticeships                           | are sufficiently implemented                       | 6.42  | Survey [010] | 5         |
|                  | Employee training                         | is a high priority in companies                    | 6.87  | Survey [010] | 9         |
|                  | Female labor force                        | Percentage of total labor force                    | 46.54 | %            | 25        |
|                  | Health infrastructure                     | meets the needs of society                         | 8.51  | Survey [010] | 4         |

|                  | Appeal  |   | Value   | !            | 2018 Rank |
|------------------|---|---|---------|--------------|-----------|
|                  | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 74.20   | index        | 32        |
|                  | Attracting and retaining talents              | is a priority in companies  | 7.69    | Survey [010] | 7         |
|                  | Worker motivation                             | in companies is high  | 7.43    | Survey [010] | 6         |
|                  | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 6.95    | Survey [010] | 5         |
| ▶                | Quality of life                               | is high   | 9.65    | Survey [010] | 4         |
|                  | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 7.83    | Survey [010] | 7         |
|                  | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 37,971  | US\$         | 22        |
|                  | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 242,424 | US\$         | 12        |
| $\triangleright$ | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 27.10   | %            | 58        |
|                  | Personal security and private property rights | are adequately protected  | 8.82    | Survey [010] | 7         |

|   | Readiness                     |   | Value |              | 2018 Rank |
|---|-------------------------------|---|-------|--------------|-----------|
|   | Labor force growth            | Percentage change   | 0.86  | %            | 29        |
|   | Skilled labor                 | is readily available  | 6.52  | Survey [010] | 9         |
|   | Finance skills                | are readily available   | 7.68  | Survey [010] | 5         |
| • | International experience      | of senior managers is generally significant                     | 7.36  | Survey [010] | 4         |
|   | Competent senior managers     | are readily available   | 6.99  | Survey [010] | 4         |
| • | Educational system            | The educational system meets the needs of a competitive economy | 8.48  | Survey [010] | 3         |
|   | Science in schools            | is sufficiently emphasized                                      | 7.29  | Survey [010] | 6         |
| • | University education          | meets the needs of a competitive economy                        | 8.36  | Survey [010] | 2         |
|   | Management education          | meets the needs of the business community                       | 7.89  | Survey [010] | 5         |
| • | Language skills               | are meeting the needs of enterprises                            | 9.07  | Survey [010] | I         |
|   | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 5.28  | number       | П         |
|   | Educational assessment - PISA | PISA survey of 15-year olds                                     | 510   | Average      | 12        |
|   |                               |   |       |              |           |

## **NEW ZEALAND**

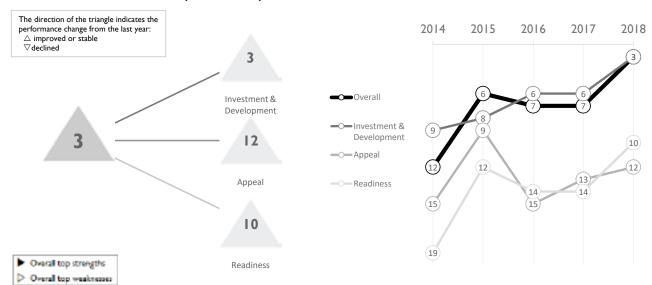


|                  | Investment & Development                  |  | Value |              | 2018 Rank |
|------------------|---|--|-------|--------------|-----------|
|                  | Total public expenditure on education     | Percentage of GDP                                  | 5.4   | %            | 19        |
|                  | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 21.7  | %            | 28        |
|                  | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 16.45 | ratio        | 36        |
| $\triangleright$ | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 14.42 | ratio        | 46        |
|                  | Apprenticeships                           | are sufficiently implemented                       | 4.44  | Survey [010] | 39        |
| $\triangleright$ | Employee training                         | is a high priority in companies                    | 5.33  | Survey [010] | 44        |
|                  | Female labor force                        | Percentage of total labor force                    | 47.34 | %            | 14        |
|                  | Health infrastructure                     | meets the needs of society                         | 5.88  | Survey [010] | 35        |

|                  | Appeal  |   | Value   |              | 2018 Rank |
|------------------|---|---|---------|--------------|-----------|
| $\triangleright$ | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 78.00   | index        | 40        |
|                  | Attracting and retaining talents              | is a priority in companies  | 7.26    | Survey [010] | 19        |
|                  | Worker motivation                             | in companies is high  | 6.60    | Survey [010] | 19        |
|                  | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 5.01    | Survey [010] | 32        |
|                  | Quality of life                               | is high   | 8.70    | Survey [010] | 15        |
| ▶                | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 6.99    | Survey [010] | 13        |
| ▶                | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 44,174  | US\$         | 12        |
|                  | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 170,780 | US\$         | 30        |
|                  | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 20.63   | %            | 39        |
| •                | Personal security and private property rights | are adequately protected  | 8.55    | Survey [010] | 13        |

| Readiness                     |   | Value           | 2018 Rank |
|-------------------------------|---|-----------------|-----------|
| Labor force growth            | Percentage change   | 3.71 %          | 3         |
| > Skilled labor               | is readily available  | 4.41 Survey [01 | 0] 50     |
| Finance skills                | are readily available   | 6.28 Survey [01 | 0] 32     |
| International experience      | of senior managers is generally significant                     | 5.26 Survey [01 | 0] 35     |
| Competent senior managers     | are readily available   | 5.58 Survey [01 | 0] 34     |
| Educational system            | The educational system meets the needs of a competitive economy | 7.01 Survey [01 | 0] [4     |
| Science in schools            | is sufficiently emphasized                                      | 5.55 Survey [01 | 0] 34     |
| University education          | meets the needs of a competitive economy                        | 6.72 Survey [01 | 0] 23     |
| Management education          | meets the needs of the business community                       | 6.12 Survey [01 | 0] 30     |
| > Language skills             | are meeting the needs of enterprises                            | 5.44 Survey [01 | 0] 40     |
| Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 11.57 number    | 2         |
| Educational assessment - PISA | PISA survey of 15-year olds                                     | 504 Average     | 16        |
|                               |   |                 |           |

## **NORWAY**

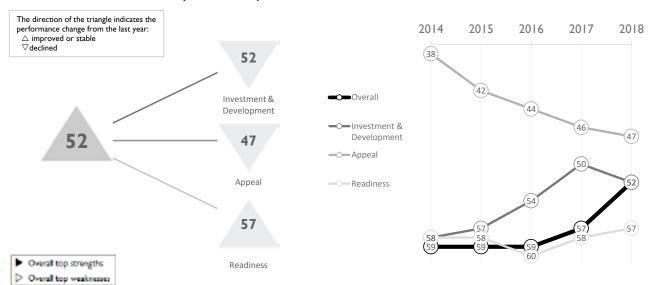


| Investment & Development                  |  | Value | e            | 2018 Rank |
|---|--|-------|--------------|-----------|
| Total public expenditure on education     | Percentage of GDP                                  | 5.6   | %            | 14        |
| Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 24.2  | %            | 14        |
| Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 10.28 | ratio        | 3         |
| Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 9.95  | ratio        | П         |
| Apprenticeships                           | are sufficiently implemented                       | 6.16  | Survey [010] | 7         |
| Employee training                         | is a high priority in companies                    | 7.20  | Survey [010] | 5         |
| Female labor force                        | Percentage of total labor force                    | 47.13 | %            | 17        |
| Health infrastructure                     | meets the needs of society                         | 8.79  | Survey [010] | 2         |

| Appeal  |   | Value   | è            | 2018 Rank |
|---|---|---------|--------------|-----------|
| Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 81.10   | index        | 44        |
| Attracting and retaining talents              | is a priority in companies  | 7.78    | Survey [010] | 6         |
| ► Worker motivation                           | in companies is high  | 7.87    | Survey [010] | 2         |
| ► Brain drain                                 | (well-educated and skilled people) does not hinder competitiveness in your economy              | 8.35    | Survey [010] | I         |
| Quality of life                               | is high   | 9.70    | Survey [010] | 2         |
| Foreign highly-skilled personnel              | are attracted to your country's business environment  | 6.08    | Survey [010] | 20        |
| Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 50,635  | US\$         | 6         |
| Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 141,899 | US\$         | 39        |
| Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 25.82   | %            | 54        |
| Personal security and private property rights | are adequately protected  | 9.08    | Survey [010] | 5         |

|   | Value  | 2018 Rank  |
|---|--|--|
| Percentage change   | -0.32 %  | 52   |
| is readily available  | 7.49 Survey [0   | 10] I  |
| are readily available   | 8.35 Survey [0   | 10] I  |
| of senior managers is generally significant                     | 5.31 Survey [0   | 10] 34   |
| are readily available   | 7.01 Survey [0   | 10] 3  |
| The educational system meets the needs of a competitive economy | 8.24 Survey [0   | 10] 6  |
| is sufficiently emphasized                                      | 6.83 Survey [0   | 10] 9  |
| meets the needs of a competitive economy                        | 8.03 Survey [0   | 10] 8  |
| meets the needs of the business community                       | 8.08 Survey [0   | 10] 3  |
| are meeting the needs of enterprises                            | 8.35 Survey [0   | 10] 9  |
| Foreign tertiary-level students per 1000 inhabitants            | 2.07 number  | 32   |
| PISA survey of 15-year olds                                     | 500 Average  | 21   |
|   | is readily available are readily available of senior managers is generally significant are readily available The educational system meets the needs of a competitive economy is sufficiently emphasized meets the needs of a competitive economy meets the needs of the business community are meeting the needs of enterprises Foreign tertiary-level students per 1000 inhabitants | Percentage change -0.32 %  is readily available 7.49 Survey [0 are readily available 8.35 Survey [0 of senior managers is generally significant 5.31 Survey [0 are readily available 7.01 Survey [0 The educational system meets the needs of a competitive economy 8.24 Survey [0 is sufficiently emphasized 6.83 Survey [0 meets the needs of a competitive economy 8.03 Survey [0 meets the needs of the business community 8.08 Survey [0 are meeting the needs of enterprises 8.35 Survey [0 Foreign tertiary-level students per 1000 inhabitants 2.07 number |

## **PERU**

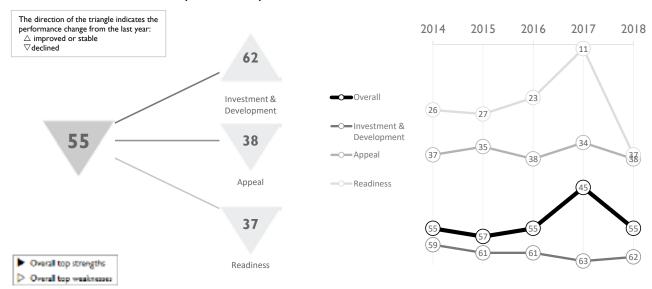


|                  | Investment & Development                  |  | Value | 2            | 2018 Rank |
|------------------|---|--|-------|--------------|-----------|
|                  | Total public expenditure on education     | Percentage of GDP                                  | 3.6   | %            | 49        |
|                  | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 14.3  | %            | 50        |
|                  | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 17.98 | ratio        | 47        |
|                  | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 14.09 | ratio        | 44        |
|                  | Apprenticeships                           | are sufficiently implemented                       | 4.07  | Survey [010] | 49        |
| $\triangleright$ | Employee training                         | is a high priority in companies                    | 4.42  | Survey [010] | 62        |
|                  | Female labor force                        | Percentage of total labor force                    | 44.01 | %            | 43        |
|                  | Health infrastructure                     | meets the needs of society                         | 2.53  | Survey [010] | 55        |

|                  | Appeal  |   | Value   | è            | 2018 Rank |
|------------------|---|---|---------|--------------|-----------|
| •                | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 70.70   | index        | 26        |
| $\triangleright$ | Attracting and retaining talents              | is a priority in companies  | 5.25    | Survey [010] | 59        |
|                  | Worker motivation                             | in companies is high  | 5.20    | Survey [010] | 47        |
|                  | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 4.59    | Survey [010] | 36        |
|                  | Quality of life                               | is high   | 4.50    | Survey [010] | 55        |
|                  | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 5.67    | Survey [010] | 27        |
|                  | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 12,539  | US\$         | 49        |
| ▶                | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 173,726 | US\$         | 26        |
| ▶                | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 12.33   | %            | 20        |
|                  | Personal security and private property rights | are adequately protected  | 4.14    | Survey [010] | 54        |

|                  | Readiness                     |   | Value  |              | 2018 Rank |
|------------------|-------------------------------|---|--------|--------------|-----------|
| ▶                | Labor force growth            | Percentage change   | 2.11 9 | %            | 13        |
|                  | Skilled labor                 | is readily available  | 3.91   | Survey [010] | 54        |
|                  | Finance skills                | are readily available   | 5.18   | Survey [010] | 51        |
|                  | International experience      | of senior managers is generally significant                     | 5.72   | Survey [010] | 24        |
|                  | Competent senior managers     | are readily available   | 5.20   | Survey [010] | 41        |
| $\triangleright$ | Educational system            | The educational system meets the needs of a competitive economy | 2.88   | Survey [010] | 57        |
| $\triangleright$ | Science in schools            | is sufficiently emphasized                                      | 2.87   | Survey [010] | 58        |
| $\triangleright$ | University education          | meets the needs of a competitive economy                        | 3.72   | Survey [010] | 57        |
|                  | Management education          | meets the needs of the business community                       | 4.61   | Survey [010] | 54        |
|                  | Language skills               | are meeting the needs of enterprises                            | 3.91   | Survey [010] | 56        |
|                  | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | - r    | number       | -         |
|                  | Educational assessment - PISA | PISA survey of 15-year olds                                     | 392 /  | Average      | 55        |
|                  |                               |   |        |              |           |

## **PHILIPPINES**

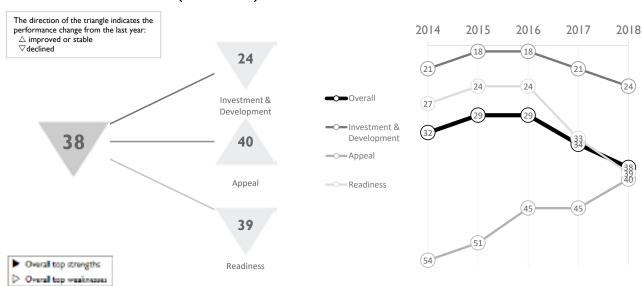


|                  | Investment & Development                  |  | Value | 20           | 18 Rank |
|------------------|---|--|-------|--------------|---------|
| $\triangleright$ | Total public expenditure on education     | Percentage of GDP                                  | 3.1   | %            | 58      |
|                  | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 9.3   | %            | 53      |
| $\triangleright$ | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 31.83 | ratio        | 61      |
| $\triangleright$ | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 26.98 | ratio        | 60      |
|                  | Apprenticeships                           | are sufficiently implemented                       | 4.40  | Survey [010] | 40      |
| ▶                | Employee training                         | is a high priority in companies                    | 6.13  | Survey [010] | 21      |
|                  | Female labor force                        | Percentage of total labor force                    | 37.66 | %            | 56      |
|                  | Health infrastructure                     | meets the needs of society                         | 3.81  | Survey [010] | 48      |

| Appeal  |   | Value   | è            | 2018 Rank |
|---|---|---------|--------------|-----------|
| Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 72.10   | index        | 29        |
| Attracting and retaining talents              | is a priority in companies  | 6.63    | Survey [010] | 31        |
| Worker motivation                             | in companies is high  | 6.11    | Survey [010] | 30        |
| Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 3.77    | Survey [010] | 46        |
| Quality of life                               | is high   | 4.74    | Survey [010] | 50        |
| Foreign highly-skilled personnel              | are attracted to your country's business environment  | 5.21    | Survey [010] | 33        |
| Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 10,815  | US\$         | 56        |
| Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 149,248 | US\$         | 35        |
| Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 9.68    | %            | 14        |
| Personal security and private property rights | are adequately protected  | 4.89    | Survey [010] | 50        |

|                  | Readiness                     |   | Value | 2            | 2018 Rank |
|------------------|-------------------------------|---|-------|--------------|-----------|
| $\triangleright$ | Labor force growth            | Percentage change   | -1.35 | %            | 63        |
| $\triangleright$ | Skilled labor                 | is readily available  | 6.70  | Survey [010] | 7         |
|                  | Finance skills                | are readily available   | 6.55  | Survey [010] | 30        |
|                  | International experience      | of senior managers is generally significant                     | 5.45  | Survey [010] | 29        |
| $\triangleright$ | Competent senior managers     | are readily available   | 6.02  | Survey [010] | 23        |
|                  | Educational system            | The educational system meets the needs of a competitive economy | 5.24  | Survey [010] | 37        |
|                  | Science in schools            | is sufficiently emphasized                                      | 4.74  | Survey [010] | 43        |
|                  | University education          | meets the needs of a competitive economy                        | 5.52  | Survey [010] | 37        |
|                  | Management education          | meets the needs of the business community                       | 5.79  | Survey [010] | 41        |
| $\triangleright$ | Language skills               | are meeting the needs of enterprises                            | 7.41  | Survey [010] | 20        |
|                  | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | -     | number       | -         |
|                  | Educational assessment - PISA | PISA survey of 15-year olds                                     | -     | Average      | -         |
|                  |                               |   |       |              |           |

## **POLAND**

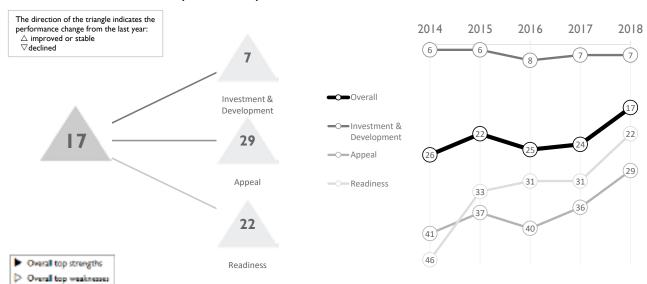


|                       | Investment & Development                  |  | Value | 2            | 2018 Rank |
|-----------------------|---|--|-------|--------------|-----------|
| $\blacktriangleright$ | Total public expenditure on education     | Percentage of GDP                                  | 5.2   | %            | 23        |
|                       | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 21.8  | %            | 26        |
| $\blacktriangleright$ | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 11.09 | ratio        | 7         |
| $\blacktriangleright$ | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 9.98  | ratio        | 12        |
|                       | Apprenticeships                           | are sufficiently implemented                       | 4.65  | Survey [010] | 31        |
|                       | Employee training                         | is a high priority in companies                    | 5.63  | Survey [010] | 36        |
|                       | Female labor force                        | Percentage of total labor force                    | 45.05 | %            | 38        |
| $\triangleright$      | Health infrastructure                     | meets the needs of society                         | 3.02  | Survey [010] | 54        |

|                       | Appeal  |   | Value   | !            | 2018 Rank |
|-----------------------|---|---|---------|--------------|-----------|
| $\blacktriangleright$ | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 56.80   | index        | 4         |
| $\triangleright$      | Attracting and retaining talents              | is a priority in companies  | 5.96    | Survey [010] | 51        |
|                       | Worker motivation                             | in companies is high  | 6.41    | Survey [010] | 24        |
|                       | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 4.16    | Survey [010] | 42        |
|                       | Quality of life                               | is high   | 6.08    | Survey [010] | 39        |
|                       | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 4.29    | Survey [010] | 43        |
|                       | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 14,303  | US\$         | 43        |
|                       | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 149,336 | US\$         | 34        |
| $\triangleright$      | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 25.52   | %            | 52        |
|                       | Personal security and private property rights | are adequately protected  | 5.76    | Survey [010] | 46        |

|                       | Readiness                     |   | Value | 2            | 2018 Rank |
|-----------------------|-------------------------------|---|-------|--------------|-----------|
| $\triangleright$      | Labor force growth            | Percentage change   | -0.51 | %            | 57        |
|                       | Skilled labor                 | is readily available  | 5.00  | Survey [010] | 44        |
|                       | Finance skills                | are readily available   | 6.00  | Survey [010] | 39        |
| $\triangleright$      | International experience      | of senior managers is generally significant                     | 4.86  | Survey [010] | 49        |
|                       | Competent senior managers     | are readily available   | 5.10  | Survey [010] | 45        |
|                       | Educational system            | The educational system meets the needs of a competitive economy | 5.06  | Survey [010] | 40        |
|                       | Science in schools            | is sufficiently emphasized                                      | 5.29  | Survey [010] | 39        |
|                       | University education          | meets the needs of a competitive economy                        | 5.22  | Survey [010] | 40        |
|                       | Management education          | meets the needs of the business community                       | 5.76  | Survey [010] | 42        |
|                       | Language skills               | are meeting the needs of enterprises                            | 7.06  | Survey [010] | 25        |
|                       | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 1.42  | number       | 39        |
| $\blacktriangleright$ | Educational assessment - PISA | PISA survey of 15-year olds                                     | 503   | Average      | 18        |

## **PORTUGAL**

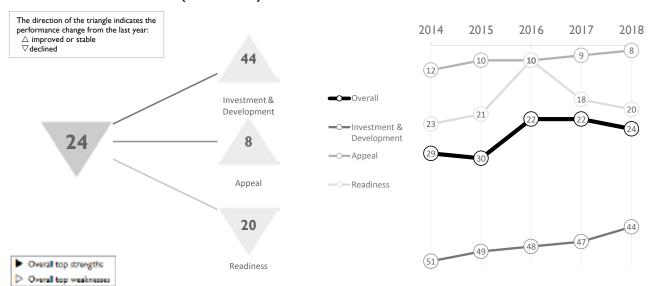


|                  | Investment & Development                  |  | Value |              | 2018 Rank |
|------------------|---|--|-------|--------------|-----------|
|                  | Total public expenditure on education     | Percentage of GDP                                  | 6.0   | %            | 13        |
| <b>&gt;</b>      | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 29.3  | %            | 3         |
|                  | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 13.70 | ratio        | 25        |
|                  | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 9.85  | ratio        | 10        |
|                  | Apprenticeships                           | are sufficiently implemented                       | 5.03  | Survey [010] | 24        |
| $\triangleright$ | Employee training                         | is a high priority in companies                    | 5.16  | Survey [010] | 48        |
| <b>&gt;</b>      | Female labor force                        | Percentage of total labor force                    | 48.91 | %            | 5         |
|                  | Health infrastructure                     | meets the needs of society                         | 7.08  | Survey [010] | 22        |

| Appeal  |   | Value   | 2            | 2018 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        | 19        |
| Attracting and retaining talents              | is a priority in companies  | 6.58    | Survey [010] | 33        |
| Worker motivation                             | in companies is high  | 5.86    | Survey [010] | 33        |
| Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 5.14    | Survey [010] | 29        |
| Quality of life                               | is high   | 8.25    | Survey [010] | 21        |
| Foreign highly-skilled personnel              | are attracted to your country's business environment  | 6.07    | Survey [010] | 21        |
| Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 19,069  | US\$         | 35        |
| Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 156,994 | US\$         | 33        |
| Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 18.02   | %            | 30        |
| Personal security and private property rights | are adequately protected  | 8.23    | Survey [010] | 16        |

| Readiness                     |  | Value  |   | 2018 Rank   |
|-------------------------------|--|--|---|---|
| Labor force growth            | Percentage change  | 0.79   | %   | 31  |
| Skilled labor                 | is readily available   | 6.54   | Survey [010]  | 8   |
| Finance skills                | are readily available  | 6.70   | Survey [010]  | 25  |
| International experience      | of senior managers is generally significant  | 5.12   | Survey [010]  | 38  |
| Competent senior managers     | are readily available  | 5.64   | Survey [010]  | 31  |
| Educational system            | The educational system meets the needs of a competitive economy  | 7.07   | Survey [010]  | 13  |
| Science in schools            | is sufficiently emphasized   | 6.43   | Survey [010]  | 14  |
| University education          | meets the needs of a competitive economy   | 7.45   | Survey [010]  | 14  |
| Management education          | meets the needs of the business community  | 7.55   | Survey [010]  | 8   |
| Language skills               | are meeting the needs of enterprises   | 8.52   | Survey [010]  | 5   |
| Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants   | 1.63   | number  | 37  |
| Educational assessment - PISA | PISA survey of 15-year olds  | 496  | Average   | 22  |
|                               | Labor force growth  Skilled labor Finance skills International experience Competent senior managers Educational system Science in schools University education Management education Language skills Student mobility inbound | Labor force growth Percentage change  Skilled labor is readily available  Finance skills are readily available  International experience of senior managers is generally significant  Competent senior managers are readily available  Educational system The educational system meets the needs of a competitive economy  Science in schools is sufficiently emphasized  University education meets the needs of a competitive economy  Management education meets the needs of the business community  Language skills are meeting the needs of enterprises  Student mobility inbound Foreign tertiary-level students per 1000 inhabitants | Labor force growth Percentage change 0.79  Skilled labor is readily available 6.54  Finance skills are readily available 6.70  International experience of senior managers is generally significant 5.12  Competent senior managers are readily available 5.64  Educational system The educational system meets the needs of a competitive economy 7.07  Science in schools is sufficiently emphasized 6.43  University education meets the needs of a competitive economy 7.45  Management education meets the needs of the business community 7.55  Language skills are meeting the needs of enterprises 8.52  Student mobility inbound Foreign tertiary-level students per 1000 inhabitants 1.63 | Labor force growth Percentage change 0.79 %  Skilled labor is readily available 6.54 Survey [010]  Finance skills are readily available 6.70 Survey [010]  International experience of senior managers is generally significant 5.12 Survey [010]  Competent senior managers are readily available 5.64 Survey [010]  Educational system The educational system meets the needs of a competitive economy 7.07 Survey [010]  Science in schools is sufficiently emphasized 6.43 Survey [010]  University education meets the needs of a competitive economy 7.45 Survey [010]  Management education meets the needs of the business community 7.55 Survey [010]  Language skills are meeting the needs of enterprises 8.52 Survey [010]  Student mobility inbound Foreign tertiary-level students per 1000 inhabitants 1.63 number |

#### **QATAR**

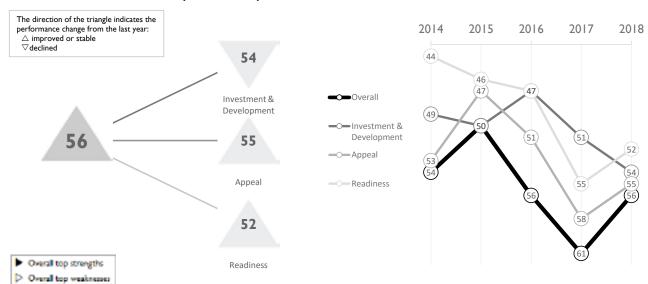


|                  | Investment & Development                  |  | Value | 2            | 2018 Rank |
|------------------|---|--|-------|--------------|-----------|
| $\triangleright$ | Total public expenditure on education     | Percentage of GDP                                  | 4.0   | %            | 39        |
|                  | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | -     | %            | -         |
|                  | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 11.63 | ratio        | - 11      |
|                  | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 10.69 | ratio        | 17        |
|                  | Apprenticeships                           | are sufficiently implemented                       | 5.93  | Survey [010] | 12        |
|                  | Employee training                         | is a high priority in companies                    | 6.28  | Survey [010] | 19        |
| $\triangleright$ | Female labor force                        | Percentage of total labor force                    | 13.49 | %            | 62        |
|                  | Health infrastructure                     | meets the needs of society                         | 7.74  | Survey [010] | 16        |

| Appeal  |   | Value   |              | 2018 Rank |
|---|---|---------|--------------|-----------|
| Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 75.60   | index        | 33        |
| Attracting and retaining talents              | is a priority in companies  | 6.86    | Survey [010] | 28        |
| Worker motivation                             | in companies is high  | 6.52    | Survey [010] | 22        |
| Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 5.94    | Survey [010] | 19        |
| Quality of life                               | is high   | 8.20    | Survey [010] | 22        |
| Foreign highly-skilled personnel              | are attracted to your country's business environment  | 7.36    | Survey [010] | 10        |
| Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 31,462  | US\$         | 29        |
| Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 158,654 | US\$         | 31        |
| Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 0.00    | %            | I         |
| Personal security and private property rights | are adequately protected  | 8.61    | Survey [010] | 10        |

|                  | Readiness                     |   | Value | 2            | 2018 Rank |
|------------------|-------------------------------|---|-------|--------------|-----------|
| $\triangleright$ | Labor force growth            | Percentage change   | 0.10  | %            | 45        |
|                  | Skilled labor                 | is readily available  | 5.93  | Survey [010] | 25        |
|                  | Finance skills                | are readily available   | 6.85  | Survey [010] | 19        |
| ▶                | International experience      | of senior managers is generally significant                     | 7.33  | Survey [010] | 5         |
|                  | Competent senior managers     | are readily available   | 6.76  | Survey [010] | 11        |
| ▶                | Educational system            | The educational system meets the needs of a competitive economy | 8.03  | Survey [010] | 8         |
|                  | Science in schools            | is sufficiently emphasized                                      | 7.65  | Survey [010] | 4         |
| ▶                | University education          | meets the needs of a competitive economy                        | 7.80  | Survey [010] | 10        |
|                  | Management education          | meets the needs of the business community                       | 7.51  | Survey [010] | 10        |
|                  | Language skills               | are meeting the needs of enterprises                            | 7.70  | Survey [010] | 18        |
|                  | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 4.12  | number       | 19        |
| $\triangleright$ | Educational assessment - PISA | PISA survey of 15-year olds                                     | 410   | Average      | 51        |
|                  |                               |   |       |              |           |

## **ROMANIA**

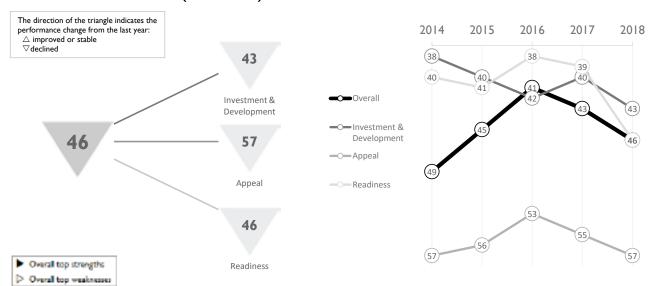


|                       | Investment & Development                  |  | Value           | 2018 Rank |
|-----------------------|---|--|-----------------|-----------|
|                       | Total public expenditure on education     | Percentage of GDP                                  | 3.7 %           | 48        |
|                       | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 15.8 %          | 48        |
|                       | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 18.91 ratio     | 50        |
| $\blacktriangleright$ | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 12.10 ratio     | 27        |
| $\triangleright$      | Apprenticeships                           | are sufficiently implemented                       | 2.33 Survey [01 | 0] 63     |
|                       | Employee training                         | is a high priority in companies                    | 5.00 Survey [01 | 0] 52     |
| $\blacktriangleright$ | Female labor force                        | Percentage of total labor force                    | 43.36 %         | 46        |
| $\triangleright$      | Health infrastructure                     | meets the needs of society                         | 2.07 Survey [01 | 0] 61     |
|                       |   |  |                 |           |

|                  | Appeal  |   | Value  |              | 2018 Rank |
|------------------|---|---|--------|--------------|-----------|
| •                | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 56.50  | index        | 3         |
|                  | Attracting and retaining talents              | is a priority in companies  | 5.63   | Survey [010] | 56        |
|                  | Worker motivation                             | in companies is high  | 4.63   | Survey [010] | 54        |
|                  | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 2.83   | Survey [010] | 56        |
| $\triangleright$ | Quality of life                               | is high   | 3.70   | Survey [010] | 60        |
|                  | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 4.30   | Survey [010] | 42        |
|                  | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 9,424  | US\$         | 57        |
|                  | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 91,615 | US\$         | 51        |
|                  | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 26.31  | %            | 56        |
|                  | Personal security and private property rights | are adequately protected  | 5.76   | Survey [010] | 45        |
|                  |   |   |        |              |           |

|                  | Readiness                     |   | Value           | 2018 Rank |
|------------------|-------------------------------|---|-----------------|-----------|
| ▶                | Labor force growth            | Percentage change   | 3.50 %          | 5         |
|                  | Skilled labor                 | is readily available  | 4.03 Survey [0. | .10] 53   |
|                  | Finance skills                | are readily available   | 5.00 Survey [0. | .10] 55   |
|                  | International experience      | of senior managers is generally significant                     | 5.07 Survey [0. | .10] 41   |
|                  | Competent senior managers     | are readily available   | 3.87 Survey [0. | .10] 57   |
|                  | Educational system            | The educational system meets the needs of a competitive economy | 2.70 Survey [0. | .10] 58   |
|                  | Science in schools            | is sufficiently emphasized                                      | 3.25 Survey [0. | .10] 54   |
| $\triangleright$ | University education          | meets the needs of a competitive economy                        | 3.43 Survey [0. | .10] 59   |
| $\triangleright$ | Management education          | meets the needs of the business community                       | 3.37 Survey [0. | .10] 62   |
|                  | Language skills               | are meeting the needs of enterprises                            | 7.17 Survey [0. | .10] 23   |
|                  | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | I.31 number     | 40        |
|                  | Educational assessment - PISA | PISA survey of 15-year olds                                     | 439 Average     | 43        |
|                  |                               |   |                 |           |

## **RUSSIA**

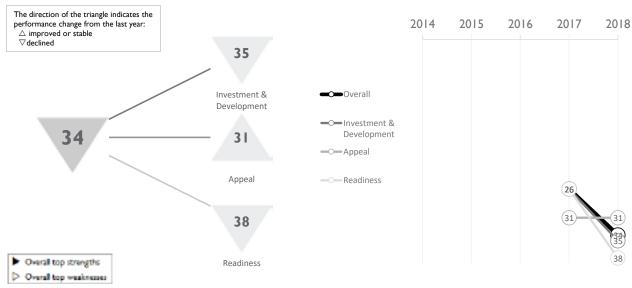


|   | Investment & Development                  |  | Value |              | 2018 Rank |
|---|---|--|-------|--------------|-----------|
|   | Total public expenditure on education     | Percentage of GDP                                  | 3.6   | %            | 51        |
|   | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | -     | %            | -         |
|   | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 20.57 | ratio        | 53        |
| ▶ | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 10.38 | ratio        | 15        |
|   | Apprenticeships                           | are sufficiently implemented                       | 4.39  | Survey [010] | 41        |
|   | Employee training                         | is a high priority in companies                    | 5.40  | Survey [010] | 41        |
| ▶ | Female labor force                        | Percentage of total labor force                    | 48.92 | %            | 4         |
|   | Health infrastructure                     | meets the needs of society                         | 3.74  | Survey [010] | 49        |

|                  | Appeal  |   | Value  | :            | 2018 Rank |
|------------------|---|---|--------|--------------|-----------|
|                  | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 95.50  | index        | 53        |
|                  | Attracting and retaining talents              | is a priority in companies  | 5.79   | Survey [010] | 54        |
|                  | Worker motivation                             | in companies is high  | 4.75   | Survey [010] | 53        |
|                  | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 3.64   | Survey [010] | 48        |
| $\triangleright$ | Quality of life                               | is high   | 3.87   | Survey [010] | 59        |
|                  | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 4.10   | Survey [010] | 48        |
|                  | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 12,950 | US\$         | 45        |
| $\triangleright$ | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 81,946 | US\$         | 56        |
| ▶                | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 11.95  | %            | 18        |
| $\triangleright$ | Personal security and private property rights | are adequately protected  | 4.03   | Survey [010] | 56        |

|                       | Readiness                     |   | Value |              | 2018 Rank |
|-----------------------|-------------------------------|---|-------|--------------|-----------|
| $\triangleright$      | Labor force growth            | Percentage change   | -0.44 | %            | 56        |
| $\blacktriangleright$ | Skilled labor                 | is readily available  | 6.13  | Survey [010] | 17        |
|                       | Finance skills                | are readily available   | 6.18  | Survey [010] | 37        |
| $\triangleright$      | International experience      | of senior managers is generally significant                     | 3.84  | Survey [010] | 59        |
|                       | Competent senior managers     | are readily available   | 4.84  | Survey [010] | 50        |
|                       | Educational system            | The educational system meets the needs of a competitive economy | 4.82  | Survey [010] | 44        |
|                       | Science in schools            | is sufficiently emphasized                                      | 5.58  | Survey [010] | 33        |
|                       | University education          | meets the needs of a competitive economy                        | 4.92  | Survey [010] | 48        |
|                       | Management education          | meets the needs of the business community                       | 4.88  | Survey [010] | 49        |
|                       | Language skills               | are meeting the needs of enterprises                            | 4.26  | Survey [010] | 53        |
|                       | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 1.66  | number       | 36        |
| $\blacktriangleright$ | Educational assessment - PISA | PISA survey of 15-year olds                                     | 490   | Average      | 27        |

## **SAUDI ARABIA**

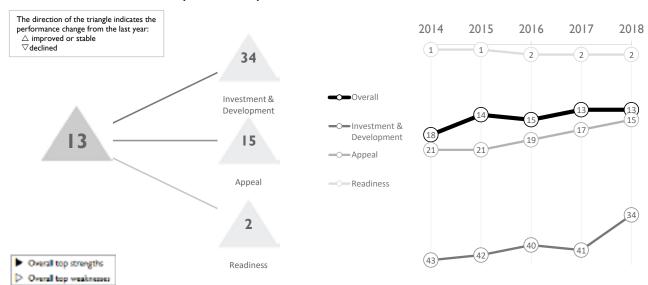


|                  | Investment & Development                  |  | Value | e            | 2018 Rank |
|------------------|---|--|-------|--------------|-----------|
| •                | Total public expenditure on education     | Percentage of GDP                                  | 7.9   | %            | I         |
|                  | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | -     | %            | -         |
| •                | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 10.90 | ratio        | 6         |
| ▶                | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 10.96 | ratio        | 20        |
|                  | Apprenticeships                           | are sufficiently implemented                       | 4.71  | Survey [010] | 29        |
|                  | Employee training                         | is a high priority in companies                    | 5.42  | Survey [010] | 39        |
| $\triangleright$ | Female labor force                        | Percentage of total labor force                    | 14.65 | %            | 61        |
|                  | Health infrastructure                     | meets the needs of society                         | 5.93  | Survey [010] | 34        |

| Appeal  |   | Value   |              | 2018 Rank |
|---|---|---------|--------------|-----------|
| Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 79.90   | index        | 43        |
| Attracting and retaining talents              | is a priority in companies  | 6.10    | Survey [010] | 44        |
| Worker motivation                             | in companies is high  | 5.23    | Survey [010] | 46        |
| Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 5.07    | Survey [010] | 30        |
| Quality of life                               | is high   | 5.95    | Survey [010] | 40        |
| Foreign highly-skilled personnel              | are attracted to your country's business environment  | 5.95    | Survey [010] | 25        |
| Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 38,623  | US\$         | 21        |
| Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 137,813 | US\$         | 40        |
| Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 12.12   | %            | 19        |
| Personal security and private property rights | are adequately protected  | 7.31    | Survey [010] | 31        |

|                       | Readiness                     |   | Value |              | 2018 Rank |
|-----------------------|-------------------------------|---|-------|--------------|-----------|
| $\blacktriangleright$ | Labor force growth            | Percentage change   | 3.12  | %            | 8         |
| $\triangleright$      | Skilled labor                 | is readily available  | 4.40  | Survey [010] | 51        |
| $\triangleright$      | Finance skills                | are readily available   | 5.05  | Survey [010] | 54        |
|                       | International experience      | of senior managers is generally significant                     | 5.64  | Survey [010] | 26        |
|                       | Competent senior managers     | are readily available   | 5.21  | Survey [010] | 1 40      |
| $\triangleright$      | Educational system            | The educational system meets the needs of a competitive economy | 4.12  | Survey [010] | 1 49      |
|                       | Science in schools            | is sufficiently emphasized                                      | 4.62  | Survey [010] | ] 44      |
| $\triangleright$      | University education          | meets the needs of a competitive economy                        | 4.77  | Survey [010] | 51        |
|                       | Management education          | meets the needs of the business community                       | 5.38  | Survey [010] | 45        |
|                       | Language skills               | are meeting the needs of enterprises                            | 5.38  | Survey [010] | 1 41      |
|                       | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 2.52  | number       | 29        |
|                       | Educational assessment - PISA | PISA survey of 15-year olds                                     | -     | Average      | -         |

## **SINGAPORE**

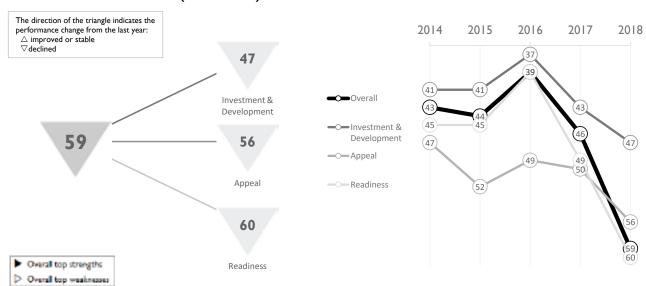


|                  | Investment & Development                  |  | Value | 2            | 2018 Rank |
|------------------|---|--|-------|--------------|-----------|
| $\triangleright$ | Total public expenditure on education     | Percentage of GDP                                  | 2.9   | %            | 60        |
|                  | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | -     | %            | -         |
|                  | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 16.00 | ratio        | 32        |
|                  | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 12.20 | ratio        | 30        |
|                  | Apprenticeships                           | are sufficiently implemented                       | 5.00  | Survey [010] | 25        |
|                  | Employee training                         | is a high priority in companies                    | 6.24  | Survey [010] | 20        |
|                  | Female labor force                        | Percentage of total labor force                    | 45.43 | %            | 36        |
|                  | Health infrastructure                     | meets the needs of society                         | 8.03  | Survey [010] | П         |

|                  | Appeal  |   | Value   |              | 2018 Rank |
|------------------|---|---|---------|--------------|-----------|
| $\triangleright$ | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 105.80  | index        | 58        |
|                  | Attracting and retaining talents              | is a priority in companies  | 7.13    | Survey [010] | 23        |
|                  | Worker motivation                             | in companies is high  | 6.44    | Survey [010] | 23        |
|                  | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 6.18    | Survey [010] | 12        |
|                  | Quality of life                               | is high   | 8.62    | Survey [010] | 18        |
| ▶                | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 8.24    | Survey [010] | 3         |
|                  | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 39,280  | US\$         | 18        |
| ▶                | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 279,159 | US\$         | 4         |
| $\triangleright$ | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 19.79   | %            | 35        |
|                  | Personal security and private property rights | are adequately protected  | 8.94    | Survey [010] | 6         |

|                  | Readiness                     |   | Value          | 2018 Rank |
|------------------|-------------------------------|---|----------------|-----------|
| $\triangleright$ | Labor force growth            | Percentage change   | -0.43 %        | 54        |
|                  | Skilled labor                 | is readily available  | 5.82 Survey [0 | 10] 26    |
|                  | Finance skills                | are readily available   | 7.18 Survey [0 | 10] 13    |
|                  | International experience      | of senior managers is generally significant                     | 7.00 Survey [0 | 10] 8     |
|                  | Competent senior managers     | are readily available   | 6.35 Survey [0 | 10] 17    |
|                  | Educational system            | The educational system meets the needs of a competitive economy | 8.12 Survey [0 | 10] 7     |
| <b>&gt;</b>      | Science in schools            | is sufficiently emphasized                                      | 8.39 Survey [0 | 10] I     |
|                  | University education          | meets the needs of a competitive economy                        | 8.18 Survey [0 | 10] 5     |
|                  | Management education          | meets the needs of the business community                       | 7.82 Survey [0 | 10] 6     |
|                  | Language skills               | are meeting the needs of enterprises                            | 8.35 Survey [0 | 10] 8     |
| •                | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 9.06 number    | 3         |
| •                | Educational assessment - PISA | PISA survey of 15-year olds                                     | 560 Average    | I         |

## **SLOVAK REPUBLIC**

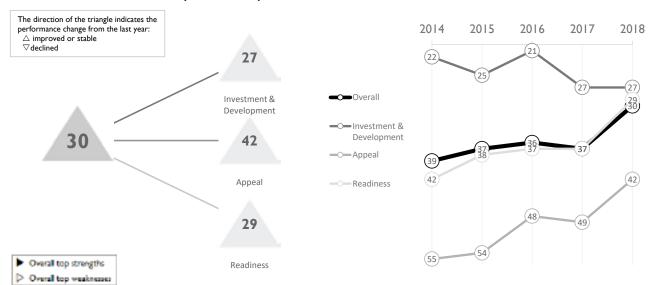


|                       | Investment & Development                  |  | Value | è            | 2018 Rank |
|-----------------------|---|--|-------|--------------|-----------|
|                       | Total public expenditure on education     | Percentage of GDP                                  | 4.2   | %            | 35        |
|                       | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 19.1  | %            | 37        |
|                       | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 17.16 | ratio        | 45        |
| $\blacktriangleright$ | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 12.41 | ratio        | 32        |
| $\triangleright$      | Apprenticeships                           | are sufficiently implemented                       | 2.54  | Survey [010] | 62        |
|                       | Employee training                         | is a high priority in companies                    | 5.05  | Survey [010] | 50        |
| $\blacktriangleright$ | Female labor force                        | Percentage of total labor force                    | 45.23 | %            | 37        |
|                       | Health infrastructure                     | meets the needs of society                         | 2.32  | Survey [010] | 57        |

| Appeal  |   | Value   |              | 2018 Rank |
|---|---|---------|--------------|-----------|
| Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 63.80   | index        | 16        |
| Attracting and retaining talents              | is a priority in companies  | 4.85    | Survey [010] | 62        |
| Worker motivation                             | in companies is high  | 4.22    | Survey [010] | 58        |
| ▶ Brain drain                                 | (well-educated and skilled people) does not hinder competitiveness in your economy              | 1.66    | Survey [010] | 62        |
| Quality of life                               | is high   | 4.56    | Survey [010] | 53        |
| Foreign highly-skilled personnel              | are attracted to your country's business environment  | 2.32    | Survey [010] | 61        |
| Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 21,256  | US\$         | 32        |
| Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 158,008 | US\$         | 32        |
| Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 18.11   | %            | 31        |
| Personal security and private property rights | are adequately protected  | 2.73    | Survey [010] | 61        |
|   |   |         |              |           |

| diness                    |   | Value   | 2018 Rank  |
|---------------------------|---|---|--|
| r force growth            | Percentage change   | -0.07 %   | 48   |
| d labor                   | is readily available  | 3.05 Survey [010  | 0] 62  |
| ce skills                 | are readily available   | 4.81 Survey [010  | 57   |
| national experience       | of senior managers is generally significant   | 4.00 Survey [010  | 57   |
| petent senior managers    | are readily available   | 3.17 Survey [010  | 0] 62  |
| ational system            | The educational system meets the needs of a competitive economy   | 2.63 Survey [010  | 0] 60  |
| ce in schools             | is sufficiently emphasized  | 3.17 Survey [010  | )] 55  |
| ersity education          | meets the needs of a competitive economy  | 2.76 Survey [010  | )j 61  |
| gement education          | meets the needs of the business community   | 3.68 Survey [010  | 0] 60  |
| uage skills               | are meeting the needs of enterprises  | 4.34 Survey [010  | )j 51  |
| ent mobility inbound      | Foreign tertiary-level students per 1000 inhabitants  | 2.01 number   | 33   |
| ational assessment - PISA | PISA survey of 15-year olds   | 468 Average   | 38   |
|                           | r force growth d labor ce skills national experience petent senior managers ational system ce in schools ersity education gement education uage skills ent mobility inbound | r force growth  d labor  is readily available  ce skills  are readily available  national experience  of senior managers is generally significant  petent senior managers  are readily available  The educational system meets the needs of a competitive economy  ce in schools  is sufficiently emphasized  ersity education  meets the needs of a competitive economy  gement education  meets the needs of the business community  are meeting the needs of enterprises  ent mobility inbound  Foreign tertiary-level students per 1000 inhabitants | r force growth Percentage change -0.07 % d labor is readily available 3.05 Survey [0.10 ce skills are readily available 4.81 Survey [0.10 ce skills are readily available 4.81 Survey [0.10 ce skills are readily available 4.81 Survey [0.10 ce skills are readily available 4.81 Survey [0.10 ce skills are readily available 4.81 Survey [0.10 ce petent senior managers are readily available 3.17 Survey [0.10 ce in schools is sufficiently emphasized 3.17 Survey [0.10 ce in schools is sufficiently emphasized 3.17 Survey [0.10 ce in schools is sufficiently emphasized 3.17 Survey [0.10 ce in schools is sufficiently emphasized 3.17 Survey [0.10 ce in schools is sufficiently emphasized 3.17 Survey [0.10 ce in schools are steen the needs of a competitive economy 2.76 Survey [0.10 ce in schools are meets the needs of the business community 3.68 Survey [0.10 ce in schools are meeting the needs of enterprises 4.34 Survey [0.10 ce in schools are meeting the needs of enterprises 4.34 Survey [0.10 ce in schools are meeting the needs of enterprises 4.34 Survey [0.10 ce in schools are meeting the needs of enterprises 4.34 Survey [0.10 ce in schools are meeting the needs of enterprises 4.34 Survey [0.10 ce in schools 4 |

## **SLOVENIA**

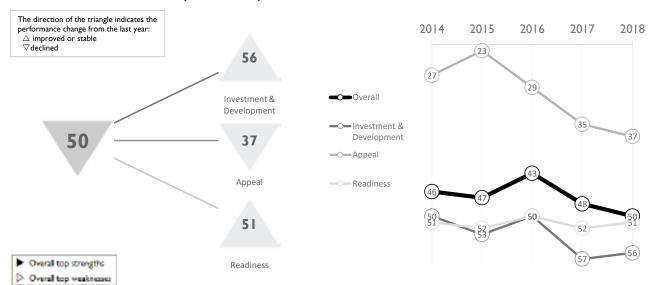


|                  | Investment & Development                  |  | Value | :            | 2018 Rank |
|------------------|---|--|-------|--------------|-----------|
|                  | Total public expenditure on education     | Percentage of GDP                                  | 4.8   | %            | 29        |
| ▶                | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 26.0  | %            | 8         |
|                  | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 15.89 | ratio        | 31        |
|                  | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 10.90 | ratio        | 19        |
| $\triangleright$ | Apprenticeships                           | are sufficiently implemented                       | 3.29  | Survey [010] | 59        |
|                  | Employee training                         | is a high priority in companies                    | 6.42  | Survey [010] | 16        |
|                  | Female labor force                        | Percentage of total labor force                    | 46.66 | %            | 24        |
|                  | Health infrastructure                     | meets the needs of society                         | 4.57  | Survey [010] | 43        |

|                  | Appeal  |   | Value   |              | 2018 Rank |
|------------------|---|---|---------|--------------|-----------|
| •                | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 61.40   | index        | 12        |
|                  | Attracting and retaining talents              | is a priority in companies  | 6.20    | Survey [010] | 42        |
|                  | Worker motivation                             | in companies is high  | 5.31    | Survey [010] | 42        |
| $\triangleright$ | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 3.65    | Survey [010] | 47        |
|                  | Quality of life                               | is high   | 8.14    | Survey [010] | 23        |
| $\triangleright$ | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 3.27    | Survey [010] | 56        |
|                  | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 23,308  | US\$         | 31        |
|                  | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 126,815 | US\$         | 41        |
| $\triangleright$ | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 25.55   | %            | 53        |
|                  | Personal security and private property rights | are adequately protected  | 6.97    | Survey [010] | 33        |

|                  | Readiness                     |   | Value | 2            | 2018 Rank |
|------------------|-------------------------------|---|-------|--------------|-----------|
| •                | Labor force growth            | Percentage change   | 3.19  | %            | 7         |
|                  | Skilled labor                 | is readily available  | 5.55  | Survey [010] | 38        |
|                  | Finance skills                | are readily available   | 5.80  | Survey [010] | 44        |
|                  | International experience      | of senior managers is generally significant                     | 5.25  | Survey [010] | 36        |
| $\triangleright$ | Competent senior managers     | are readily available   | 5.06  | Survey [010] | 47        |
|                  | Educational system            | The educational system meets the needs of a competitive economy | 5.80  | Survey [010] | 32        |
|                  | Science in schools            | is sufficiently emphasized                                      | 5.78  | Survey [010] | 30        |
|                  | University education          | meets the needs of a competitive economy                        | 5.57  | Survey [010] | 35        |
|                  | Management education          | meets the needs of the business community                       | 5.86  | Survey [010] | 37        |
| ▶                | Language skills               | are meeting the needs of enterprises                            | 7.86  | Survey [010] | 12        |
|                  | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 1.14  | number       | 45        |
| •                | Educational assessment - PISA | PISA survey of 15-year olds                                     | 511   | Average      | - 11      |
|                  |                               |   |       |              |           |

## **SOUTH AFRICA**

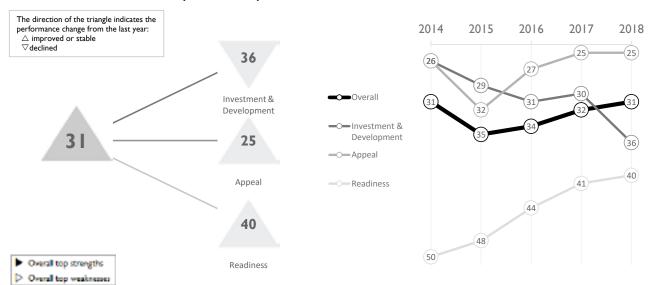


|                  | Investment & Development                  |  | Value | 20           | 18 Rank |
|------------------|---|--|-------|--------------|---------|
| <b>&gt;</b>      | Total public expenditure on education     | Percentage of GDP                                  | 7.0   | %            | 3       |
|                  | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 21.0  | %            | 32      |
| $\triangleright$ | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 32.77 | ratio        | 62      |
| $\triangleright$ | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 27.51 | ratio        | 61      |
| $\triangleright$ | Apprenticeships                           | are sufficiently implemented                       | 3.00  | Survey [010] | 61      |
|                  | Employee training                         | is a high priority in companies                    | 5.77  | Survey [010] | 32      |
| ▶                | Female labor force                        | Percentage of total labor force                    | 46.69 | %            | 23      |
|                  | Health infrastructure                     | meets the needs of society                         | 3.70  | Survey [010] | 50      |

|                  | Appeal  |   | Value  |              | 2018 Rank |
|------------------|---|---|--------|--------------|-----------|
| •                | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 53.60  | index        | ı         |
|                  | Attracting and retaining talents              | is a priority in companies  | 6.33   | Survey [010] | 38        |
| $\triangleright$ | Worker motivation                             | in companies is high  | 4.03   | Survey [010] | 60        |
|                  | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 3.06   | Survey [010] | 55        |
|                  | Quality of life                               | is high   | 6.32   | Survey [010] | 36        |
|                  | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 4.20   | Survey [010] | 46        |
|                  | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 19,087 | US\$         | 34        |
| $\triangleright$ | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 49,528 | US\$         | 58        |
| •                | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 1.51   | %            | 3         |
|                  | Personal security and private property rights | are adequately protected  | 4.48   | Survey [010] | 52        |

| Readiness                     |   | Value             | 2018 Rank |
|-------------------------------|---|-------------------|-----------|
| Labor force growth            | Percentage change   | 1.68 %            | 22        |
| Skilled labor                 | is readily available  | 3.43 Survey [010] | ] 58      |
| Finance skills                | are readily available   | 5.68 Survey [010] | ] 46      |
| International experience      | of senior managers is generally significant                     | 4.03 Survey [010] | ] 56      |
| Competent senior managers     | are readily available   | 4.33 Survey [010] | 53        |
| Educational system            | The educational system meets the needs of a competitive economy | 3.44 Survey [010] | 52        |
| Science in schools            | is sufficiently emphasized                                      | 3.28 Survey [010] | 53        |
| University education          | meets the needs of a competitive economy                        | 5.16 Survey [010] | ] 41      |
| Management education          | meets the needs of the business community                       | 5.84 Survey [010] | ] 38      |
| Language skills               | are meeting the needs of enterprises                            | 5.94 Survey [010] | ] 35      |
| Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 0.79 number       | 49        |
| Educational assessment - PISA | PISA survey of 15-year olds                                     | - Average         | -         |
|                               |   |                   |           |

## **SPAIN**

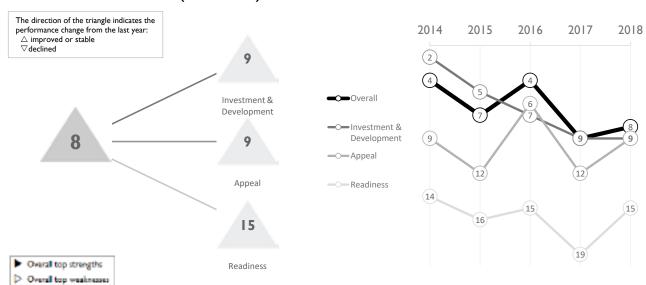


|                       | Investment & Development                  |  | Value | 2            | 2018 Rank |
|-----------------------|---|--|-------|--------------|-----------|
|                       | Total public expenditure on education     | Percentage of GDP                                  | 4.0   | %            | 38        |
|                       | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 22.2  | %            | 25        |
|                       | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 13.66 | ratio        | 24        |
| $\blacktriangleright$ | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 11.50 | ratio        | 23        |
| $\triangleright$      | Apprenticeships                           | are sufficiently implemented                       | 3.59  | Survey [010] | 55        |
| $\triangleright$      | Employee training                         | is a high priority in companies                    | 4.49  | Survey [010] | 58        |
|                       | Female labor force                        | Percentage of total labor force                    | 46.48 | %            | 28        |
| $\blacktriangleright$ | Health infrastructure                     | meets the needs of society                         | 8.19  | Survey [010] | 9         |

|                  | Appeal  |   | Value   | !            | 2018 Rank |
|------------------|---|---|---------|--------------|-----------|
| ▶                | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 70.20   | index        | 22        |
| $\triangleright$ | Attracting and retaining talents              | is a priority in companies  | 5.48    | Survey [010] | 58        |
|                  | Worker motivation                             | in companies is high  | 5.29    | Survey [010] | 43        |
|                  | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 4.95    | Survey [010] | 34        |
| ▶                | Quality of life                               | is high   | 8.41    | Survey [010] | 19        |
|                  | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 6.04    | Survey [010] | 23        |
|                  | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 32,662  | US\$         | 27        |
| ▶                | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 201,648 | US\$         | 19        |
|                  | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 13.92   | %            | 23        |
|                  | Personal security and private property rights | are adequately protected  | 7.67    | Survey [010] | 26        |

|   | Value   |  | 2018 Rank   |
|---|---|--|---|
| Percentage change   | -0.36   | %  | 53  |
| is readily available  | 5.93  | Survey [010]   | 24  |
| are readily available   | 6.00  | Survey [010]   | 39  |
| of senior managers is generally significant                     | 5.08  | Survey [010]   | 40  |
| ers are readily available                                       | 5.59  | Survey [010]   | 33  |
| The educational system meets the needs of a competitive economy | 5.59  | Survey [010]   | 36  |
| is sufficiently emphasized                                      | 4.84  | Survey [010]   | 42  |
| meets the needs of a competitive economy                        | 5.43  | Survey [010]   | 38  |
| meets the needs of the business community                       | 6.31  | Survey [010]   | 27  |
| are meeting the needs of enterprises                            | 4.33  | Survey [010]   | 52  |
| Foreign tertiary-level students per 1000 inhabitants            | 1.15  | number   | 44  |
| PISA PISA survey of 15-year olds                                | 489   | Average  | 28  |
|   | is readily available are readily available of senior managers is generally significant  ers are readily available The educational system meets the needs of a competitive economy is sufficiently emphasized meets the needs of a competitive economy meets the needs of the business community are meeting the needs of enterprises Foreign tertiary-level students per 1000 inhabitants | Percentage change -0.36 is readily available 5.93 are readily available 6.00 of senior managers is generally significant 5.08 ers are readily available 5.59 The educational system meets the needs of a competitive economy 5.59 is sufficiently emphasized 4.84 meets the needs of a competitive economy 5.43 meets the needs of the business community 6.31 are meeting the needs of enterprises 4.33 Foreign tertiary-level students per 1000 inhabitants 1.15 | Percentage change -0.36 %  is readily available 5.93 Survey [0.10]  are readily available 6.00 Survey [0.10]  of senior managers is generally significant 5.08 Survey [0.10]  ers are readily available 5.59 Survey [0.10]  The educational system meets the needs of a competitive economy 5.59 Survey [0.10]  is sufficiently emphasized 4.84 Survey [0.10]  meets the needs of a competitive economy 5.43 Survey [0.10]  meets the needs of the business community 6.31 Survey [0.10]  are meeting the needs of enterprises 4.33 Survey [0.10]  Foreign tertiary-level students per 1000 inhabitants 1.15 number |

## **SWEDEN**

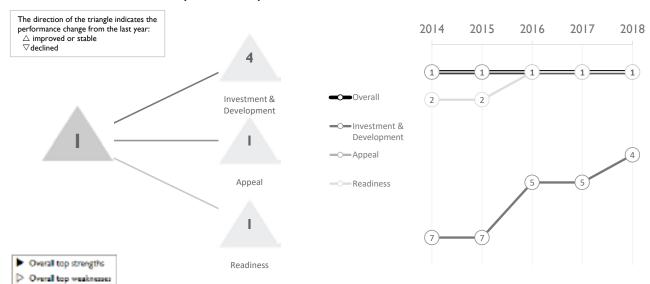


|                  | Investment & Development                  |  | Value | 2            | 2018 Rank |
|------------------|---|--|-------|--------------|-----------|
| ▶                | Total public expenditure on education     | Percentage of GDP                                  | 6.6   | %            | 7         |
|                  | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 24.8  | %            | 13        |
|                  | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 12.83 | ratio        | 19        |
|                  | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 13.41 | ratio        | 41        |
| $\triangleright$ | Apprenticeships                           | are sufficiently implemented                       | 4.56  | Survey [010] | 33        |
|                  | Employee training                         | is a high priority in companies                    | 6.72  | Survey [010] | 10        |
|                  | Female labor force                        | Percentage of total labor force                    | 47.50 | %            | 12        |
|                  | Health infrastructure                     | meets the needs of society                         | 6.88  | Survey [010] | 24        |

| Appeal  |   | Value   |              | 2018 Rank |
|---|---|---------|--------------|-----------|
| Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 70.60   | index        | 25        |
| Attracting and retaining talents              | is a priority in companies  | 8.13    | Survey [010] | 2         |
| Worker motivation                             | in companies is high  | 7.19    | Survey [010] | 8         |
| Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 6.60    | Survey [010] | 8         |
| Quality of life                               | is high   | 8.95    | Survey [010] | 12        |
| Foreign highly-skilled personnel              | are attracted to your country's business environment  | 6.41    | Survey [010] | 15        |
| Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 47,831  | US\$         | 8         |
| Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 224,108 | US\$         | 15        |
| Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 24.35   | %            | 50        |
| Personal security and private property rights | are adequately protected  | 7.84    | Survey [010] | 25        |

|                  | Readiness                     |   | Value | 2            | 2018 Rank |
|------------------|-------------------------------|---|-------|--------------|-----------|
|                  | Labor force growth            | Percentage change   | 1.98  | %            | 15        |
|                  | Skilled labor                 | is readily available  | 5.48  | Survey [010] | 40        |
|                  | Finance skills                | are readily available   | 7.09  | Survey [010] | 15        |
| ▶                | International experience      | of senior managers is generally significant                     | 7.08  | Survey [010] | 7         |
|                  | Competent senior managers     | are readily available   | 6.50  | Survey [010] | 14        |
|                  | Educational system            | The educational system meets the needs of a competitive economy | 6.25  | Survey [010] | 29        |
|                  | Science in schools            | is sufficiently emphasized                                      | 5.46  | Survey [010] | 37        |
|                  | University education          | meets the needs of a competitive economy                        | 6.91  | Survey [010] | 20        |
|                  | Management education          | meets the needs of the business community                       | 7.06  | Survey [010] | 15        |
|                  | Language skills               | are meeting the needs of enterprises                            | 8.28  | Survey [010] | 10        |
| $\triangleright$ | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 2.71  | number       | 26        |
|                  | Educational assessment - PISA | PISA survey of 15-year olds                                     | 494   | Average      | 25        |
|                  |                               |   |       |              |           |

## **SWITZERLAND**

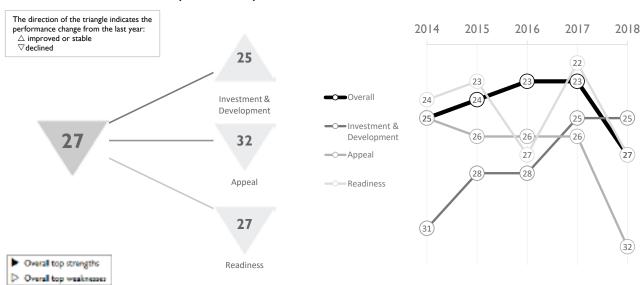


|                       | Investment & Development                  |  | Value | 2            | 2018 Rank |
|-----------------------|---|--|-------|--------------|-----------|
|                       | Total public expenditure on education     | Percentage of GDP                                  | 5.1   | %            | 25        |
|                       | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 25.3  | %            | 12        |
|                       | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 15.65 | ratio        | 30        |
|                       | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 11.68 | ratio        | 24        |
| $\blacktriangleright$ | Apprenticeships                           | are sufficiently implemented                       | 8.64  | Survey [010] | I         |
|                       | Employee training                         | is a high priority in companies                    | 7.23  | Survey [010] | 4         |
|                       | Female labor force                        | Percentage of total labor force                    | 46.50 | %            | 26        |
|                       | Health infrastructure                     | meets the needs of society                         | 8.97  | Survey [010] | - 1       |

|                       | Appeal  |   | Value   | !            | 2018 Rank |
|-----------------------|---|---|---------|--------------|-----------|
| $\triangleright$      | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 106.70  | index        | 59        |
|                       | Attracting and retaining talents              | is a priority in companies  | 7.51    | Survey [010] | 12        |
|                       | Worker motivation                             | in companies is high  | 7.56    | Survey [010] | 4         |
|                       | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 7.51    | Survey [010] | 2         |
|                       | Quality of life                               | is high   | 9.66    | Survey [010] | 3         |
| ▶                     | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 8.55    | Survey [010] | I         |
| ▶                     | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 92,625  | US\$         | I         |
| $\blacktriangleright$ | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 448,322 | US\$         | I         |
|                       | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 10.39   | %            | 16        |
|                       | Personal security and private property rights | are adequately protected  | 9.11    | Survey [010] | 4         |

| Readiness                     |   | Value            | 2018 Rank |
|-------------------------------|---|------------------|-----------|
| > Labor force growth          | Percentage change   | 0.57 %           | 38        |
| Skilled labor                 | is readily available  | 7.03 Survey [010 | 0] 3      |
| Finance skills                | are readily available   | 8.06 Survey [010 | 0] 2      |
| International experience      | of senior managers is generally significant                     | 7.80 Survey [010 | 0] 2      |
| Competent senior managers     | are readily available   | 7.15 Survey [010 | 0] 2      |
| Educational system            | The educational system meets the needs of a competitive economy | 8.80 Survey [010 | oj l      |
| Science in schools            | is sufficiently emphasized                                      | 7.96 Survey [010 | 0] 2      |
| University education          | meets the needs of a competitive economy                        | 8.75 Survey [010 | oj I      |
| Management education          | meets the needs of the business community                       | 8.35 Survey [010 | oj I      |
| Language skills               | are meeting the needs of enterprises                            | 8.66 Survey [010 | 0] 3      |
| Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 6.24 number      | 8         |
| Educational assessment - PISA | PISA survey of 15-year olds                                     | 513 Average      | 10        |
|                               |   |                  |           |

## **TAIWAN**

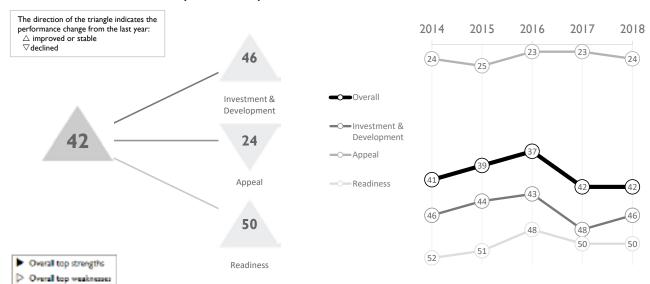


|                       | Investment & Development                  |  | Value | 2            | 2018 Rank |
|-----------------------|---|--|-------|--------------|-----------|
| $\triangleright$      | Total public expenditure on education     | Percentage of GDP                                  | 3.8   | %            | 47        |
|                       | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 22.5  | %            | 24        |
|                       | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 12.50 | ratio        | 17        |
|                       | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 14.20 | ratio        | 45        |
|                       | Apprenticeships                           | are sufficiently implemented                       | 5.32  | Survey [010] | 19        |
|                       | Employee training                         | is a high priority in companies                    | 6.38  | Survey [010] | 18        |
|                       | Female labor force                        | Percentage of total labor force                    | 44.32 | %            | 41        |
| $\blacktriangleright$ | Health infrastructure                     | meets the needs of society                         | 7.93  | Survey [010] | 14        |

| Appeal  |   | Value   | !            | 2018 Rank |
|---|---|---------|--------------|-----------|
| Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 87.00   | index        | 49        |
| Attracting and retaining talents              | is a priority in companies  | 6.09    | Survey [010] | 45        |
| Worker motivation                             | in companies is high  | 6.56    | Survey [010] | 20        |
| ▶ Brain drain                                 | (well-educated and skilled people) does not hinder competitiveness in your economy              | 3.44    | Survey [010] | 51        |
| Quality of life                               | is high   | 6.97    | Survey [010] | 31        |
| Foreign highly-skilled personnel              | are attracted to your country's business environment  | 3.62    | Survey [010] | 55        |
| Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 26,313  | US\$         | 30        |
| Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 175,477 | US\$         | 25        |
| ► Effective personal income tax rate          | Percentage of an income equal to GDP per capita   | 6.75    | %            | 8         |
| Personal security and private property rights | are adequately protected  | 7.44    | Survey [010] | 28        |

| Readiness                     |   | Value           | 2018 Rank |
|-------------------------------|---|-----------------|-----------|
| Labor force growth            | Percentage change   | 0.58 %          | 37        |
| Skilled labor                 | is readily available  | 5.62 Survey [01 | 0] 33     |
| Finance skills                | are readily available   | 6.19 Survey [01 | 0] 36     |
| International experience      | of senior managers is generally significant                     | 5.03 Survey [01 | 0] 44     |
| Competent senior managers     | are readily available   | 5.31 Survey [01 | 0] 39     |
| Educational system            | The educational system meets the needs of a competitive economy | 6.27 Survey [01 | 0] 27     |
| Science in schools            | is sufficiently emphasized                                      | 6.57 Survey [01 | 0] 12     |
| University education          | meets the needs of a competitive economy                        | 5.60 Survey [01 | 0] 34     |
| Management education          | meets the needs of the business community                       | 6.09 Survey [01 | 0] 31     |
| Language skills               | are meeting the needs of enterprises                            | 5.69 Survey [01 | 0] 38     |
| Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 4.95 number     | 14        |
| Educational assessment - PISA | PISA survey of 15-year olds                                     | 537 Average     | 2         |

## **THAILAND**

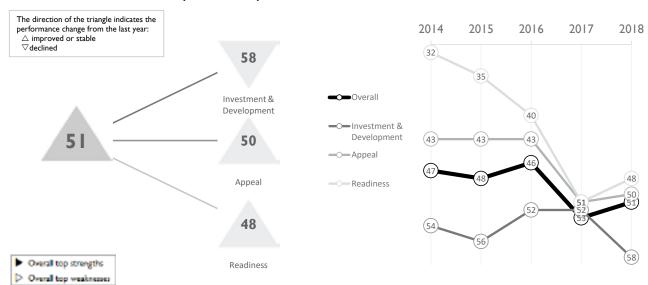


|                  | Investment & Development                  |  | Value |              | 2018 Rank |
|------------------|---|--|-------|--------------|-----------|
|                  | Total public expenditure on education     | Percentage of GDP                                  | 3.8   | %            | 45        |
|                  | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 18.0  | %            | 41        |
|                  | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 16.88 | ratio        | 40        |
| $\triangleright$ | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 28.15 | ratio        | 62        |
|                  | Apprenticeships                           | are sufficiently implemented                       | 5.61  | Survey [010] | 15        |
|                  | Employee training                         | is a high priority in companies                    | 6.59  | Survey [010] | 12        |
|                  | Female labor force                        | Percentage of total labor force                    | 45.44 | %            | 35        |
|                  | Health infrastructure                     | meets the needs of society                         | 6.20  | Survey [010] | 31        |

| Appeal  |   | Value   | 9            | 2018 Rank |
|---|---|---------|--------------|-----------|
| Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 77.20   | index        | 36        |
| Attracting and retaining talents              | is a priority in companies  | 7.03    | Survey [010] | 24        |
| Worker motivation                             | in companies is high  | 6.14    | Survey [010] | 27        |
| Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 5.42    | Survey [010] | 24        |
| Quality of life                               | is high   | 6.29    | Survey [010] | 37        |
| Foreign highly-skilled personnel              | are attracted to your country's business environment  | 6.00    | Survey [010] | 24        |
| Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 12,900  | US\$         | 46        |
| Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 172,158 | US\$         | 29        |
| Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 4.09    | %            | 5         |
| Personal security and private property rights | are adequately protected  | 6.68    | Survey [010] | 36        |

|                       | Readiness                     |   | Value |              | 2018 Rank |
|-----------------------|-------------------------------|---|-------|--------------|-----------|
| $\triangleright$      | Labor force growth            | Percentage change   | -0.44 | %            | 55        |
| $\blacktriangleright$ | Skilled labor                 | is readily available  | 5.93  | Survey [010] | 23        |
|                       | Finance skills                | are readily available   | 6.27  | Survey [010] | 33        |
| $\blacktriangleright$ | International experience      | of senior managers is generally significant                     | 5.97  | Survey [010] | 20        |
|                       | Competent senior managers     | are readily available   | 5.98  | Survey [010] | 25        |
|                       | Educational system            | The educational system meets the needs of a competitive economy | 4.51  | Survey [010] | 46        |
|                       | Science in schools            | is sufficiently emphasized                                      | 4.60  | Survey [010] | 45        |
|                       | University education          | meets the needs of a competitive economy                        | 4.99  | Survey [010] | 46        |
|                       | Management education          | meets the needs of the business community                       | 5.56  | Survey [010] | 43        |
| $\triangleright$      | Language skills               | are meeting the needs of enterprises                            | 4.58  | Survey [010] | 49        |
| $\triangleright$      | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 0.19  | number       | 53        |
| $\triangleright$      | Educational assessment - PISA | PISA survey of 15-year olds                                     | 418   | Average      | 49        |

## **TURKEY**

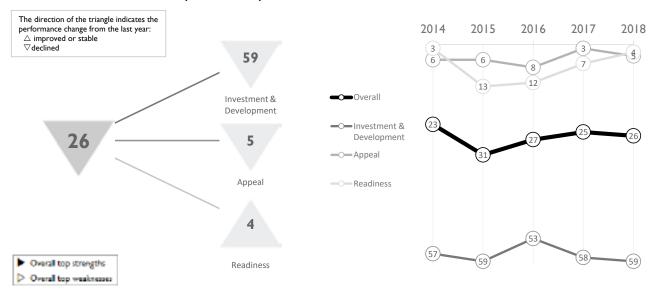


|                  | Investment & Development                  |  | Value | 2            | 2018 Rank |
|------------------|---|--|-------|--------------|-----------|
|                  | Total public expenditure on education     | Percentage of GDP                                  | 3.8   | %            | 44        |
|                  | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 11.2  | %            | 51        |
|                  | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 18.40 | ratio        | 49        |
|                  | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 15.45 | ratio        | 50        |
|                  | Apprenticeships                           | are sufficiently implemented                       | 4.31  | Survey [010] | 44        |
| $\triangleright$ | Employee training                         | is a high priority in companies                    | 5.00  | Survey [010] | 52        |
| $\triangleright$ | Female labor force                        | Percentage of total labor force                    | 32.11 | %            | 57        |
| ▶                | Health infrastructure                     | meets the needs of society                         | 6.58  | Survey [010] | 28        |

| Appeal  |   | Value   | 2            | 2018 Rank |
|---|---|---------|--------------|-----------|
| Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 64.60   | index        | 18        |
| Attracting and retaining talents              | is a priority in companies  | 6.27    | Survey [010] | 40        |
| Worker motivation                             | in companies is high  | 5.19    | Survey [010] | 48        |
| Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 3.92    | Survey [010] | 45        |
| Quality of life                               | is high   | 4.59    | Survey [010] | 51        |
| Foreign highly-skilled personnel              | are attracted to your country's business environment  | 3.85    | Survey [010] | 51        |
| Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 14,323  | US\$         | 42        |
| Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 148,925 | US\$         | 36        |
| Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 20.77   | %            | 41        |
| Personal security and private property rights | are adequately protected  | 5.88    | Survey [010] | 43        |
|   |   |         |              |           |

|                  | Readiness                     |   | Value          | 2018 Rank      |
|------------------|-------------------------------|---|----------------|----------------|
| •                | Labor force growth            | Percentage change   | 3.63 %         | 4              |
|                  | Skilled labor                 | is readily available  | 5.58 Survey [0 | 010] 36        |
| •                | Finance skills                | are readily available   | 6.54 Survey [0 | 010] 31        |
|                  | International experience      | of senior managers is generally significant                     | 5.25 Survey [0 | 010] 36        |
| •                | Competent senior managers     | are readily available   | 5.85 Survey [0 | 010] 29        |
| $\triangleright$ | Educational system            | The educational system meets the needs of a competitive economy | 2.65 Survey [0 | D10] <b>59</b> |
| $\triangleright$ | Science in schools            | is sufficiently emphasized                                      | 2.86 Survey [0 | 010] 59        |
| $\triangleright$ | University education          | meets the needs of a competitive economy                        | 4.04 Survey [0 | 010] 56        |
|                  | Management education          | meets the needs of the business community                       | 4.81 Survey [0 | 5010]          |
|                  | Language skills               | are meeting the needs of enterprises                            | 4.38 Survey [0 | 010] 50        |
|                  | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 0.92 number    | 48             |
|                  | Educational assessment - PISA | PISA survey of 15-year olds                                     | 423 Average    | 47             |
|                  |                               |   |                |                |

## **UAE**

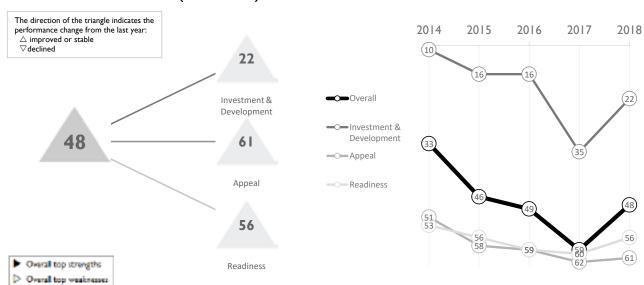


|                  | Investment & Development                  |  | Value | 2            | 2018 Rank |
|------------------|---|--|-------|--------------|-----------|
| $\triangleright$ | Total public expenditure on education     | Percentage of GDP                                  | 1.3   | %            | 61        |
|                  | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | -     | %            | -         |
| $\triangleright$ | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 23.62 | ratio        | 55        |
|                  | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 13.27 | ratio        | 40        |
|                  | Apprenticeships                           | are sufficiently implemented                       | 6.00  | Survey [010] | 9         |
|                  | Employee training                         | is a high priority in companies                    | 6.52  | Survey [010] | 13        |
| $\triangleright$ | Female labor force                        | Percentage of total labor force                    | 19.14 | %            | 59        |
|                  | Health infrastructure                     | meets the needs of society                         | 7.87  | Survey [010] | 15        |

|                  | Appeal  |   | Value   |              | 2018 Rank |
|------------------|---|---|---------|--------------|-----------|
| $\triangleright$ | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 90.80   | index        | 51        |
|                  | Attracting and retaining talents              | is a priority in companies  | 7.35    | Survey [010] | 18        |
|                  | Worker motivation                             | in companies is high  | 6.98    | Survey [010] | 10        |
|                  | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 7.27    | Survey [010] | 4         |
|                  | Quality of life                               | is high   | 8.78    | Survey [010] | 14        |
| ▶                | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 8.40    | Survey [010] | 2         |
|                  | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 35,346  | US\$         | 24        |
|                  | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 199,989 | US\$         | 20        |
|                  | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 4.64    | %            | 6         |
|                  | Personal security and private property rights | are adequately protected  | 8.53    | Survey [010] | 14        |
|                  |   |   |         |              |           |

|                  | Readiness                     |   | Value | e            | 2018 Rank |
|------------------|-------------------------------|---|-------|--------------|-----------|
|                  | Labor force growth            | Percentage change   | 1.90  | %            | 18        |
| ▶                | Skilled labor                 | is readily available  | 7.06  | Survey [010] | 2         |
|                  | Finance skills                | are readily available   | 7.47  | Survey [010] | 8         |
| ▶                | International experience      | of senior managers is generally significant                     | 8.27  | Survey [010] | I         |
| ▶                | Competent senior managers     | are readily available   | 7.60  | Survey [010] | I         |
|                  | Educational system            | The educational system meets the needs of a competitive economy | 7.60  | Survey [010] | 9         |
|                  | Science in schools            | is sufficiently emphasized                                      | 7.20  | Survey [010] | 7         |
|                  | University education          | meets the needs of a competitive economy                        | 7.02  | Survey [010] | 18        |
|                  | Management education          | meets the needs of the business community                       | 7.06  | Survey [010] | 16        |
|                  | Language skills               | are meeting the needs of enterprises                            | 8.36  | Survey [010] | 7         |
| ▶                | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 8.36  | number       | 4         |
| $\triangleright$ | Educational assessment - PISA | PISA survey of 15-year olds                                     | 432   | Average      | 46        |

## **UKRAINE**

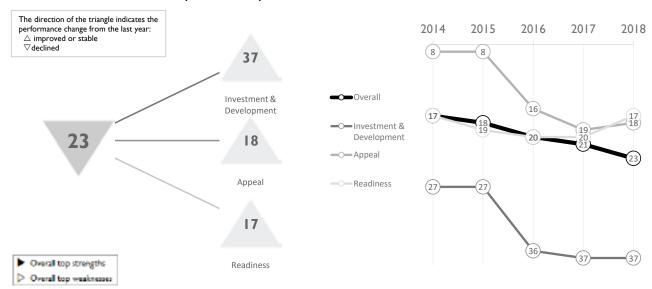


|   | Investment & Development                  |  | Value | 2            | 2018 Rank |
|---|---|--|-------|--------------|-----------|
| ▶ | Total public expenditure on education     | Percentage of GDP                                  | 5.4   | %            | 18        |
| ▶ | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 25.9  | %            | 9         |
|   | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 16.89 | ratio        | 41        |
| ▶ | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 6.97  | ratio        | 1         |
|   | Apprenticeships                           | are sufficiently implemented                       | 4.62  | Survey [010] | 32        |
|   | Employee training                         | is a high priority in companies                    | 5.06  | Survey [010] | 49        |
| ▶ | Female labor force                        | Percentage of total labor force                    | 47.18 | %            | 16        |
|   | Health infrastructure                     | meets the needs of society                         | 2.30  | Survey [010] | 58        |

| Appeal  |   | Value  | !   | 2018 Rank   |
|---|---|--|---|---|
| Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100)   | 61.10  | index   | - 11  |
| Attracting and retaining talents              | is a priority in companies  | 5.70   | Survey [010]  | 55  |
| Worker motivation                             | in companies is high  | 4.79   | Survey [010]  | 52  |
| Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy  | 2.07   | Survey [010]  | 60  |
| Quality of life                               | is high   | 2.83   | Survey [010]  | 61  |
| Foreign highly-skilled personnel              | are attracted to your country's business environment  | 2.86   | Survey [010]  | 59  |
| Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$   | 3,728  | US\$  | 62  |
| Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$   | 26,527   | US\$  | 60  |
| Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 18.92  | %   | 32  |
| Personal security and private property rights | are adequately protected  | 2.72   | Survey [010]  | 62  |
|   | Cost-of-living index Attracting and retaining talents Worker motivation Brain drain Quality of life Foreign highly-skilled personnel Remuneration in services professions Remuneration of management Effective personal income tax rate | 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  is a priority in companies  Worker motivation  in companies is high  Brain drain  (well-educated and skilled people) does not hinder competitiveness in your economy  Quality of life  is high  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 | 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  is a priority in companies  5.70  Worker motivation  in companies is high  4.79  Brain drain  (well-educated and skilled people) does not hinder competitiveness in your economy  Quality of life  is high  2.83  Foreign highly-skilled personnel  are attracted to your country's business environment  2.86  Remuneration in services professions  Gross annual income including supplements such as bonuses, US\$  3,728  Remuneration of management  Total base salary plus bonuses and long-term incentives, US\$  26,527  Effective personal income tax rate  Percentage of an income equal to GDP per capita | 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  is a priority in companies  5.70 Survey [010]  Worker motivation  in companies is high  4.79 Survey [010]  Brain drain  (well-educated and skilled people) does not hinder competitiveness in your economy  Quality of life  is high  2.83 Survey [010]  Foreign highly-skilled personnel  are attracted to your country's business environment  2.86 Survey [010]  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\$  26,527 US\$  Effective personal income tax rate  Percentage of an income equal to GDP per capita |

| Readiness                     |   | Value           | 2018 Rank |
|-------------------------------|---|-----------------|-----------|
| Labor force growth            | Percentage change   | -0.56 %         | 58        |
| Skilled labor                 | is readily available  | 5.36 Survey [01 | 0] 42     |
| Finance skills                | are readily available   | 5.88 Survey [01 | 0] 42     |
| > International experience    | of senior managers is generally significant                     | 3.80 Survey [01 | 0] 61     |
| Competent senior managers     | are readily available   | 4.77 Survey [01 | 0] 51     |
| Educational system            | The educational system meets the needs of a competitive economy | 3.56 Survey [01 | 0] 51     |
| Science in schools            | is sufficiently emphasized                                      | 4.17 Survey [01 | 0] 49     |
| University education          | meets the needs of a competitive economy                        | 4.07 Survey [01 | 0] 55     |
| Management education          | meets the needs of the business community                       | 4.57 Survey [01 | 0] 55     |
| Language skills               | are meeting the needs of enterprises                            | 3.90 Survey [01 | 0] 57     |
| Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | I.27 number     | 41        |
| Educational assessment - PISA | PISA survey of 15-year olds                                     | - Average       | -         |
|                               |   |                 |           |

## **UNITED KINGDOM**

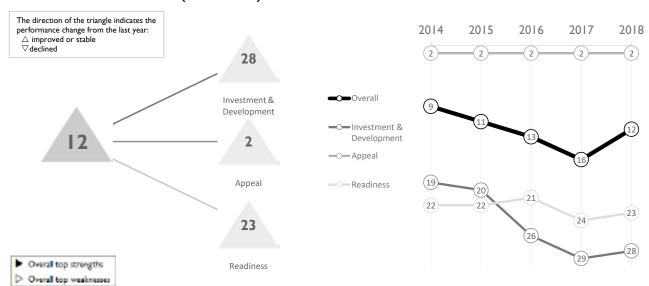


|                  | Investment & Development                  |  | Value | 2            | 2018 Rank |
|------------------|---|--|-------|--------------|-----------|
|                  | Total public expenditure on education     | Percentage of GDP                                  | 5.5   | %            | 15        |
|                  | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 23.4  | %            | 18        |
| $\triangleright$ | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 18.36 | ratio        | 48        |
| $\triangleright$ | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 16.28 | ratio        | 52        |
|                  | Apprenticeships                           | are sufficiently implemented                       | 4.34  | Survey [010] | 42        |
| $\triangleright$ | Employee training                         | is a high priority in companies                    | 5.23  | Survey [010] | 47        |
|                  | Female labor force                        | Percentage of total labor force                    | 46.90 | %            | 20        |
|                  | Health infrastructure                     | meets the needs of society                         | 6.06  | Survey [010] | 33        |

|                  | Appeal  |   | Value   |              | 2018 Rank |
|------------------|---|---|---------|--------------|-----------|
| $\triangleright$ | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 85.50   | index        | 46        |
|                  | Attracting and retaining talents              | is a priority in companies  | 7.21    | Survey [010] | 20        |
|                  | Worker motivation                             | in companies is high  | 6.24    | Survey [010] | 26        |
|                  | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 6.09    | Survey [010] | 17        |
|                  | Quality of life                               | is high   | 7.57    | Survey [010] | 29        |
| ▶                | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 6.62    | Survey [010] | 14        |
| ▶                | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 45,691  | US\$         | 10        |
| ▶                | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 232,156 | US\$         | 14        |
|                  | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 20.47   | %            | 38        |
|                  | Personal security and private property rights | are adequately protected  | 8.17    | Survey [010] | 18        |

|                       | Readiness                     |   | Value |              | 2018 Rank |
|-----------------------|-------------------------------|---|-------|--------------|-----------|
|                       | Labor force growth            | Percentage change   | 0.56  | %            | 40        |
|                       | Skilled labor                 | is readily available  | 5.70  | Survey [010] | 28        |
| $\blacktriangleright$ | Finance skills                | are readily available   | 7.87  | Survey [010] | 4         |
|                       | International experience      | of senior managers is generally significant                     | 6.26  | Survey [010] | 17        |
|                       | Competent senior managers     | are readily available   | 6.34  | Survey [010] | 18        |
|                       | Educational system            | The educational system meets the needs of a competitive economy | 6.81  | Survey [010] | 20        |
|                       | Science in schools            | is sufficiently emphasized                                      | 5.83  | Survey [010] | 29        |
|                       | University education          | meets the needs of a competitive economy                        | 7.23  | Survey [010] | 16        |
|                       | Management education          | meets the needs of the business community                       | 6.82  | Survey [010] | 19        |
| $\triangleright$      | Language skills               | are meeting the needs of enterprises                            | 4.60  | Survey [010] | 48        |
| $\blacktriangleright$ | Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 6.66  | number       | 7         |
|                       | Educational assessment - PISA | PISA survey of 15-year olds                                     | 501   | Average      | 20        |

## **USA**

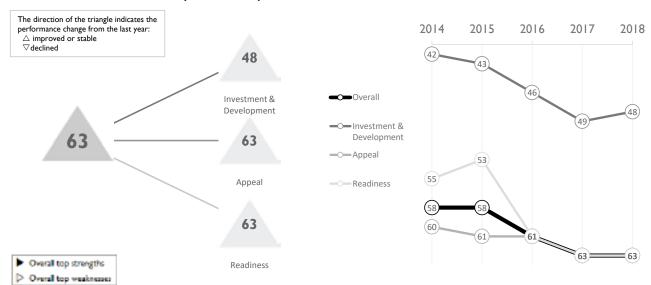


|                  | Investment & Development                  |  | Value |              | 2018 Rank |
|------------------|---|--|-------|--------------|-----------|
|                  | Total public expenditure on education     | Percentage of GDP                                  | 6.1   | %            | П         |
|                  | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | 22.5  | %            | 23        |
|                  | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | 15.35 | ratio        | 26        |
| $\triangleright$ | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 15.38 | ratio        | 49        |
| $\triangleright$ | Apprenticeships                           | are sufficiently implemented                       | 3.96  | Survey [010] | 51        |
| $\triangleright$ | Employee training                         | is a high priority in companies                    | 5.71  | Survey [010] | 34        |
|                  | Female labor force                        | Percentage of total labor force                    | 46.89 | %            | 21        |
|                  | Health infrastructure                     | meets the needs of society                         | 6.38  | Survey [010] | 29        |

|                  | Appeal  |   | Value   |              | 2018 Rank |
|------------------|---|---|---------|--------------|-----------|
| $\triangleright$ | 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  | 7.40    | Survey [010] | 15        |
|                  | Worker motivation                             | in companies is high  | 6.85    | Survey [010] | 14        |
| ▶                | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 6.83    | Survey [010] | 6         |
|                  | Quality of life                               | is high   | 8.13    | Survey [010] | 24        |
| ▶                | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 8.05    | Survey [010] | 5         |
| ▶                | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 60,717  | US\$         | 2         |
| ▶                | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 389,450 | US\$         | 2         |
|                  | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 13.46   | %            | 22        |
|                  | Personal security and private property rights | are adequately protected  | 8.11    | Survey [010] | 21        |

| Readiness                     |   | Value            | 2018 Rank |
|-------------------------------|---|------------------|-----------|
| Labor force growth            | Percentage change   | 0.71 %           | 32        |
| Skilled labor                 | is readily available  | 6.26 Survey [010 | ] 15      |
| Finance skills                | are readily available   | 7.34 Survey [010 | ] 12      |
| International experience      | of senior managers is generally significant                     | 5.78 Survey [010 | ] 22      |
| Competent senior managers     | are readily available   | 6.90 Survey [010 | ] 7       |
| Educational system            | The educational system meets the needs of a competitive economy | 6.86 Survey [010 | ] 17      |
| Science in schools            | is sufficiently emphasized                                      | 6.22 Survey [010 | ] 21      |
| University education          | meets the needs of a competitive economy                        | 7.50 Survey [010 | ] 13      |
| Management education          | meets the needs of the business community                       | 7.38 Survey [010 | ] [[      |
| ► Language skills             | are meeting the needs of enterprises                            | 5.35 Survey [010 | ] 42      |
| Student mobility inbound      | Foreign tertiary-level students per 1000 inhabitants            | 2.82 number      | 24        |
| Educational assessment - PISA | PISA survey of 15-year olds                                     | 483 Average      | 32        |

## **VENEZUELA**



|                  | Investment & Development                  |  | Value | 9            | 2018 Rank |
|------------------|---|--|-------|--------------|-----------|
|                  | Total public expenditure on education     | Percentage of GDP                                  | -     | %            | -         |
|                  | Gov. expenditure on education per student | Percentage of GDP per capita (secondary education) | -     | %            | -         |
|                  | Pupil-teacher ratio (primary education)   | Ratio of students to teaching staff                | -     | ratio        | -         |
| ▶                | Pupil-teacher ratio (secondary education) | Ratio of students to teaching staff                | 7.90  | ratio        | 5         |
|                  | Apprenticeships                           | are sufficiently implemented                       | 3.77  | Survey [010] | 53        |
|                  | Employee training                         | is a high priority in companies                    | 4.47  | Survey [010] | 60        |
|                  | Female labor force                        | Percentage of total labor force                    | 38.85 | %            | 52        |
| $\triangleright$ | Health infrastructure                     | meets the needs of society                         | 0.72  | Survey [010] | 63        |

|                       | Appeal  |   | Value  |              | 2018 Rank |
|-----------------------|---|---|--------|--------------|-----------|
|                       | Cost-of-living index                          | Index of a basket of goods & services in the main city, including housing (New York City = 100) | 102.50 | index        | 56        |
|                       | Attracting and retaining talents              | is a priority in companies  | 6.07   | Survey [010] | 47        |
| $\triangleright$      | Worker motivation                             | in companies is high  | 2.52   | Survey [010] | 63        |
|                       | Brain drain                                   | (well-educated and skilled people) does not hinder competitiveness in your economy              | 1.54   | Survey [010] | 63        |
| $\triangleright$      | Quality of life                               | is high   | 0.98   | Survey [010] | 63        |
| $\triangleright$      | Foreign highly-skilled personnel              | are attracted to your country's business environment  | 0.80   | Survey [010] | 63        |
|                       | Remuneration in services professions          | Gross annual income including supplements such as bonuses, US\$                                 | 14,400 | US\$         | 41        |
|                       | Remuneration of management                    | Total base salary plus bonuses and long-term incentives, US\$                                   | 23,610 | US\$         | 61        |
| $\blacktriangleright$ | Effective personal income tax rate            | Percentage of an income equal to GDP per capita   | 0.98   | %            | 2         |
| $\triangleright$      | Personal security and private property rights | are adequately protected  | 0.60   | Survey [010] | 63        |

| Readiness                     |   | Value            | 2018 Rank |
|-------------------------------|---|------------------|-----------|
| Labor force growth            | Percentage change   | 0.00 %           | 46        |
| Skilled labor                 | is readily available  | 3.66 Survey [010 | )] 55     |
| Finance skills                | are readily available   | 4.36 Survey [010 | 0] 60     |
| International experience      | of senior managers is generally significant                     | 3.84 Survey [010 | 0] 60     |
| Competent senior managers     | are readily available   | 3.28 Survey [010 | )] 60     |
| Educational system            | The educational system meets the needs of a competitive economy | 2.36 Survey [010 | )j 61     |
| Science in schools            | is sufficiently emphasized                                      | 2.43 Survey [010 | 0] 62     |
| University education          | meets the needs of a competitive economy                        | 4.56 Survey [010 | 53        |
| Management education          | meets the needs of the business community                       | 4.43 Survey [010 | 57        |
| Language skills               | are meeting the needs of enterprises                            | 3.64 Survey [010 | 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

# Investment and development

The investment in and development of home-grown talent

#### **Appeal**

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

#### Readiness

The availability of skills and competencies in the talent pool

#### IMD World Talent Ranking

Table 1: Components of the talent factors

# Investment and development factor

Total public expenditure on education

Public expenditure on education (per pupil)

Pupil-teacher ratio (primary)

Pupil-teacher ratio (secondary)

Apprenticeship

Employee training

Female labor force

Health infrastructure

# Appeal factor

Cost of living

Attracting and retaining

Worker motivation

Brain drain

Quality of life

Foreign skilled people

Remuneration in services professions

Remuneration of management

Effective personal income tax rate

Personal security and private property rights

## Readiness factor

Labor force growth

Skiller labor

Finance skills

International experience

Competent senior managers

Educational system

Sciences in schools

University education

Management education

Language skills

Student mobility inbound

Educational assessment - PISA

#### 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 for 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 3** 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 2: Sample size (2014-2018)

| Year:        | 2014 | 2015 | 2016 | 2017 | 2018 |
|--------------|------|------|------|------|------|
| # Countries: | 60   | 61   | 61   | 63   | 63   |

Table 3: Criteria definitions and survey questions

| Investment & Development                        |  |  |  |  |
|---|--|--|--|--|
| Total public expenditure on education           | Percentage of GDP                                  |  |  |  |
| Government expenditure on education per student | Percentage of GDP per capita (secondary education) |  |  |  |
| 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       |  |  |  |

| 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     | is a priority in companies  |  |
| Worker motivation                    | in companies is high  |  |
| Brain drain                          | (well-educated and skilled people) does not hinder competitiveness in your economy              |  |
| Quality of life                      | is high   |  |
| 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\$                                 |  |

| Readiness                 |   |  |
|---------------------------|---|--|
| Labor force growth        | Percentage change   |  |
| Skilled labor             | is readily available  |  |
| Finance skills            | are readily available   |  |
| International experience  | of senior managers is generally significant                     |  |
| Competent senior managers | are readily available   |  |
| Educational system        | The educational system meets the needs of a competitive economy |  |
| Science in schools        | is sufficiently emphasized                                      |  |
| University education      | meets the needs of a competitive economy                        |  |
| Management education      | meets the needs of the business community                       |  |

## Notes and Sources

#### Total public expenditure on education (%)

UNESCO
Government Finance Statistics Yearbook
Eurostat
National sources

Philippines: Includes expenditure for items other than basic and higher education such as vocational education, culture and sports. Jordan and Chile: Budgetary central government. government.

#### Government expenditure on education per pupil

UNESCO http://stats.uis.unesco.org National sources

Initial government funding per secondary student as a percentage of GDP per capita. Total general (local, regional and central) government expenditure (current and capital) on a given level of education (secondary) minus international transfers to government for education, divided by the number of student enrolled at that level of education. Taiwan: including elementary and secondary schools.

#### Pupil-teacher ratio (primary education)

UNESCO http://stats.uis.unesco.org OECD Education at a Glance 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, Kazakhstan, Mongolia, Peru, Qatar, Romania, Thailand, UAE and Ukraine: based on headcounts. Ireland and Switzerland: public institutions only. Canada: Public and government-dependent private institutions only. Hong Kong: figures refer to the position as at mid-September of the respective years (i.e. the beginning of an academic year spanning two calendar years). Teaching staff includes teachers as well as principles; figures cover local schools, special and international schools. Canada: Primary includes pre-primary education.

#### Pupil-teacher ratio (secondary education)

UNESCO http://stats.uis.unesco.org OECD Education at a Glance 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 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, Hong Kong, Jordan, Kazakhstan, Peru, Romania, Saudi Arabia, Thailand, UAE and Ukraine: Based on headcounts. Ireland, Israel and Switzerland: public institutions only. Australia: includes only programs in upper secondary education. Australia: general programmes only. Canada: upper secondary programmes. France: Public and government-dependent private institutions only. Greece: average lower secondary and upper secondary vocational programmes. Iceland: lower secondary only. South Africa and Switzerland: Upper secondary general programmes only.

#### Female labor force (%)

OECD Main Economic Indicators National sources

Estimate for 2017. Austria: break in series in 2008. Denmark: break in series in 2009. Malaysia: break in series in 2010. Portugal: methodological change in 2011. Romania: for 2017 - third quarter. Spain: break in series in 2005. Philippines: data for 2017 are preliminary.

#### Cost-of-living index

MERCER Cost of Living survey 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).

#### Remuneration in services professions

UBS Prices and Earnings National sources

Figures are estimates remuneration paid in major cities. Gross annual income including possible supplements such as profit sharing, performance bonuses, vacation pay, additional monthly salaries and family allowances. Bank Credit Officer: completed bank training and around 10 years' experience in a bank; about 35 years old, married, two children. Product Manager: employed in the pharmaceuticals, chemicals or food industry, middle-management position, university or

technical college graduate with at least 5 years' experience in the field; about 35 years old, married, no children. Primary school teacher: teaching in the state school system (not private schools) for around 10 years; about 35 years old, married, two children. Personal Assistant: to a department head in an industrial or service company, around 5 years' experience (PC skills, 1 foreign language); about 25 years old, single. Call center agent: trained agent at an inbound call/service center, e.g. in the telecommunications or technology sector; age about 25, single.

#### Remuneration of management

HCM Compensation Insights & Technology AG (CCT-ProSurvey) 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.

Engineer: co-ordinates the engineering/ technical aspects of production operations; typically manages functions such as process engineering, plant specifications and development; is responsible for planning, calculating and budgeting any item necessary to achieve a project; monitors the entire development of a project; holds an University degree. Estonia: break in series in 2011 (change of source, data for earlier years are not comparable). Slovenia: break in series in 2007, estimates, not entirely corresponding to definition.

Director manufacturing: directs the manufacturing side of the operations, including production, engineering, production and material control and quality assurance; manages the output process, production control and quality assurance; is responsible for manufacturing, engineering, maintenance purchasing, shipping and receiving as well as quality control; ensures the return on investment. Estonia: break in series in 2011 (change of source, data for earlier years are not comparable). Slovenia: break in series in 2007, estimates, not entirely corresponding to definition.

Director of Human Resources: develops and implements Human Resources policies and programs; advises and assist the General Manager in the management of the Human Resources, is responsible for all matters concerning personnel management, including planning, recruitment, selection, training and development, hygiene and security, remuneration, benefits and personnel services, is responsible for the development and implementation of personnel policies and training, co-ordinates the company's internal communication policies. Estonia: break in series in 2011 (change of source, data for earlier years are not comparable). Slovenia: break in series in 2007, estimates, not entirely corresponding to definition.

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). Slovenia: break in series in 2007, estimates, not entirely corresponding to definition.

#### Effective personal income tax rate

PricewaterhouseCoopers, Resource Tax Manager

This criterion is based on the latest GDP per capita 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. 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.

#### Labor force growth

OECD Main Economic Indicators National sources

Estimates for latest year. Austria: break in series in 2008. 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. Romania: break in series in 2002, third quarter for 2013. Portugal: methodological change in 2011. Spain: break in series in 2005. Lithuania: break in series 2011 - census revised labor force figure downwards by 10% (emigration to EU over past decade).

#### 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.

#### Educational assessment - PISA

PISA (OECD)

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.

#### **Executive Opinion Survey**

Every year, for our flagship publication, The IMD World Competitiveness Yearbook, we conduct an Executive Opinion Survey in order to complement the statistics that we use from international, national and regional sources. Whereas the Hard Data shows how competitiveness is measured over a specific period of time, the Survey Data measures competitiveness as it is perceived. The survey was designed to quantify issues that are not easily measured, for example: management practices, labor relations, corruption, environmental concerns or quality of life. The survey responses reflect present and future perceptions of competitiveness by business executives who are dealing with international business situations. Their responses are more recent and closer to reality since there is no time lag, which is often a problem with Hard Data that shows a "picture of the past".

The Executive Opinion Survey is sent to executives in topand middle management in all of the economies covered by the WCY. In order to be statistically representative, we select a sample size which is proportional to the GDP of each economy. The sample of respondents are representative of the entire economy, covering a cross-section of the business community in each economic sector: primary, manufacturing and services, based on their contribution to the GDP of the economy. The survey respondents are nationals or expatriates, located in local and foreign enterprises in the economy and which, in general, have an international dimension. They are asked to evaluate the present and expected competitiveness conditions of the economy in which they work and have resided during the past year, drawing from the wealth of their international experience, thereby ensuring that the evaluations portray an in-depth knowledge of their particular environment. We try to contact most IMD alumni and all responses returned to IMD are treated as confidential. The surveys are sent in January and are returned in April; in 2015, we received 6,200 responses from the 61 economies worldwide. The respondents assess the competitiveness issues by answering the questions on a scale of 1 to 6. The average value for each economy is then calculated and converted into a 0 to 10 scale.