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## Periodical Part

## IMD world talent ranking / IMD ; IMD World Competitiveness Center ; 2018

### Provided in Cooperation with:

International Institute for Management Development (IMD), Lausanne

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

This Version is available at:

<http://hdl.handle.net/11159/2986>

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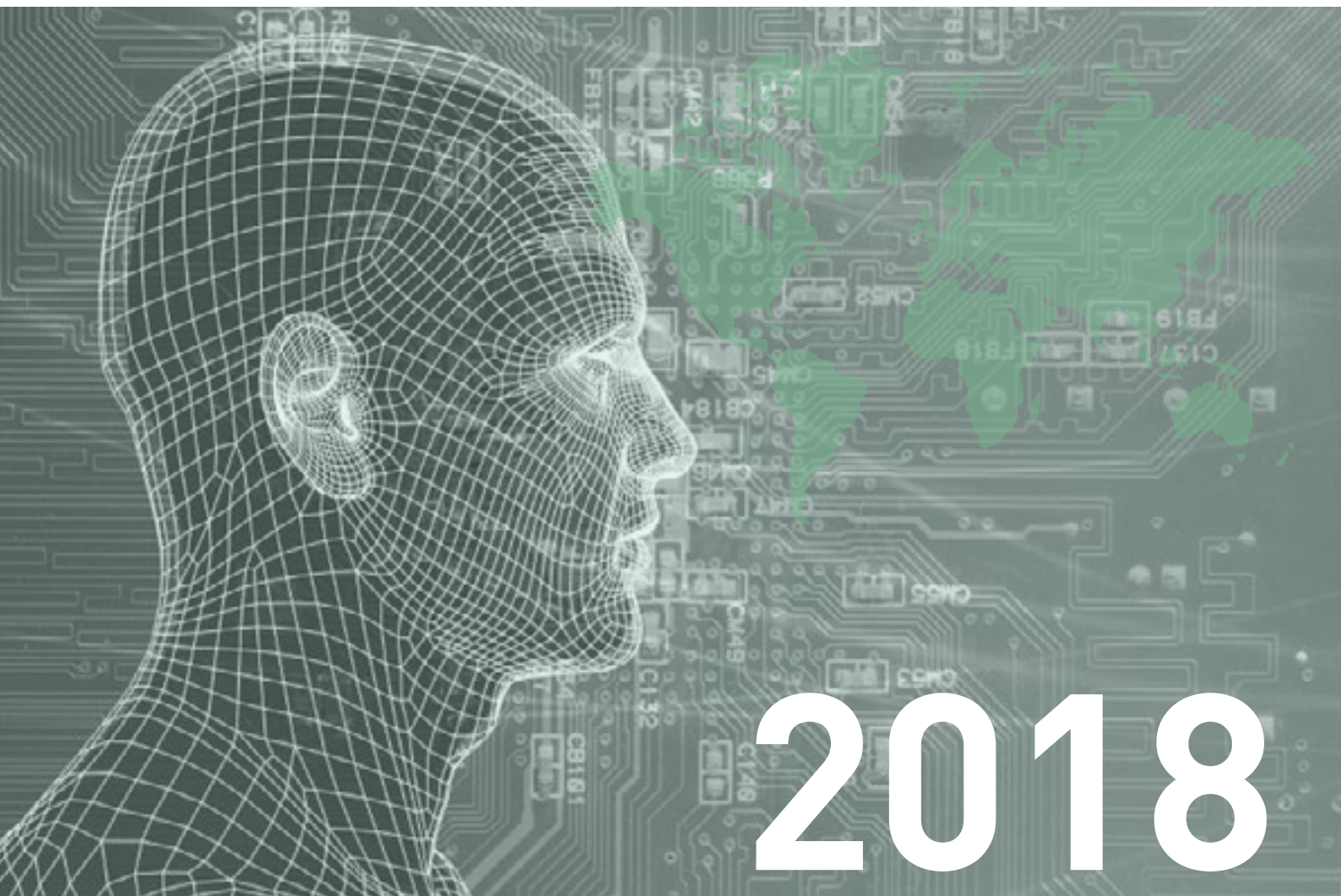
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# IMD WORLD TALENT RANKING

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# 2018

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November 2018  
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# 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.



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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.

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# IMD Talent ranking 2018

## Trends and insights in talent development

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### I. Introduction

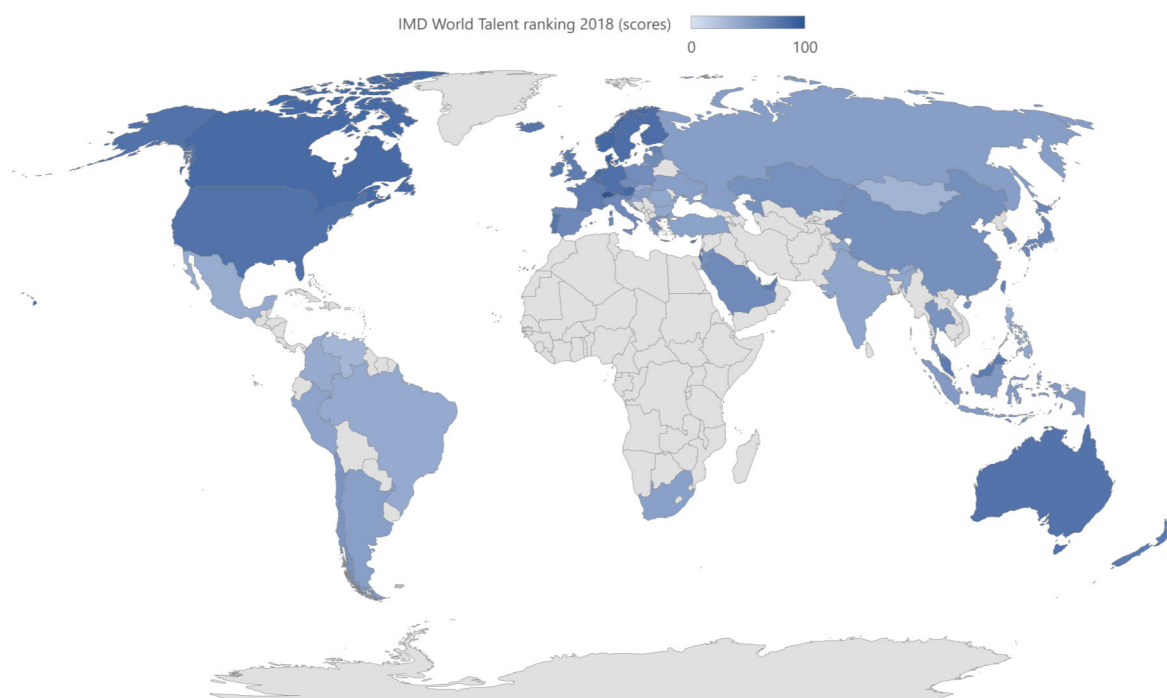
The talent ranking captures the efforts invested in developing local talent while being able to attract overseas staff. Ultimately, it describes the quality of the talent pool available in an economy. To do so, we employ three factors. The Investment and Development factor measures the resources committed 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 1<sup>st</sup> and Denmark in the 2<sup>nd</sup> 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.

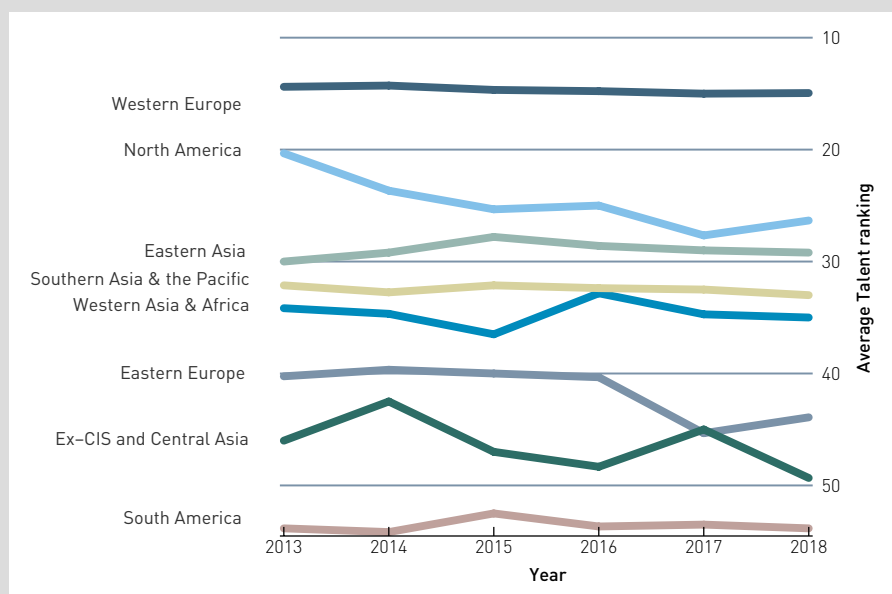
To identify important trends around the world, Figure 2 presents the evolution of the overall rankings at a sub-regional level for the last six years. The list of countries in each sub-region can be found in Appendix 1. Figure 2 shows that Western Europe continues to lead the IMD World Talent Rankings 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>.

**Figure 2.** Sub-regional talent competitiveness rankings, 2018



Source IMD World Competitiveness Center (2018)

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

(18<sup>th</sup>) mainly because of a slowdown in labor force growth and availability of skilled labor. The Netherlands continues to perform rather low (15<sup>th</sup>) in Investment and Development. In Appeal (10<sup>th</sup>), 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 (3<sup>rd</sup>) because of the effectiveness of its educational system in developing the talent/skills necessary for its economy to thrive.

Luxembourg (9<sup>th</sup>) and Germany (10<sup>th</sup>) 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 12<sup>th</sup> place from 16<sup>th</sup> 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 (61<sup>st</sup>) 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 54<sup>th</sup> (from 49<sup>th</sup>). Also, business executives' negative perceptions about the implementation of apprenticeships and the private sector's prioritization of employee training severely increase, dropping from 31<sup>st</sup> to 45<sup>th</sup> and from 36<sup>th</sup> to 54<sup>th</sup>, respectively. The drop in the Appeal factor (from 33<sup>rd</sup> to 43<sup>rd</sup>) is mainly due to an increase in negative perceptions about the level of worker motivation (41<sup>st</sup>), the existence of brain drain (44<sup>th</sup>) and the country's quality of life (49<sup>th</sup>). This factor also includes some of Mexico's main weaknesses, the prioritization of attracting and retaining talents (60<sup>th</sup>) and the protection of personal security and private property rights (60<sup>th</sup>). There is also a negative turn in executives' perception about several elements of Readiness including the availability of skilled labor (41<sup>st</sup> from 36<sup>th</sup>) and finance skills (56<sup>th</sup> from 46<sup>th</sup>).

## Eastern Asia

Hong Kong ranks the highest in this sub-region (18<sup>th</sup>) 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 (31<sup>st</sup> to 29<sup>th</sup>) 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 (13<sup>th</sup>) and Malaysia (22<sup>nd</sup>) 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 top-tier 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 (45<sup>th</sup>) and the Philippines (55<sup>th</sup>) 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 (37<sup>th</sup>, from 11<sup>th</sup> in 2017). This change is driven by a marked deterioration in every criterion related 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 (19<sup>th</sup>), Qatar (24<sup>th</sup>) and the UAE (26<sup>th</sup>) 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 (34<sup>th</sup>), Jordan (41<sup>st</sup>) and Turkey (51<sup>st</sup>) 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 (38<sup>th</sup> from 26<sup>th</sup> 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 (50<sup>th</sup>) and Readiness (48<sup>th</sup>) 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 (28<sup>th</sup>) and Slovenia (30<sup>th</sup>), 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 37<sup>th</sup> to 30<sup>th</sup> place. It ranks 27<sup>th</sup> in Investment and Development, 42<sup>nd</sup> in Appeal and 29<sup>th</sup> 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 59<sup>th</sup> in the implementation of apprenticeships and 56<sup>th</sup> in the country's attractiveness for highly-skilled overseas staff.

Elsewhere in the region other countries improve to different degrees: the Czech Republic ranks 37<sup>th</sup>, Ukraine 48<sup>th</sup>, Hungary 49<sup>th</sup> and Croatia 54<sup>th</sup>. 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 (56<sup>th</sup>), Bulgaria (57<sup>th</sup>) and the Slovak Republic (59<sup>th</sup>) 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 30<sup>th</sup> to 40<sup>th</sup> 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 (58<sup>th</sup>), Colombia (60<sup>th</sup>) and Venezuela (63<sup>rd</sup>) 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.

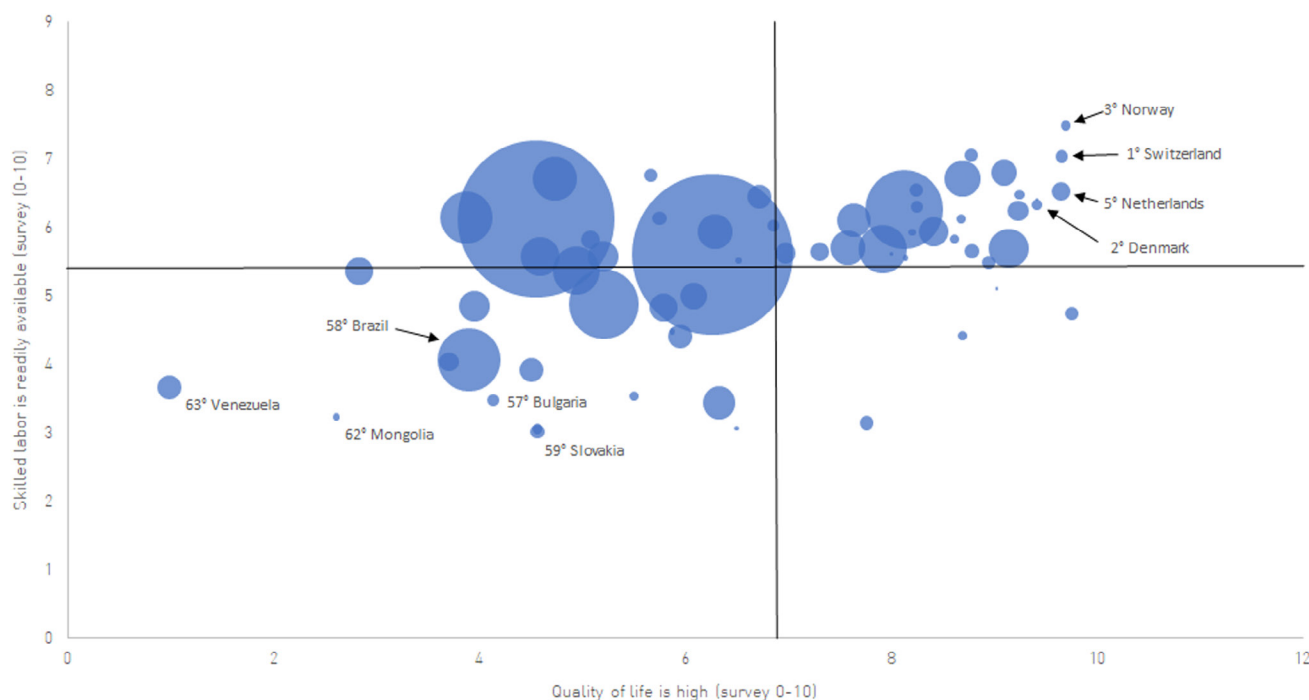
### 3. Talent insights

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

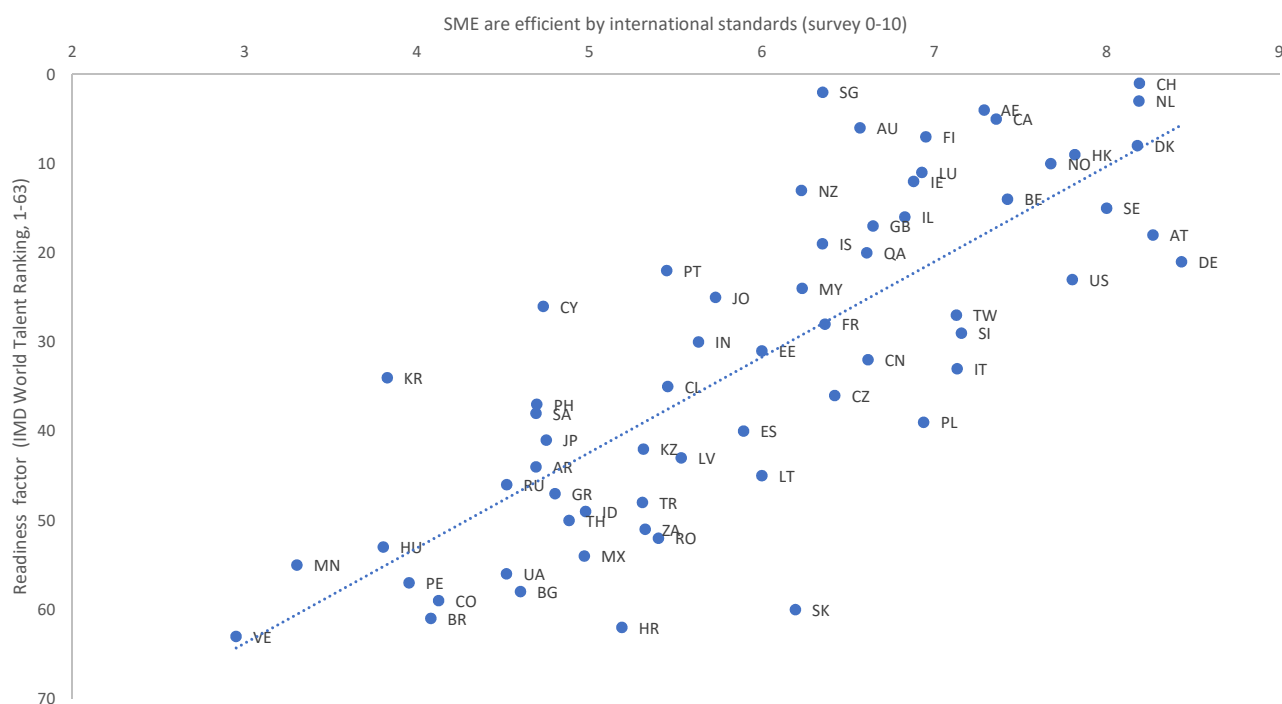


Source IMD World Competitiveness Center (2018)

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**

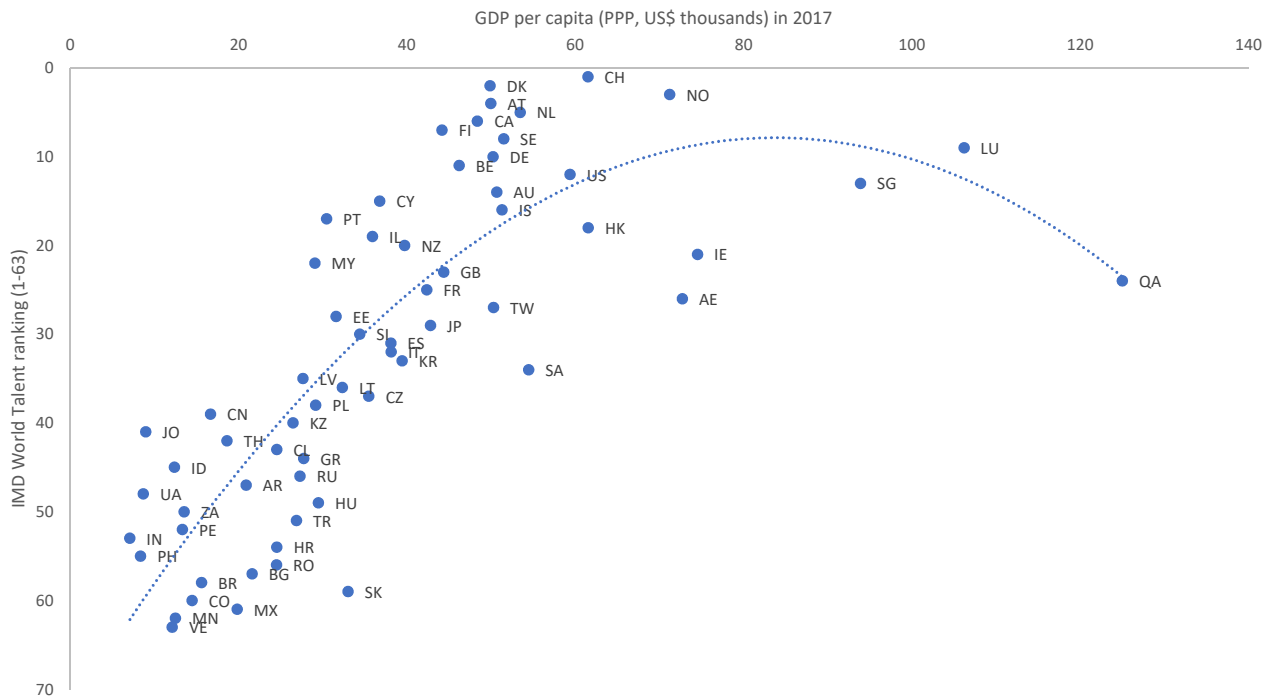


Source IMD World Competitiveness Center (2018)

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**

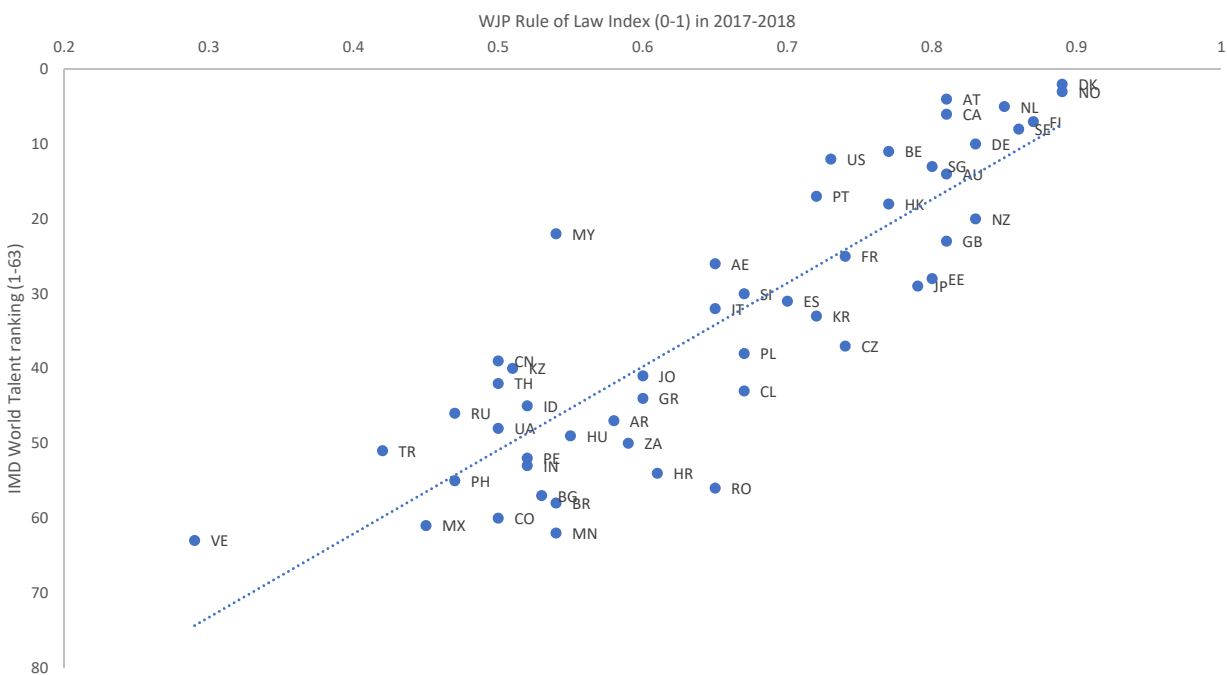


Source IMD World Competitiveness Center (2018)

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**



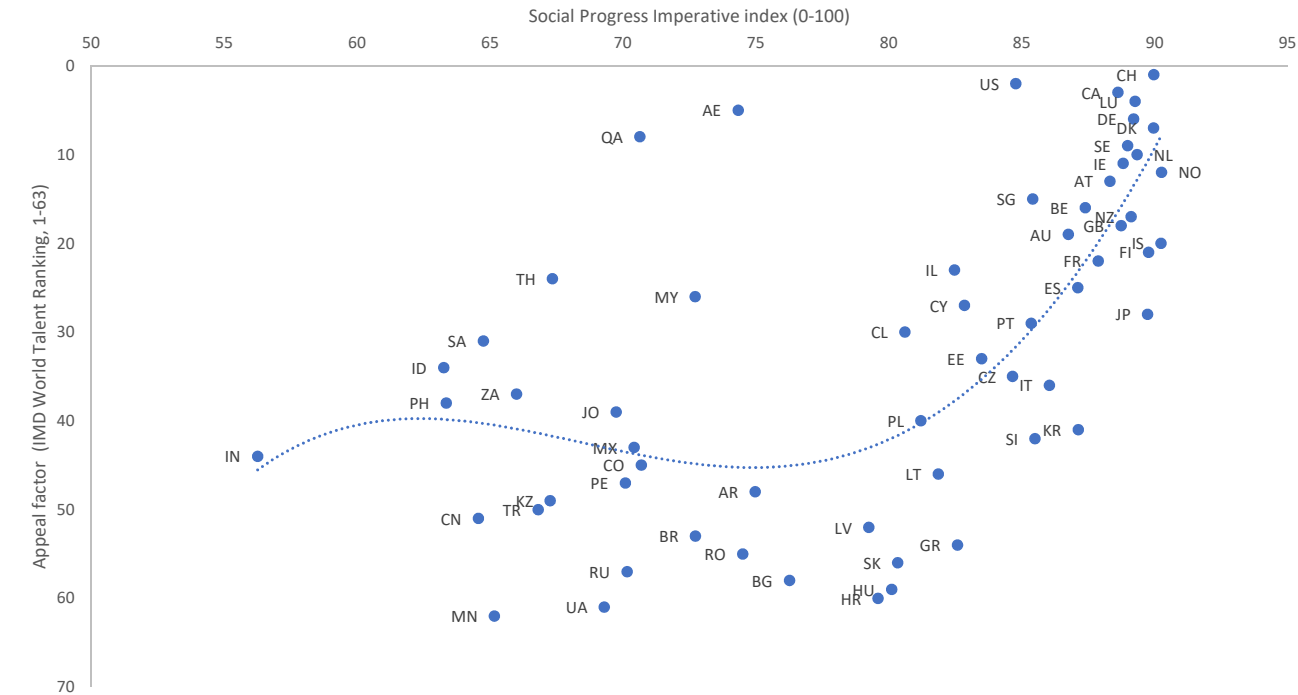
Source IMD World Competitiveness Center (2018), World Justice Project (2018)

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>

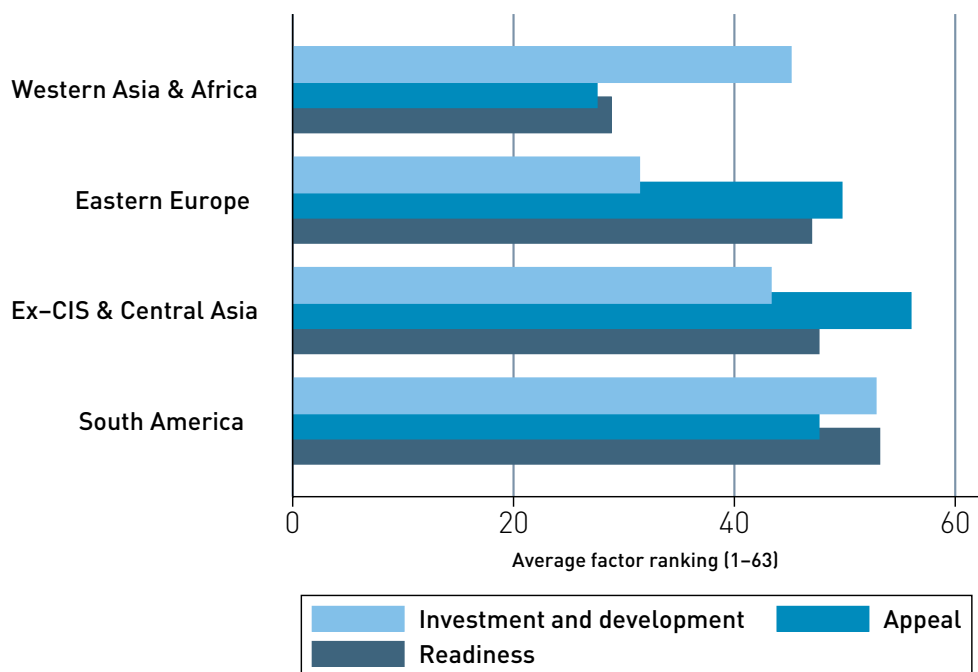
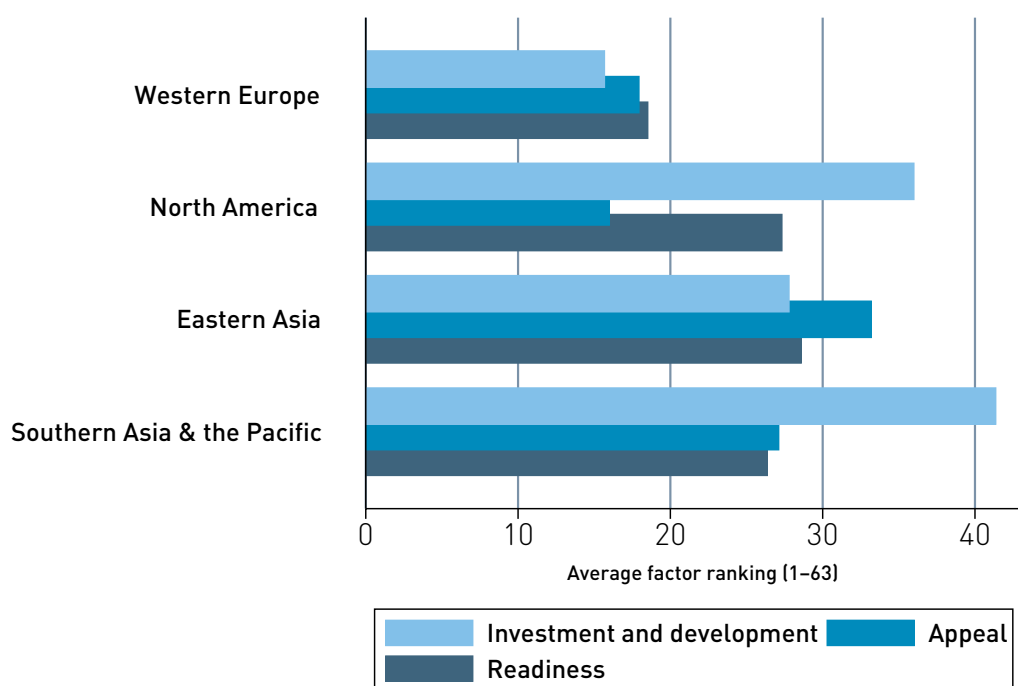
World Justice Project. (2018). Rule of Law Index 2017-2018. Retrieved from <https://worldjusticeproject.org/our-work/wjp-rule-law-index/wjp-rule-law-index-2017%E2%80%932018>

## Appendices

### Appendix 1. Sub-regions

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

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







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# WORLD TALENT RANKINGS 2018

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All data are available from the  
World Competitiveness Online.

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# The 2018 IMD World

Overall Rank 2018		One Year Change	Overall Score 2018	Factor Ranks 2018		
				Investment & Development	Appeal	Readiness
1	Switzerland	-	100.00	4	1	1
2	Denmark	-	91.97	1	7	8
3	Norway	+ 4	86.37	3	12	10
4	Austria	-	86.10	2	13	18
5	Netherlands	+ 1	85.25	15	10	3
6	Canada	+ 5	84.50	19	3	5
7	Finland	- 2	83.00	6	21	7
8	Sweden	+ 1	82.45	9	9	15
9	Luxembourg	+ 1	81.63	18	4	11
10	Germany	- 2	81.11	10	6	21
11	Belgium	- 8	80.54	8	16	14
12	USA	+ 4	79.22	28	2	23
13	Singapore	-	78.66	34	15	2
14	Australia	+ 5	78.57	26	19	6
15	Cyprus	+ 2	77.34	5	27	26
16	Iceland	+ 2	77.21	12	20	19
17	Portugal	+ 7	76.76	7	29	22
18	Hong Kong SAR	- 6	76.62	31	14	9
19	Israel	+ 1	75.86	14	23	16
20	New Zealand	- 5	74.12	32	17	13
21	Ireland	- 7	73.93	42	11	12
22	Malaysia	+ 6	72.77	17	26	24
23	United Kingdom	- 2	72.63	37	18	17
24	Qatar	- 2	71.99	44	8	20
25	France	+ 2	70.85	21	22	28
26	UAE	- 1	70.38	59	5	4
27	Taiwan	- 4	68.28	25	32	27
28	Estonia	+ 1	67.92	16	33	31
29	Japan	+ 2	64.95	23	28	41
30	Slovenia	+ 7	64.69	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

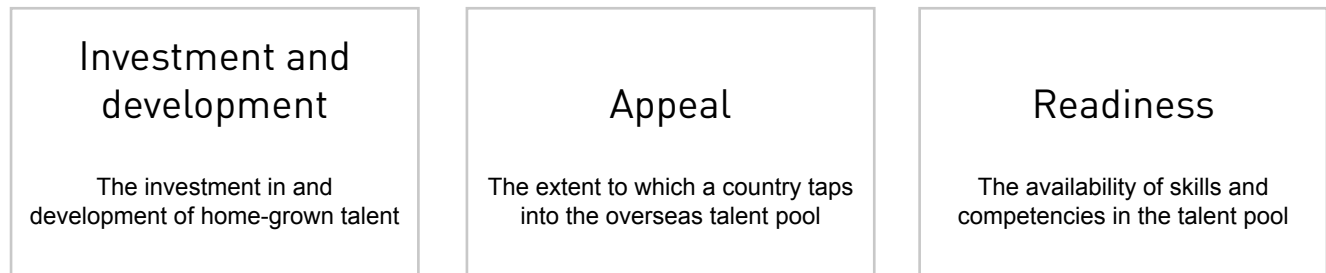
					Factor Ranks 2018		
Overall Rank 2018		One Year Change		Overall Score 2018	Investment & Development	Appeal	Readiness
31	Spain	+ 1	<div></div>	63.34	36	25	40
32	Italy	+ 4	<div></div>	62.42	33	36	33
33	Korea Rep.	+ 6	<div></div>	62.32	20	41	34
34	Saudi Arabia	- 8	<div></div>	61.95	35	31	38
35	Latvia	-	<div></div>	61.67	11	52	43
36	Lithuania	- 3	<div></div>	61.51	13	46	45
37	Czech Republic	+ 1	<div></div>	61.02	38	35	36
38	Poland	- 4	<div></div>	60.81	24	40	39
39	China Mainland	+ 1	<div></div>	58.60	40	51	32
40	Kazakhstan	- 10	<div></div>	57.94	30	49	42
41	Jordan	+ 8	<div></div>	57.28	50	39	25
42	Thailand	-	<div></div>	55.81	46	24	50
43	Chile	+ 1	<div></div>	55.07	55	30	35
44	Greece	- 3	<div></div>	54.98	29	54	47
45	Indonesia	+ 2	<div></div>	51.34	51	34	49
46	Russia	- 3	<div></div>	48.58	43	57	46
47	Argentina	+ 3	<div></div>	48.07	53	48	44
48	Ukraine	+ 11	<div></div>	47.87	22	61	56
49	Hungary	+ 5	<div></div>	47.76	41	59	53
50	South Africa	- 2	<div></div>	47.14	56	37	51
51	Turkey	+ 2	<div></div>	45.94	58	50	48
52	Peru	+ 5	<div></div>	44.28	52	47	57
53	India	- 2	<div></div>	43.28	63	44	30
54	Croatia	+ 6	<div></div>	42.74	39	60	62
55	Philippines	- 10	<div></div>	42.11	62	38	37
56	Romania	+ 5	<div></div>	41.35	54	55	52
57	Bulgaria	+ 1	<div></div>	41.34	45	58	58
58	Brazil	- 6	<div></div>	40.32	49	53	61
59	Slovak Republic	- 13	<div></div>	39.63	47	56	60
60	Colombia	- 5	<div></div>	39.37	60	45	59
61	Mexico	- 5	<div></div>	38.86	61	43	54
62	Mongolia	-	<div></div>	33.35	57	62	55
63	Venezuela	-	<div></div>	31.91	48	63	63

# Methodology in a Nutshell

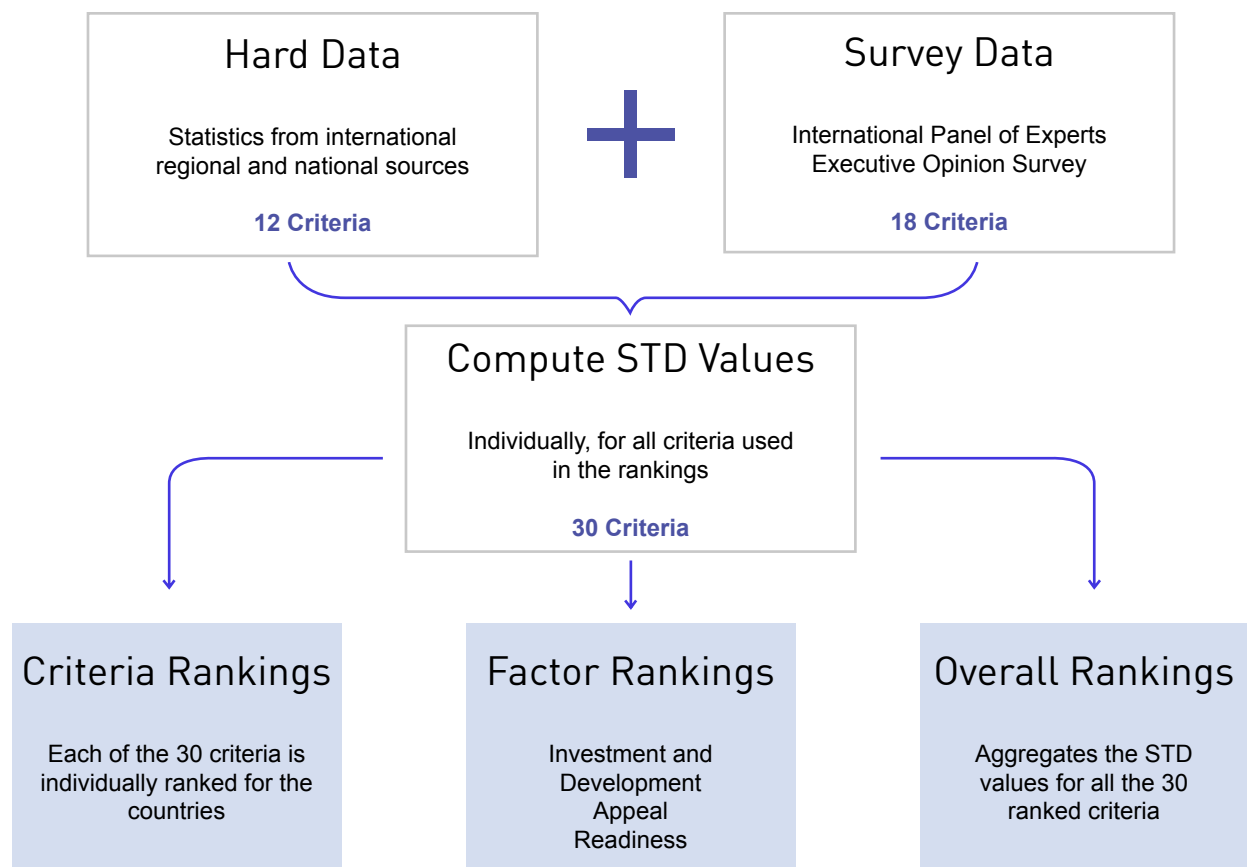
1. The IMD World Talent Ranking (WTR) assesses the status and the development of competencies necessary for enterprises and the economy to achieve long term value creation. It does so by using a set of indicators which measure the development, retention and attraction of a domestic and international highly-skilled workforce.
2. Based on our research, the methodology of the World Talent Ranking defines Talent Competitiveness into three main factors:
  - Investment and Development
  - Appeal
  - Readiness
3. These 3 factors comprise 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  $1/3$  ( $3 \times 33.3 \sim 100$ ).
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 Competitiveness 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

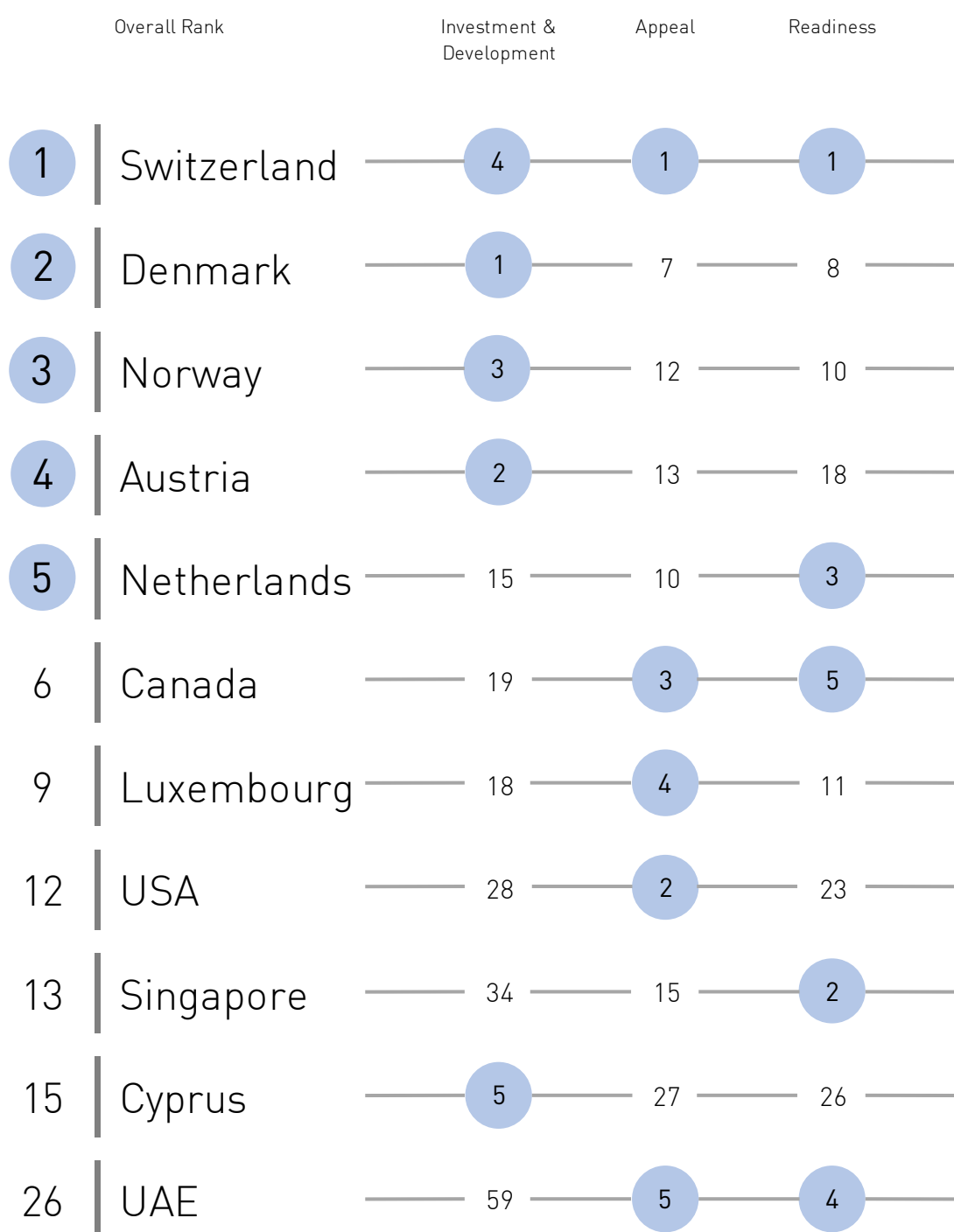


## Computing the Rankings



# The 2018 IMD World Talent Rankings: Selected Breakdowns

## Talent Ranking Leaderboard



## The investment in and development of home-grown talent

Rank 2018		One Year Change		Score 2018
1	Denmark	-		97.96
2	Austria	+ 1		91.76
3	Norway	+ 3		85.97
4	Switzerland	+ 1		83.93
5	Cyprus	+ 3		82.65
6	Finland	- 2		82.45
7	Portugal	-		78.35
8	Belgium	- 6		77.67
9	Sweden	-		76.77
10	Germany	-		75.09
11	Latvia	+ 2		73.18
12	Iceland	- 1		72.89
13	Lithuania	- 1		70.85
14	Israel	+ 3		70.66
15	Netherlands	-		70.10
16	Estonia	- 2		69.85
17	Malaysia	+ 2		66.96
18	Luxembourg	- 2		66.81
19	Canada	+ 3		65.32
20	Korea Rep.	+ 18		63.78
21	France	- 1		63.61
22	Ukraine	+ 13		63.48
23	Japan	- 5		63.26
24	Poland	- 3		63.21
25	Taiwan	-		63.11
26	Australia	+ 10		62.63
27	Slovenia	-		62.51
28	USA	+ 1		62.22
29	Greece	+ 2		59.98
30	Kazakhstan	- 7		59.12
31	Hong Kong SAR	- 7		59.02
32	New Zealand	- 4		58.00
33	Italy	-		57.60
34	Singapore	+ 7		57.08
35	Saudi Arabia	- 9		56.84
36	Spain	- 6		56.52
37	United Kingdom	-		55.98
38	Czech Republic	+ 1		55.54
39	Croatia	- 7		55.43
40	China Mainland	+ 2		55.18
41	Hungary	+ 5		54.22
42	Ireland	- 8		49.72
43	Russia	- 3		47.94
44	Qatar	+ 3		47.56
45	Bulgaria	- 1		42.31
46	Thailand	+ 2		41.12
47	Slovak Republic	- 4		40.36
48	Venezuela	+ 1		38.06
49	Brazil	- 4		35.48
50	Jordan	+ 10		35.00
51	Indonesia	+ 5		34.93
52	Peru	- 2		32.00
53	Argentina	+ 2		31.73
54	Romania	- 3		31.31
55	Chile	- 2		30.88
56	South Africa	+ 1		29.81
57	Mongolia	- 3		28.96
58	Turkey	- 6		28.49
59	UAE	- 1		24.89
60	Colombia	- 1		24.59
61	Mexico	-		11.97
62	Philippines	+ 1		3.17
63	India	- 1		0.00

## Factor 2: Appeal

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

Rank 2018		One Year Change	Score 2018
1	Switzerland	-	100.00
2	USA	-	83.40
3	Canada	+ 3	80.31
4	Luxembourg	-	78.68
5	UAE	- 2	77.65
6	Germany	+ 2	75.67
7	Denmark	+ 3	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	71.92
14	Hong Kong SAR	- 3	69.09
15	Singapore	+ 2	67.31
16	Belgium	-	67.28
17	New Zealand	- 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	- 6	60.99
28	Japan	- 6	59.83
29	Portugal	+ 7	59.83
30	Chile	- 3	58.00
31	Saudi Arabia	-	56.23
32	Taiwan	- 6	54.50
33	Estonia	+ 5	54.22
34	Indonesia	- 2	53.97
35	Czech Republic	+ 5	52.70
36	Italy	+ 5	52.20
37	South Africa	- 2	49.68
38	Philippines	- 4	49.62
39	Jordan	+ 5	47.21
40	Poland	+ 5	46.91
41	Korea Rep.	+ 1	46.71
42	Slovenia	+ 7	46.63
43	Mexico	- 10	46.62
44	India	- 1	46.22
45	Colombia	- 6	46.08
46	Lithuania	+ 2	45.58
47	Peru	- 1	45.42
48	Argentina	+ 5	44.25
49	Kazakhstan	- 12	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	31.90
57	Russia	- 2	30.72
58	Bulgaria	- 1	30.50
59	Hungary	+ 2	30.15
60	Croatia	- 1	27.53
61	Ukraine	+ 1	24.40
62	Mongolia	- 2	15.02
63	Venezuela	-	13.32



The availability of skills and competencies in the talent pool			
Rank 2018		One Year Change	Score 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	+ 19	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
35	Chile	+ 8	51.14
36	Czech Republic	-	49.65
37	Philippines	- 26	48.36
38	Saudi Arabia	- 12	47.60
39	Poland	- 6	47.15
40	Spain	+ 1	47.13
41	Japan	+ 7	46.59
42	Kazakhstan	- 10	46.29
43	Latvia	- 5	45.19
44	Argentina	+ 2	43.06
45	Lithuania	-	42.94
46	Russia	- 7	41.90
47	Greece	- 7	41.25
48	Turkey	+ 3	40.99
49	Indonesia	- 2	39.93
50	Thailand	-	39.80
51	South Africa	+ 1	36.74
52	Romania	+ 3	34.11
53	Hungary	+ 1	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	-	20.08
63	Venezuela	-	19.18

## Factor rankings

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

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



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# TALENT COUNTRY PROFILES

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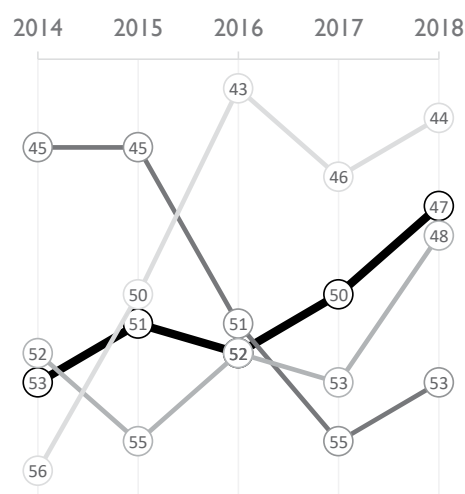
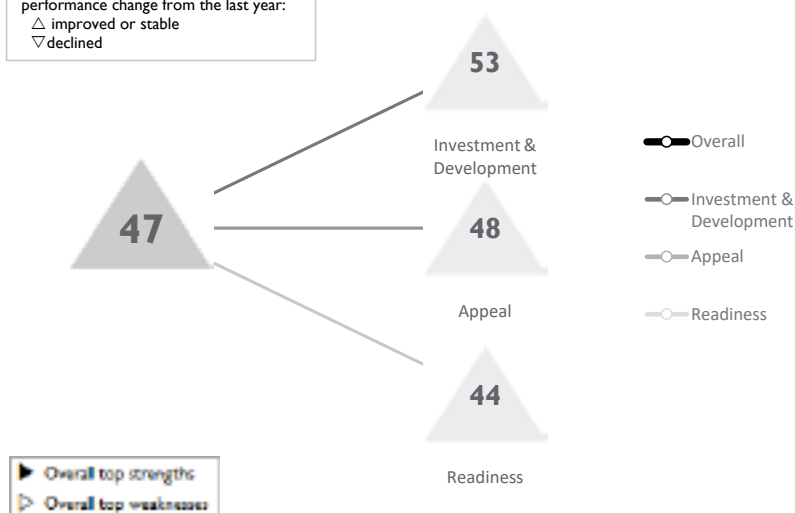
All data are available from the  
World Competitiveness Online.

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# ARGENTINA

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	2018 Rank
▶ Total public expenditure on education	Percentage of GDP	1.2 %	62
▶ Gov. expenditure on education per student	Percentage of GDP per capita (secondary education)	23.4 %	19
▶ Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	13.00 ratio	20
▶ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	23.82 ratio	56
▶ Apprenticeships	are sufficiently implemented	4.00 Survey [0..10]	50
Employee training	is a high priority in companies	5.41 Survey [0..10]	40
Female labor force	Percentage of total labor force	40.88 %	49
Health infrastructure	meets the needs of society	4.70 Survey [0..10]	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 [0..10]	37
Worker motivation	in companies is high	5.38 Survey [0..10]	40
▶ Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	5.24 Survey [0..10]	26
Quality of life	is high	5.79 Survey [0..10]	42
Foreign highly-skilled personnel	are attracted to your country's business environment	4.93 Survey [0..10]	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
▶ Personal security and private property rights	are adequately protected	4.49 Survey [0..10]	51

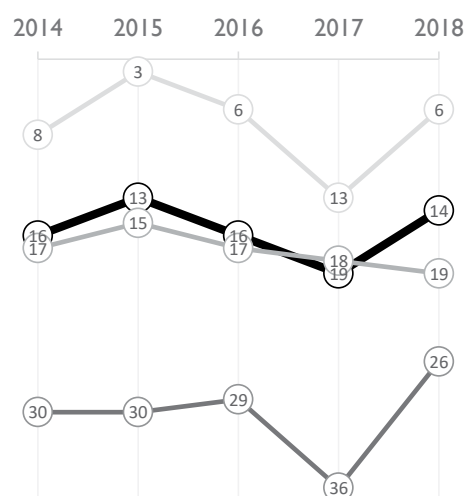
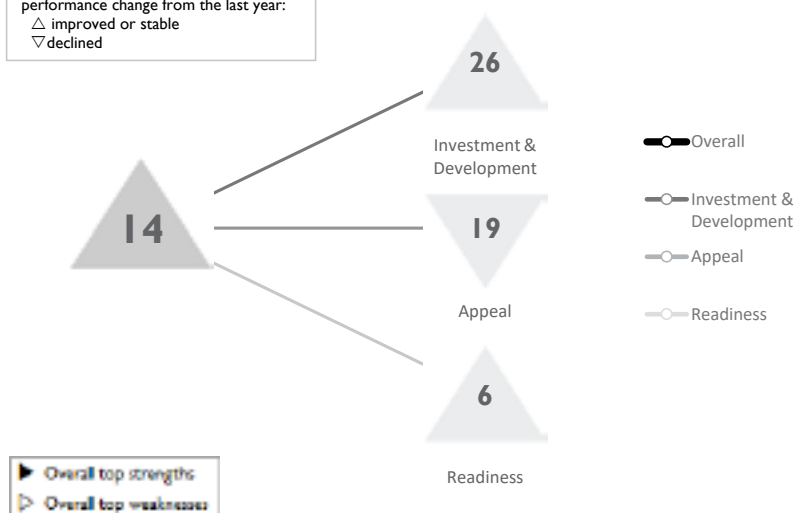
### Readiness

		Value	2018 Rank
Labor force growth	Percentage change	1.00 %	28
Skilled labor	is readily available	4.83 Survey [0..10]	47
Finance skills	are readily available	6.18 Survey [0..10]	38
▶ International experience	of senior managers is generally significant	6.18 Survey [0..10]	18
Competent senior managers	are readily available	5.17 Survey [0..10]	42
Educational system	The educational system meets the needs of a competitive economy	4.24 Survey [0..10]	48
▶ Science in schools	is sufficiently emphasized	3.68 Survey [0..10]	51
University education	meets the needs of a competitive economy	5.54 Survey [0..10]	36
Management education	meets the needs of the business community	5.89 Survey [0..10]	36
Language skills	are meeting the needs of enterprises	5.55 Survey [0..10]	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

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	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
▷ Apprenticeships	are sufficiently implemented	4.53 Survey [0..10]	35
▷ Employee training	is a high priority in companies	5.45 Survey [0..10]	38
Female labor force	Percentage of total labor force	46.91 %	19
Health infrastructure	meets the needs of society	7.40 Survey [0..10]	19

### 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	6.82 Survey [0..10]	29
Worker motivation	in companies is high	6.12 Survey [0..10]	28
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	5.34 Survey [0..10]	25
▶ Quality of life	is high	9.24 Survey [0..10]	8
Foreign highly-skilled personnel	are attracted to your country's business environment	7.28 Survey [0..10]	12
▶ 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
▷ 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 [0..10]	12

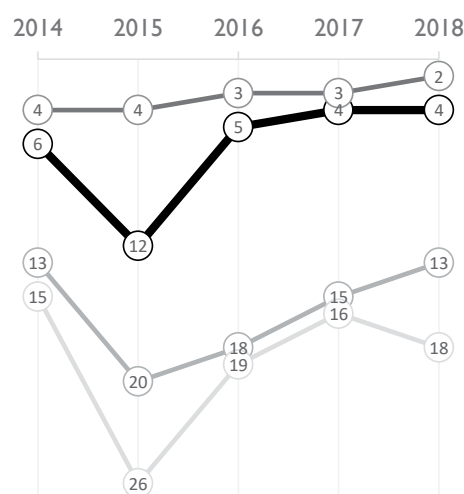
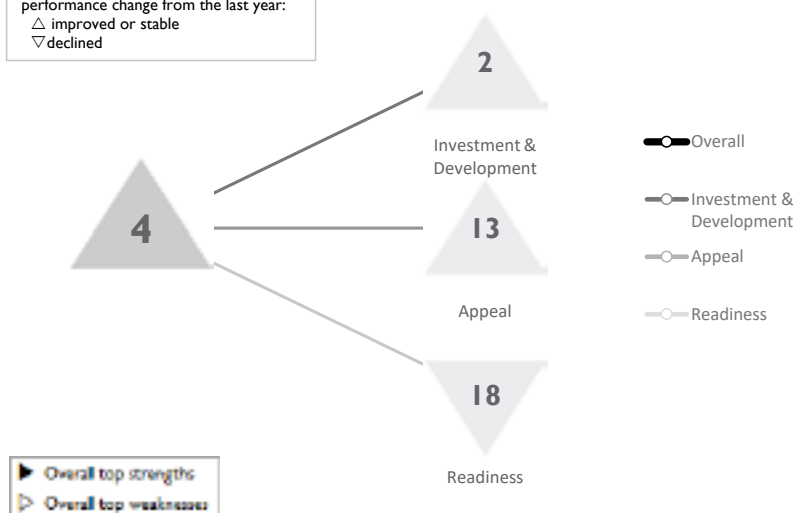
### Readiness

		Value	2018 Rank
▶ Labor force growth	Percentage change	3.20 %	6
Skilled labor	is readily available	6.24 Survey [0..10]	16
▶ Finance skills	are readily available	7.39 Survey [0..10]	10
International experience	of senior managers is generally significant	5.36 Survey [0..10]	32
Competent senior managers	are readily available	6.02 Survey [0..10]	24
Educational system	The educational system meets the needs of a competitive economy	7.36 Survey [0..10]	12
Science in schools	is sufficiently emphasized	5.92 Survey [0..10]	25
University education	meets the needs of a competitive economy	6.80 Survey [0..10]	22
Management education	meets the needs of the business community	6.66 Survey [0..10]	23
▷ Language skills	are meeting the needs of enterprises	5.94 Survey [0..10]	34
▶ Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	13.91 number	1
Educational assessment - PISA	PISA survey of 15-year olds	502 Average	19

# AUSTRIA

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	2018 Rank
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 [0..10]	3
► Employee training	is a high priority in companies	7.69 Survey [0..10]	2
Female labor force	Percentage of total labor force	46.85 %	22
Health infrastructure	meets the needs of society	8.46 Survey [0..10]	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 [0..10]	4
Worker motivation	in companies is high	7.53 Survey [0..10]	5
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	5.65 Survey [0..10]	22
► Quality of life	is high	9.75 Survey [0..10]	1
Foreign highly-skilled personnel	are attracted to your country's business environment	6.04 Survey [0..10]	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
► 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 [0..10]	8

### Readiness

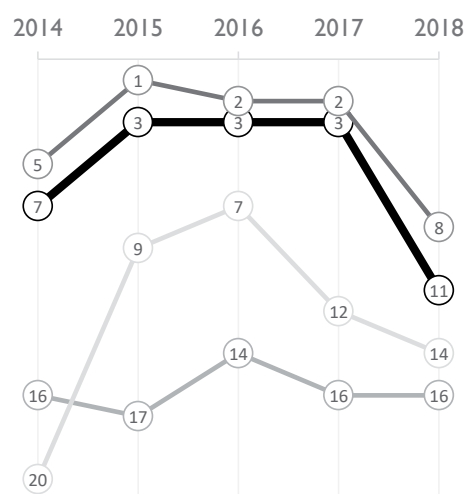
		Value	2018 Rank
► Labor force growth	Percentage change	0.40 %	42
► Skilled labor	is readily available	4.74 Survey [0..10]	48
Finance skills	are readily available	6.78 Survey [0..10]	23
International experience	of senior managers is generally significant	6.31 Survey [0..10]	16
► Competent senior managers	are readily available	5.55 Survey [0..10]	36
Educational system	The educational system meets the needs of a competitive economy	6.94 Survey [0..10]	15
Science in schools	is sufficiently emphasized	5.83 Survey [0..10]	28
University education	meets the needs of a competitive economy	7.40 Survey [0..10]	15
Management education	meets the needs of the business community	7.18 Survey [0..10]	13
Language skills	are meeting the needs of enterprises	7.09 Survey [0..10]	24
► 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

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	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
▷ Apprenticeships	are sufficiently implemented	3.81 Survey [0..10]	52
Employee training	is a high priority in companies	5.97 Survey [0..10]	27
Female labor force	Percentage of total labor force	46.33 %	30
▶ Health infrastructure	meets the needs of society	8.67 Survey [0..10]	3

### 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)	70.70 index	26
Attracting and retaining talents	is a priority in companies	7.51 Survey [0..10]	13
Worker motivation	in companies is high	5.97 Survey [0..10]	31
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	5.17 Survey [0..10]	28
Quality of life	is high	8.79 Survey [0..10]	13
Foreign highly-skilled personnel	are attracted to your country's business environment	5.51 Survey [0..10]	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 [0..10]	15

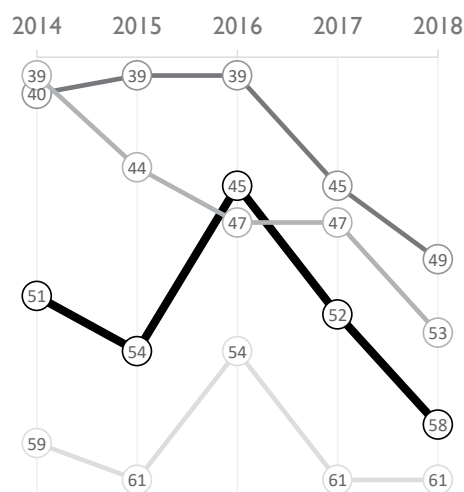
### Readiness

		Value	2018 Rank
▷ Labor force growth	Percentage change	-0.08 %	49
Skilled labor	is readily available	5.64 Survey [0..10]	31
Finance skills	are readily available	7.00 Survey [0..10]	16
International experience	of senior managers is generally significant	6.68 Survey [0..10]	10
▶ Competent senior managers	are readily available	6.79 Survey [0..10]	9
Educational system	The educational system meets the needs of a competitive economy	6.86 Survey [0..10]	18
Science in schools	is sufficiently emphasized	6.20 Survey [0..10]	22
University education	meets the needs of a competitive economy	7.67 Survey [0..10]	11
Management education	meets the needs of the business community	7.22 Survey [0..10]	12
Language skills	are meeting the needs of enterprises	7.78 Survey [0..10]	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

## OVERALL PERFORMANCE (63 countries)

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



### 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	24.79 ratio	57
Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	24.40 ratio	57
Apprenticeships	are sufficiently implemented	4.50 Survey [0..10]	37
Employee training	is a high priority in companies	5.02 Survey [0..10]	51
▶ Female labor force	Percentage of total labor force	44.50 %	39
▷ Health infrastructure	meets the needs of society	1.99 Survey [0..10]	62

### 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)	86.30 index	48
Attracting and retaining talents	is a priority in companies	6.06 Survey [0..10]	48
Worker motivation	in companies is high	5.04 Survey [0..10]	50
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	4.36 Survey [0..10]	39
Quality of life	is high	3.90 Survey [0..10]	58
Foreign highly-skilled personnel	are attracted to your country's business environment	3.77 Survey [0..10]	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 %	11
▷ Personal security and private property rights	are adequately protected	3.63 Survey [0..10]	59

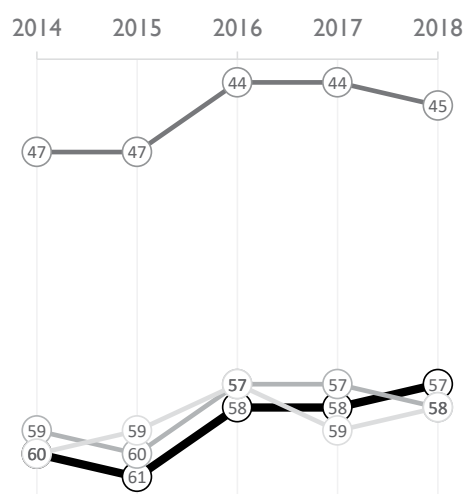
### Readiness

		Value	2018 Rank
▶ Labor force growth	Percentage change	1.97 %	16
Skilled labor	is readily available	4.06 Survey [0..10]	52
Finance skills	are readily available	4.79 Survey [0..10]	58
International experience	of senior managers is generally significant	4.66 Survey [0..10]	53
Competent senior managers	are readily available	4.56 Survey [0..10]	52
▷ Educational system	The educational system meets the needs of a competitive economy	2.27 Survey [0..10]	62
▷ Science in schools	is sufficiently emphasized	2.20 Survey [0..10]	63
University education	meets the needs of a competitive economy	3.46 Survey [0..10]	58
Management education	meets the needs of the business community	4.02 Survey [0..10]	58
▷ Language skills	are meeting the needs of enterprises	2.89 Survey [0..10]	63
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	0.10 number	57
Educational assessment - PISA	PISA survey of 15-year olds	389 Average	56

# BULGARIA

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	2018 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 [0..10]	58
Employee training	is a high priority in companies	4.73 Survey [0..10]	56
► Female labor force	Percentage of total labor force	46.48 %	27
Health infrastructure	meets the needs of society	2.27 Survey [0..10]	59

### 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)	54.90 index	2
Attracting and retaining talents	is a priority in companies	6.00 Survey [0..10]	49
Worker motivation	in companies is high	4.47 Survey [0..10]	55
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	2.13 Survey [0..10]	59
Quality of life	is high	4.13 Survey [0..10]	56
Foreign highly-skilled personnel	are attracted to your country's business environment	3.00 Survey [0..10]	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 [0..10]	58

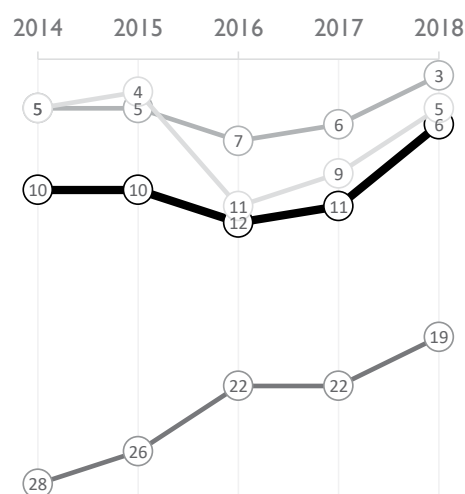
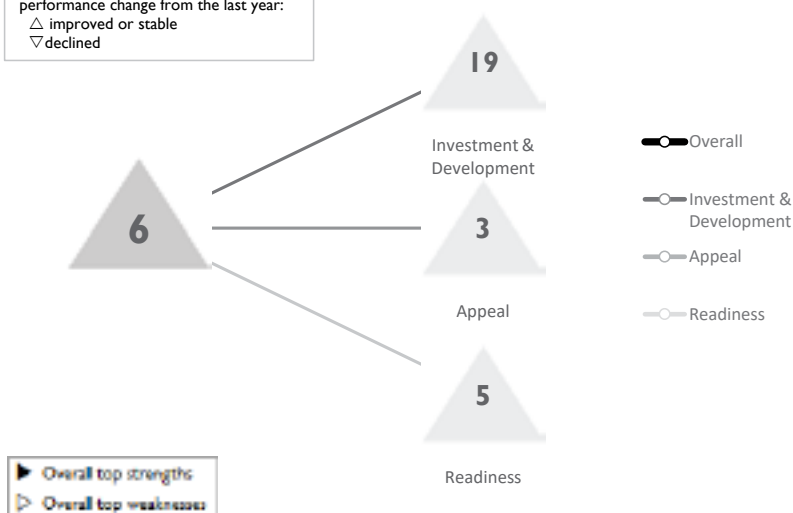
### Readiness

		Value	2018 Rank
► Labor force growth	Percentage change	2.86 %	11
Skilled labor	is readily available	3.47 Survey [0..10]	57
▷ Finance skills	are readily available	3.93 Survey [0..10]	62
International experience	of senior managers is generally significant	4.47 Survey [0..10]	54
Competent senior managers	are readily available	3.87 Survey [0..10]	57
▷ Educational system	The educational system meets the needs of a competitive economy	2.27 Survey [0..10]	63
▷ Science in schools	is sufficiently emphasized	2.55 Survey [0..10]	61
▷ University education	meets the needs of a competitive economy	2.53 Survey [0..10]	63
▷ Management education	meets the needs of the business community	2.87 Survey [0..10]	63
► Language skills	are meeting the needs of enterprises	6.47 Survey [0..10]	30
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	1.71 number	35
Educational assessment - PISA	PISA survey of 15-year olds	443 Average	42

# CANADA

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	2018 Rank
Total public expenditure on education	Percentage of GDP	5.4 %	17
▷ Gov. expenditure on education per student	Percentage of GDP per capita (secondary education)	18.3 %	40
▷ 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 [0..10]	11
Employee training	is a high priority in companies	6.39 Survey [0..10]	17
Female labor force	Percentage of total labor force	47.43 %	13
Health infrastructure	meets the needs of society	7.70 Survey [0..10]	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
▷ Attracting and retaining talents	is a priority in companies	8.00 Survey [0..10]	3
Worker motivation	in companies is high	7.13 Survey [0..10]	9
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	6.08 Survey [0..10]	18
Quality of life	is high	9.09 Survey [0..10]	10
▷ Foreign highly-skilled personnel	are attracted to your country's business environment	8.11 Survey [0..10]	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
▷ Personal security and private property rights	are adequately protected	9.13 Survey [0..10]	3

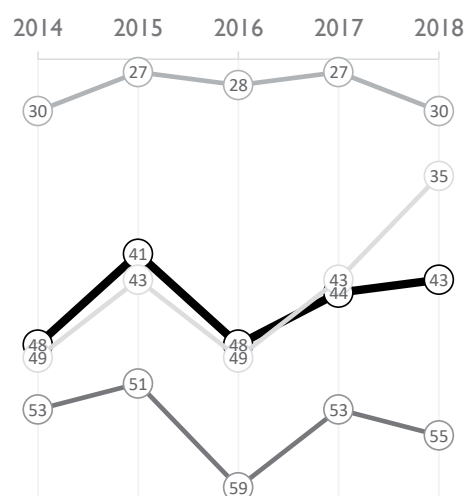
### Readiness

		Value	2018 Rank
Labor force growth	Percentage change	1.14 %	26
Skilled labor	is readily available	6.79 Survey [0..10]	4
Finance skills	are readily available	7.43 Survey [0..10]	9
International experience	of senior managers is generally significant	5.77 Survey [0..10]	23
Competent senior managers	are readily available	6.91 Survey [0..10]	6
▷ Educational system	The educational system meets the needs of a competitive economy	8.30 Survey [0..10]	4
Science in schools	is sufficiently emphasized	7.40 Survey [0..10]	5
▷ University education	meets the needs of a competitive economy	8.34 Survey [0..10]	3
Management education	meets the needs of the business community	7.92 Survey [0..10]	4
Language skills	are meeting the needs of enterprises	7.81 Survey [0..10]	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

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	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
▷ Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	20.89 ratio	54
▷ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	22.60 ratio	55
Apprenticeships	are sufficiently implemented	4.07 Survey [0..10]	48
Employee training	is a high priority in companies	5.24 Survey [0..10]	46
▷ Female labor force	Percentage of total labor force	40.61 %	51
Health infrastructure	meets the needs of society	4.78 Survey [0..10]	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 [0..10]	41
Worker motivation	in companies is high	5.42 Survey [0..10]	39
▶ Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	6.11 Survey [0..10]	16
Quality of life	is high	7.31 Survey [0..10]	30
▶ Foreign highly-skilled personnel	are attracted to your country's business environment	7.35 Survey [0..10]	11
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	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 [0..10]	32

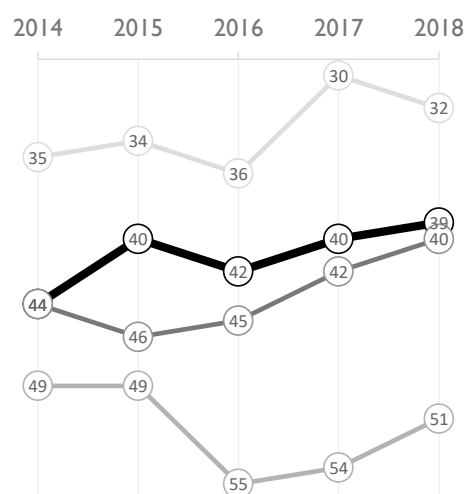
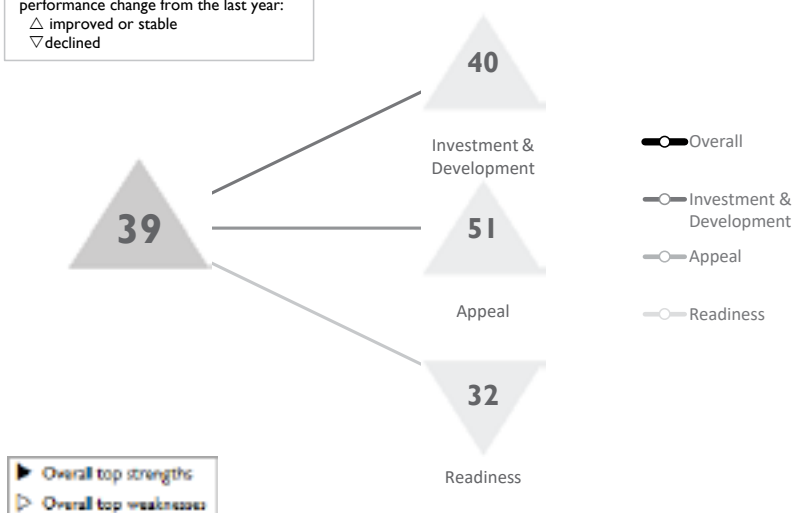
### Readiness

		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
▷ Language skills	are meeting the needs of enterprises	3.26 Survey [0..10]	60
▷ 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

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	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
▶ Apprenticeships	are sufficiently implemented	5.31 Survey [0..10]	20
▶ Employee training	is a high priority in companies	6.46 Survey [0..10]	15
Female labor force	Percentage of total labor force	- %	-
Health infrastructure	meets the needs of society	5.69 Survey [0..10]	36

### 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)	100.90 index	55
▶ Attracting and retaining talents	is a priority in companies	7.21 Survey [0..10]	21
Worker motivation	in companies is high	6.55 Survey [0..10]	21
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	4.23 Survey [0..10]	40
Quality of life	is high	6.27 Survey [0..10]	38
Foreign highly-skilled personnel	are attracted to your country's business environment	5.59 Survey [0..10]	28
▷ 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 [0..10]	42

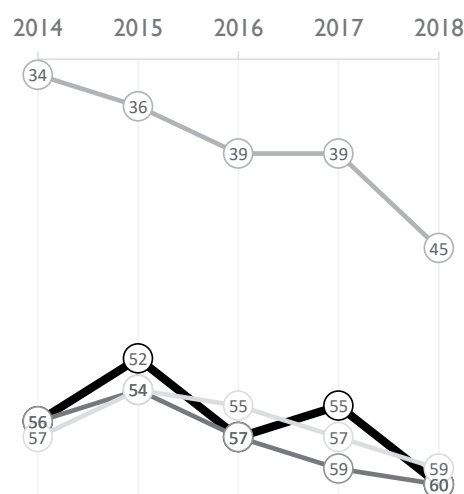
### Readiness

		Value	2018 Rank
▷ Labor force growth	Percentage change	-0.17 %	51
Skilled labor	is readily available	5.61 Survey [0..10]	35
Finance skills	are readily available	6.20 Survey [0..10]	35
▷ International experience	of senior managers is generally significant	4.76 Survey [0..10]	50
Competent senior managers	are readily available	5.37 Survey [0..10]	38
Educational system	The educational system meets the needs of a competitive economy	5.68 Survey [0..10]	34
▶ Science in schools	is sufficiently emphasized	6.57 Survey [0..10]	11
University education	meets the needs of a competitive economy	5.86 Survey [0..10]	32
Management education	meets the needs of the business community	6.03 Survey [0..10]	33
Language skills	are meeting the needs of enterprises	5.80 Survey [0..10]	36
▷ Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	0.10 number	56
▶ Educational assessment - PISA	PISA survey of 15-year olds	525 Average	6

# COLOMBIA

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	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
▷ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	25.58 ratio	58
Apprenticeships	are sufficiently implemented	4.54 Survey [0..10]	34
Employee training	is a high priority in companies	5.29 Survey [0..10]	45
▶ Female labor force	Percentage of total labor force	43.82 %	44
Health infrastructure	meets the needs of society	2.52 Survey [0..10]	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
▷ Attracting and retaining talents	is a priority in companies	5.05 Survey [0..10]	61
Worker motivation	in companies is high	5.06 Survey [0..10]	49
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	3.59 Survey [0..10]	50
Quality of life	is high	3.95 Survey [0..10]	57
Foreign highly-skilled personnel	are attracted to your country's business environment	5.24 Survey [0..10]	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 [0..10]	57

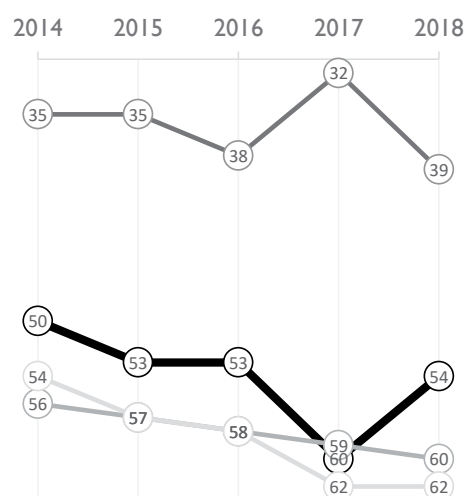
### Readiness

		Value	2018 Rank
Labor force growth	Percentage change	0.34 %	44
Skilled labor	is readily available	4.85 Survey [0..10]	46
Finance skills	are readily available	5.13 Survey [0..10]	53
International experience	of senior managers is generally significant	4.29 Survey [0..10]	55
Competent senior managers	are readily available	3.98 Survey [0..10]	56
Educational system	The educational system meets the needs of a competitive economy	3.38 Survey [0..10]	54
▷ Science in schools	is sufficiently emphasized	2.69 Survey [0..10]	60
University education	meets the needs of a competitive economy	4.09 Survey [0..10]	54
Management education	meets the needs of the business community	4.53 Survey [0..10]	56
▷ Language skills	are meeting the needs of enterprises	3.01 Survey [0..10]	62
▷ 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

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	2018 Rank
Total public expenditure on education	Percentage of GDP	4.4 %	33
▶ Gov. expenditure on education per student	Percentage of GDP per capita (secondary education)	25.3 %	11
▶ Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	11.70 ratio	12
▶ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	9.80 ratio	9
Apprenticeships	are sufficiently implemented	3.25 Survey [0..10]	60
▷ Employee training	is a high priority in companies	3.59 Survey [0..10]	63
Female labor force	Percentage of total labor force	45.85 %	32
Health infrastructure	meets the needs of society	4.55 Survey [0..10]	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 [0..10]	63
Worker motivation	in companies is high	3.91 Survey [0..10]	62
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	2.43 Survey [0..10]	57
Quality of life	is high	5.50 Survey [0..10]	45
Foreign highly-skilled personnel	are attracted to your country's business environment	1.97 Survey [0..10]	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 [0..10]	53

### Readiness

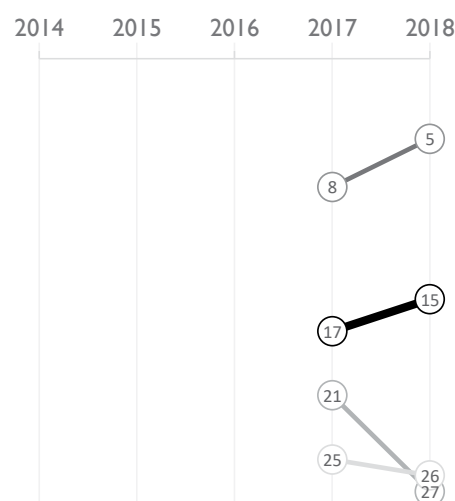
		Value	2018 Rank
Labor force growth	Percentage change	0.00 %	46
Skilled labor	is readily available	3.53 Survey [0..10]	56
▷ Finance skills	are readily available	3.53 Survey [0..10]	63
▷ International experience	of senior managers is generally significant	3.22 Survey [0..10]	63
▷ Competent senior managers	are readily available	3.10 Survey [0..10]	63
Educational system	The educational system meets the needs of a competitive economy	3.25 Survey [0..10]	55
Science in schools	is sufficiently emphasized	3.13 Survey [0..10]	56
University education	meets the needs of a competitive economy	3.19 Survey [0..10]	60
Management education	meets the needs of the business community	3.71 Survey [0..10]	59
▶ Language skills	are meeting the needs of enterprises	6.41 Survey [0..10]	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

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	2018 Rank
▶ Total public expenditure on education	Percentage of GDP	6.4 %	9
▶ Gov. expenditure on education per student	Percentage of GDP per capita (secondary education)	39.1 %	1
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	11.92 ratio	15
Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	10.35 ratio	14
▷ Apprenticeships	are sufficiently implemented	4.10 Survey [0..10]	47
▷ Employee training	is a high priority in companies	4.48 Survey [0..10]	59
▶ Female labor force	Percentage of total labor force	48.11 %	8
Health infrastructure	meets the needs of society	4.62 Survey [0..10]	42

### 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)	59.40 index	8
▷ Attracting and retaining talents	is a priority in companies	6.00 Survey [0..10]	49
▷ Worker motivation	in companies is high	4.95 Survey [0..10]	51
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	4.62 Survey [0..10]	35
Quality of life	is high	8.00 Survey [0..10]	25
Foreign highly-skilled personnel	are attracted to your country's business environment	4.93 Survey [0..10]	38
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	38,627 US\$	20
▷ Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	82,229 US\$	55
Effective personal income tax rate	Percentage of an income equal to GDP per capita	7.35 %	9
Personal security and private property rights	are adequately protected	7.43 Survey [0..10]	29

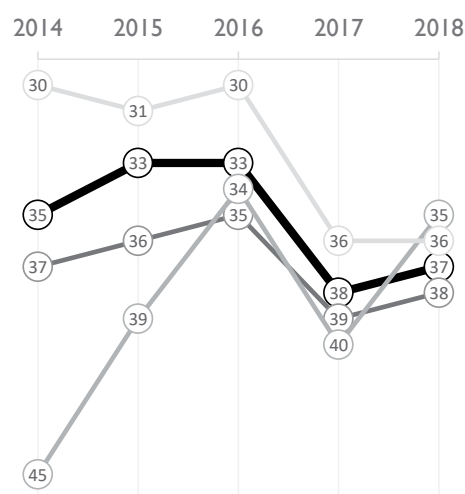
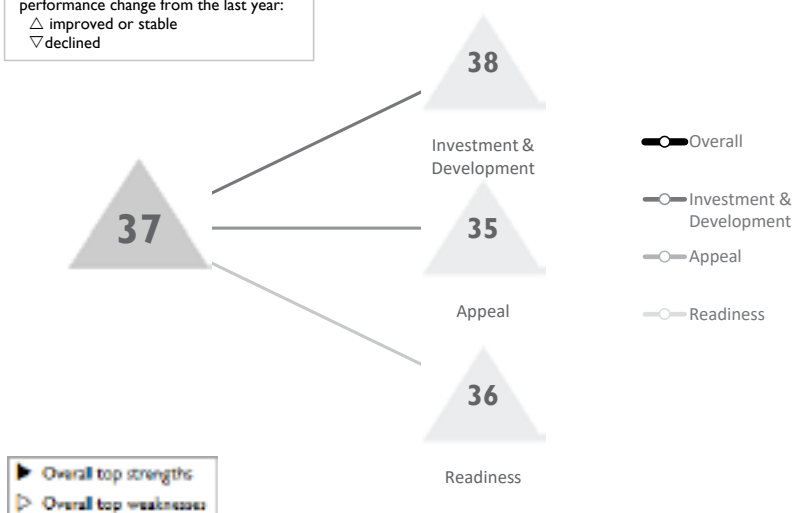
### Readiness

		Value	2018 Rank
Labor force growth	Percentage change	2.16 %	12
Skilled labor	is readily available	5.61 Survey [0..10]	34
Finance skills	are readily available	6.67 Survey [0..10]	26
International experience	of senior managers is generally significant	5.10 Survey [0..10]	39
Competent senior managers	are readily available	5.07 Survey [0..10]	46
Educational system	The educational system meets the needs of a competitive economy	6.05 Survey [0..10]	30
Science in schools	is sufficiently emphasized	5.86 Survey [0..10]	27
University education	meets the needs of a competitive economy	6.86 Survey [0..10]	21
Management education	meets the needs of the business community	5.95 Survey [0..10]	35
Language skills	are meeting the needs of enterprises	7.76 Survey [0..10]	15
▶ Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	7.68 number	6
Educational assessment - PISA	PISA survey of 15-year olds	435 Average	44

# CZECH REPUBLIC

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	2018 Rank
▶ 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
▶ 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 [0..10]	36
Employee training	is a high priority in companies	6.00 Survey [0..10]	24
Female labor force	Percentage of total labor force	44.48 %	40
▶ Health infrastructure	meets the needs of society	7.27 Survey [0..10]	20

### 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)	65.80 index	20
▶ Attracting and retaining talents	is a priority in companies	7.38 Survey [0..10]	16
Worker motivation	in companies is high	5.96 Survey [0..10]	32
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	4.96 Survey [0..10]	33
Quality of life	is high	7.76 Survey [0..10]	27
Foreign highly-skilled personnel	are attracted to your country's business environment	4.50 Survey [0..10]	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 [0..10]	27

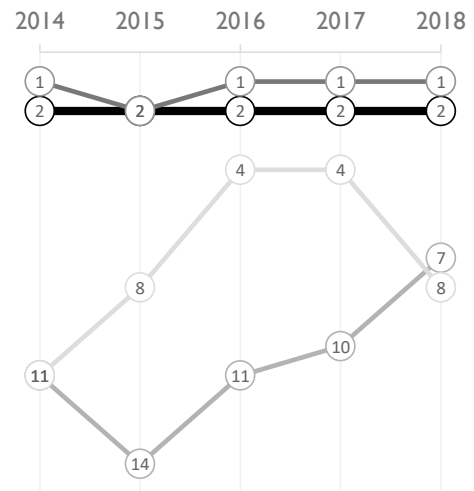
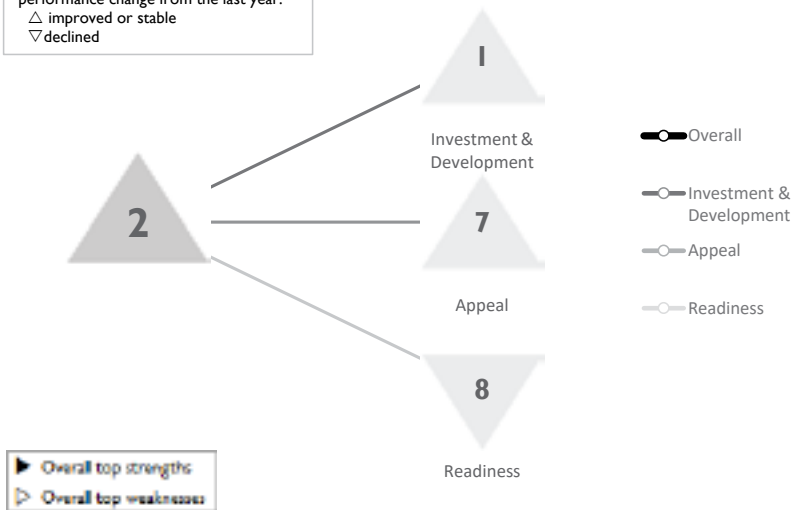
### Readiness

		Value	2018 Rank
Labor force growth	Percentage change	0.51 %	41
▶ Skilled labor	is readily available	3.14 Survey [0..10]	60
▶ Finance skills	are readily available	5.18 Survey [0..10]	51
International experience	of senior managers is generally significant	5.38 Survey [0..10]	31
▶ Competent senior managers	are readily available	4.96 Survey [0..10]	49
Educational system	The educational system meets the needs of a competitive economy	5.77 Survey [0..10]	33
Science in schools	is sufficiently emphasized	5.62 Survey [0..10]	32
University education	meets the needs of a competitive economy	6.08 Survey [0..10]	29
Management education	meets the needs of the business community	5.96 Survey [0..10]	34
Language skills	are meeting the needs of enterprises	5.77 Survey [0..10]	37
▶ 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

## OVERALL PERFORMANCE (63 countries)

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



### 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 [0..10]	4
▶ Employee training	is a high priority in companies	7.70 Survey [0..10]	1
Female labor force	Percentage of total labor force	47.76 %	11
Health infrastructure	meets the needs of society	8.34 Survey [0..10]	7

### 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)	86.10 index	47
▶ Attracting and retaining talents	is a priority in companies	8.13 Survey [0..10]	1
▶ Worker motivation	in companies is high	8.25 Survey [0..10]	1
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	7.32 Survey [0..10]	3
Quality of life	is high	9.41 Survey [0..10]	5
Foreign highly-skilled personnel	are attracted to your country's business environment	6.21 Survey [0..10]	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
▷ 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 [0..10]	2

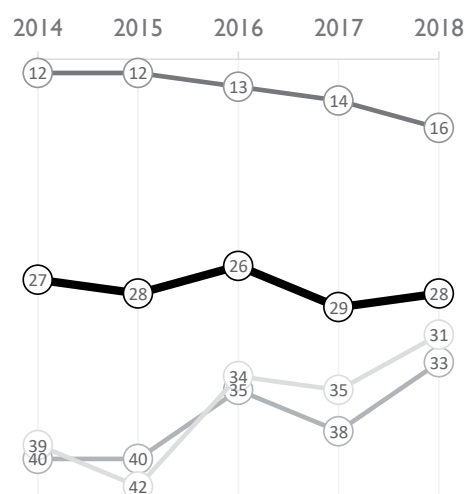
### Readiness

		Value	2018 Rank
▷ Labor force growth	Percentage change	-0.95 %	60
Skilled labor	is readily available	6.33 Survey [0..10]	13
Finance skills	are readily available	7.66 Survey [0..10]	6
International experience	of senior managers is generally significant	6.75 Survey [0..10]	9
Competent senior managers	are readily available	6.88 Survey [0..10]	8
Educational system	The educational system meets the needs of a competitive economy	8.24 Survey [0..10]	5
Science in schools	is sufficiently emphasized	6.84 Survey [0..10]	8
University education	meets the needs of a competitive economy	8.10 Survey [0..10]	7
▶ Management education	meets the needs of the business community	8.13 Survey [0..10]	2
Language skills	are meeting the needs of enterprises	8.96 Survey [0..10]	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

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	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 [0..10]	28
▶ Employee training	is a high priority in companies	6.50 Survey [0..10]	14
▶ Female labor force	Percentage of total labor force	48.48 %	6
Health infrastructure	meets the needs of society	6.16 Survey [0..10]	32

### 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)	61.70 index	13
Attracting and retaining talents	is a priority in companies	6.91 Survey [0..10]	27
Worker motivation	in companies is high	6.25 Survey [0..10]	25
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	4.19 Survey [0..10]	41
Quality of life	is high	6.50 Survey [0..10]	35
Foreign highly-skilled personnel	are attracted to your country's business environment	5.11 Survey [0..10]	34
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	13,655 US\$	44
▶ 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 [0..10]	30

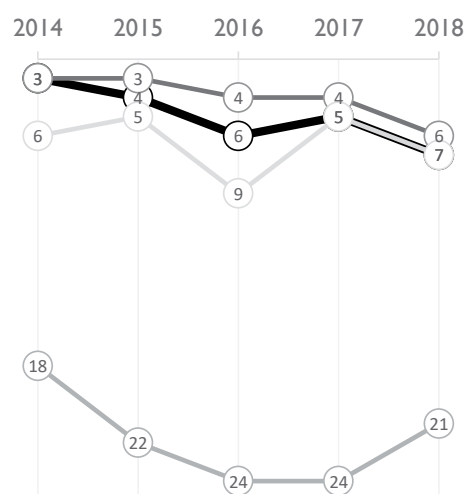
### Readiness

		Value	2018 Rank
Labor force growth	Percentage change	1.13 %	27
▶ Skilled labor	is readily available	3.06 Survey [0..10]	61
▶ Finance skills	are readily available	5.30 Survey [0..10]	50
▶ International experience	of senior managers is generally significant	4.94 Survey [0..10]	47
▶ Competent senior managers	are readily available	4.23 Survey [0..10]	54
Educational system	The educational system meets the needs of a competitive economy	6.91 Survey [0..10]	16
Science in schools	is sufficiently emphasized	6.31 Survey [0..10]	18
University education	meets the needs of a competitive economy	6.53 Survey [0..10]	24
Management education	meets the needs of the business community	6.25 Survey [0..10]	28
Language skills	are meeting the needs of enterprises	7.19 Survey [0..10]	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

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	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 [0..10]	27
Employee training	is a high priority in companies	6.69 Survey [0..10]	11
Female labor force	Percentage of total labor force	48.02 %	10
Health infrastructure	meets the needs of society	8.39 Survey [0..10]	6

### 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)	73.90 index	30
Attracting and retaining talents	is a priority in companies	7.17 Survey [0..10]	22
Worker motivation	in companies is high	6.69 Survey [0..10]	18
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	6.17 Survey [0..10]	13
Quality of life	is high	9.25 Survey [0..10]	7
▶ Foreign highly-skilled personnel	are attracted to your country's business environment	4.74 Survey [0..10]	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
▶ 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 [0..10]	1

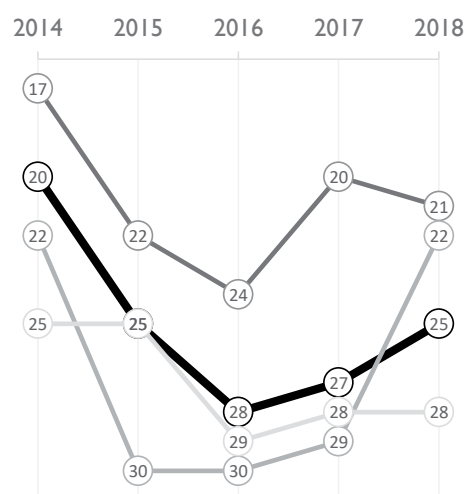
### Readiness

		Value	2018 Rank
Labor force growth	Percentage change	0.82 %	30
Skilled labor	is readily available	6.48 Survey [0..10]	10
Finance skills	are readily available	7.10 Survey [0..10]	14
International experience	of senior managers is generally significant	5.63 Survey [0..10]	27
Competent senior managers	are readily available	6.13 Survey [0..10]	22
▶ Educational system	The educational system meets the needs of a competitive economy	8.54 Survey [0..10]	2
▶ Science in schools	is sufficiently emphasized	7.77 Survey [0..10]	3
University education	meets the needs of a competitive economy	8.12 Survey [0..10]	6
Management education	meets the needs of the business community	7.53 Survey [0..10]	9
Language skills	are meeting the needs of enterprises	8.08 Survey [0..10]	11
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

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	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
▷ 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
▷ Apprenticeships	are sufficiently implemented	3.52 Survey [0..10]	56
Employee training	is a high priority in companies	5.36 Survey [0..10]	43
► Female labor force	Percentage of total labor force	48.08 %	9
► Health infrastructure	meets the needs of society	8.06 Survey [0..10]	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 [0..10]	35
▷ Worker motivation	in companies is high	5.26 Survey [0..10]	44
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	6.12 Survey [0..10]	15
Quality of life	is high	8.69 Survey [0..10]	16
Foreign highly-skilled personnel	are attracted to your country's business environment	5.52 Survey [0..10]	29
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	38,787 US\$	19
► Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	255,620 US\$	8
▷ 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 [0..10]	22

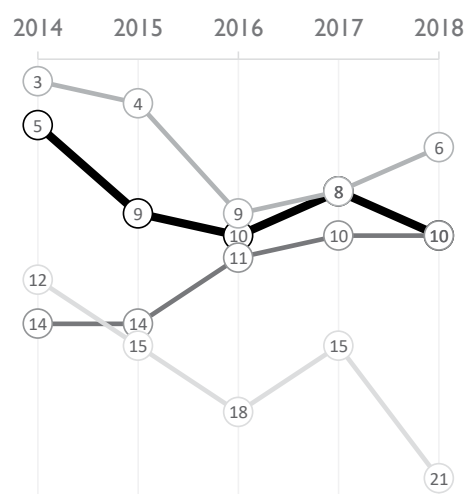
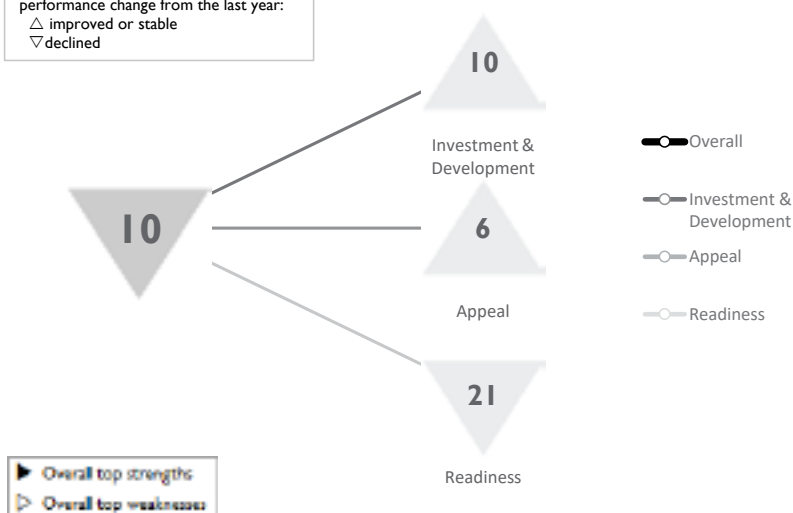
### Readiness

		Value	2018 Rank
Labor force growth	Percentage change	0.39 %	43
► Skilled labor	is readily available	6.71 Survey [0..10]	6
Finance skills	are readily available	6.72 Survey [0..10]	24
International experience	of senior managers is generally significant	5.03 Survey [0..10]	43
Competent senior managers	are readily available	6.23 Survey [0..10]	19
Educational system	The educational system meets the needs of a competitive economy	6.33 Survey [0..10]	24
Science in schools	is sufficiently emphasized	6.41 Survey [0..10]	15
University education	meets the needs of a competitive economy	6.21 Survey [0..10]	28
Management education	meets the needs of the business community	6.72 Survey [0..10]	21
▷ Language skills	are meeting the needs of enterprises	4.23 Survey [0..10]	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

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	2018 Rank
▷ Total public expenditure on education	Percentage of GDP	4.2 %	37
Gov. expenditure on education per student	Percentage of GDP per capita (secondary education)	23.3 %	20
Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	15.45 ratio	29
Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	13.18 ratio	38
▶ Apprenticeships	are sufficiently implemented	8.04 Survey [0..10]	2
▶ Employee training	is a high priority in companies	7.36 Survey [0..10]	3
Female labor force	Percentage of total labor force	46.29 %	31
▶ Health infrastructure	meets the needs of society	8.25 Survey [0..10]	8

### 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)	71.70 index	28
Attracting and retaining talents	is a priority in companies	7.65 Survey [0..10]	8
▶ Worker motivation	in companies is high	7.21 Survey [0..10]	7
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	6.57 Survey [0..10]	9
Quality of life	is high	9.14 Survey [0..10]	9
Foreign highly-skilled personnel	are attracted to your country's business environment	6.32 Survey [0..10]	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
▷ 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 [0..10]	9

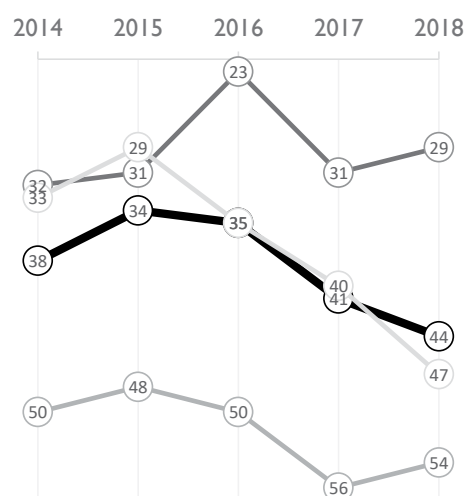
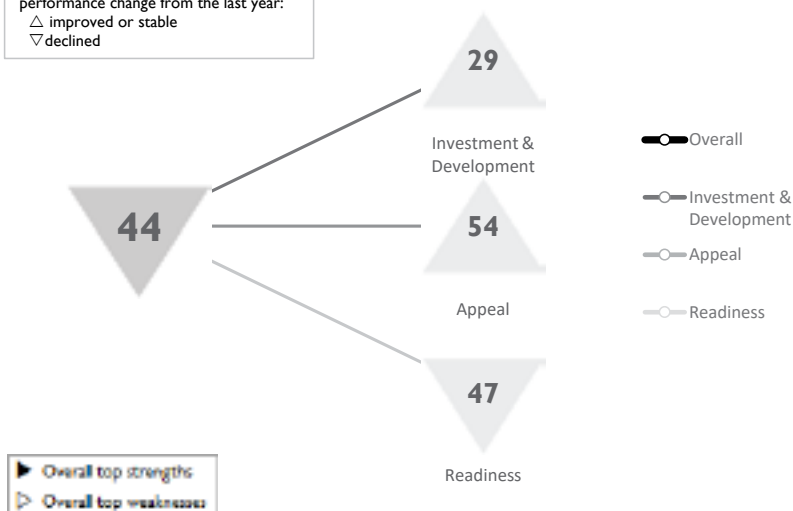
### Readiness

		Value	2018 Rank
▷ Labor force growth	Percentage change	0.57 %	39
Skilled labor	is readily available	5.68 Survey [0..10]	29
Finance skills	are readily available	6.83 Survey [0..10]	20
International experience	of senior managers is generally significant	6.41 Survey [0..10]	14
Competent senior managers	are readily available	6.18 Survey [0..10]	21
Educational system	The educational system meets the needs of a competitive economy	7.38 Survey [0..10]	11
Science in schools	is sufficiently emphasized	5.87 Survey [0..10]	26
University education	meets the needs of a competitive economy	7.52 Survey [0..10]	12
Management education	meets the needs of the business community	6.72 Survey [0..10]	20
Language skills	are meeting the needs of enterprises	6.96 Survey [0..10]	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

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	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
▶ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	7.30 ratio	2
Apprenticeships	are sufficiently implemented	4.20 Survey [0..10]	46
▷ Employee training	is a high priority in companies	4.45 Survey [0..10]	61
Female labor force	Percentage of total labor force	44.30 %	42
Health infrastructure	meets the needs of society	4.08 Survey [0..10]	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 [0..10]	52
▷ Worker motivation	in companies is high	4.28 Survey [0..10]	57
▷ Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	2.40 Survey [0..10]	58
Quality of life	is high	5.75 Survey [0..10]	43
▷ Foreign highly-skilled personnel	are attracted to your country's business environment	2.53 Survey [0..10]	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 [0..10]	49

### Readiness

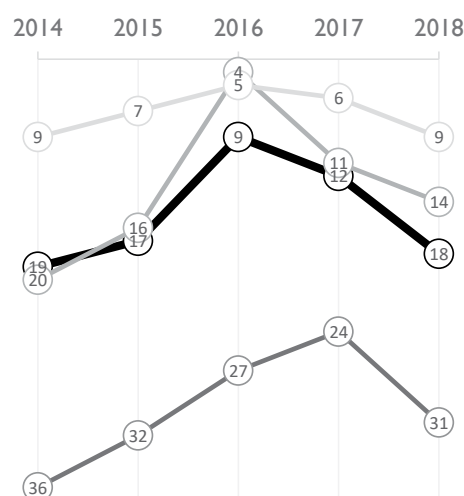
		Value	2018 Rank
▷ Labor force growth	Percentage change	-1.27 %	61
▶ Skilled labor	is readily available	6.13 Survey [0..10]	18
Finance skills	are readily available	6.26 Survey [0..10]	34
International experience	of senior managers is generally significant	5.05 Survey [0..10]	42
Competent senior managers	are readily available	5.55 Survey [0..10]	35
Educational system	The educational system meets the needs of a competitive economy	4.10 Survey [0..10]	50
Science in schools	is sufficiently emphasized	5.04 Survey [0..10]	41
University education	meets the needs of a competitive economy	4.65 Survey [0..10]	52
Management education	meets the needs of the business community	4.78 Survey [0..10]	52
▶ Language skills	are meeting the needs of enterprises	7.73 Survey [0..10]	17
Student mobility 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

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	2018 Rank
▷ Total public expenditure on education	Percentage of GDP	3.3 %	56
▷ 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 [0..10]	23
Employee training	is a high priority in companies	5.97 Survey [0..10]	26
▶ Female labor force	Percentage of total labor force	49.46 %	3
Health infrastructure	meets the needs of society	6.73 Survey [0..10]	26

### 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)	126.40 index	61
Attracting and retaining talents	is a priority in companies	7.38 Survey [0..10]	17
Worker motivation	in companies is high	6.86 Survey [0..10]	13
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	6.35 Survey [0..10]	11
Quality of life	is high	6.86 Survey [0..10]	32
Foreign highly-skilled personnel	are attracted to your country's business environment	7.40 Survey [0..10]	9
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	45,050 US\$	11
▶ 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 [0..10]	11

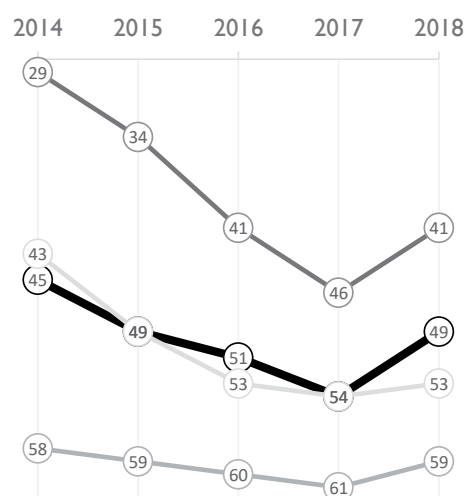
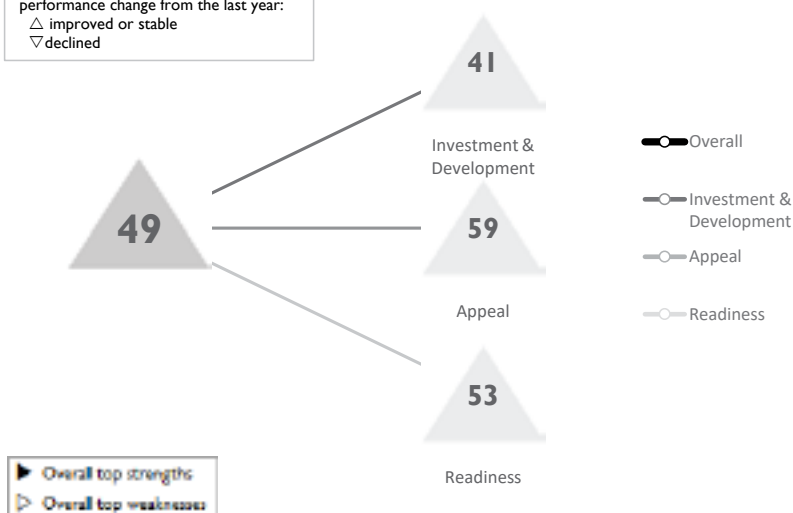
### Readiness

		Value	2018 Rank
▷ Labor force growth	Percentage change	0.69 %	34
Skilled labor	is readily available	6.03 Survey [0..10]	22
▶ Finance skills	are readily available	8.00 Survey [0..10]	3
▶ International experience	of senior managers is generally significant	7.64 Survey [0..10]	3
Competent senior managers	are readily available	6.96 Survey [0..10]	5
Educational system	The educational system meets the needs of a competitive economy	6.52 Survey [0..10]	22
Science in schools	is sufficiently emphasized	6.29 Survey [0..10]	20
University education	meets the needs of a competitive economy	6.91 Survey [0..10]	19
Management education	meets the needs of the business community	7.00 Survey [0..10]	17
Language skills	are meeting the needs of enterprises	6.23 Survey [0..10]	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

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	2018 Rank
Total public expenditure on education	Percentage of GDP	4.2 %	36
▶ Gov. expenditure on education per student	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 [0..10]	54
Employee training	is a high priority in companies	4.52 Survey [0..10]	57
▶ Female labor force	Percentage of total labor force	45.52 %	34
Health infrastructure	meets the needs of society	3.10 Survey [0..10]	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 [0..10]	57
Worker motivation	in companies is high	4.38 Survey [0..10]	56
▷ Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	1.88 Survey [0..10]	61
Quality of life	is high	4.56 Survey [0..10]	52
Foreign highly-skilled personnel	are attracted to your country's business environment	3.76 Survey [0..10]	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
▷ 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 [0..10]	47

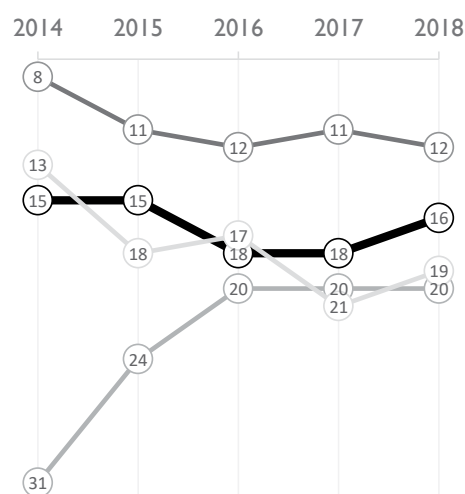
### Readiness

		Value	2018 Rank
Labor force growth	Percentage change	0.59 %	36
▷ Skilled labor	is readily available	3.02 Survey [0..10]	63
▷ Finance skills	are readily available	4.61 Survey [0..10]	59
International experience	of senior managers is generally significant	4.89 Survey [0..10]	48
▷ Competent senior managers	are readily available	3.38 Survey [0..10]	59
Educational system	The educational system meets the needs of a competitive economy	4.32 Survey [0..10]	47
Science in schools	is sufficiently emphasized	4.42 Survey [0..10]	46
University education	meets the needs of a competitive economy	5.14 Survey [0..10]	43
Management education	meets the needs of the business community	4.89 Survey [0..10]	48
Language skills	are meeting the needs of enterprises	3.59 Survey [0..10]	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

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	2018 Rank
▶ 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
▶ 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
▷ Apprenticeships	are sufficiently implemented	4.32 Survey [0..10]	43
Employee training	is a high priority in companies	5.59 Survey [0..10]	37
Female labor force	Percentage of total labor force	46.44 %	29
Health infrastructure	meets the needs of society	7.15 Survey [0..10]	21

### 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	7.65 Survey [0..10]	10
Worker motivation	in companies is high	6.88 Survey [0..10]	11
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	6.56 Survey [0..10]	10
▶ Quality of life	is high	9.41 Survey [0..10]	6
▷ Foreign highly-skilled personnel	are attracted to your country's business environment	4.27 Survey [0..10]	44
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	43,467 US\$	14
▷ Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	94,496 US\$	50
▷ 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 [0..10]	20

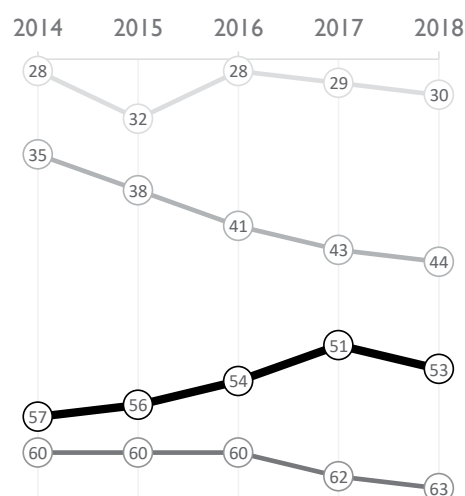
### Readiness

		Value	2018 Rank
Labor force growth	Percentage change	1.54 %	23
Skilled labor	is readily available	6.40 Survey [0..10]	12
Finance skills	are readily available	7.36 Survey [0..10]	11
▷ International experience	of senior managers is generally significant	4.72 Survey [0..10]	51
Competent senior managers	are readily available	6.19 Survey [0..10]	20
Educational system	The educational system meets the needs of a competitive economy	6.80 Survey [0..10]	21
Science in schools	is sufficiently emphasized	5.52 Survey [0..10]	35
University education	meets the needs of a competitive economy	7.05 Survey [0..10]	17
Management education	meets the needs of the business community	6.96 Survey [0..10]	18
▶ Language skills	are meeting the needs of enterprises	8.49 Survey [0..10]	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

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	2018 Rank
▷ 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
▷ Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	29.06 ratio	60
▷ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	31.65 ratio	63
▶ Apprenticeships	are sufficiently implemented	5.38 Survey [0..10]	18
Employee training	is a high priority in companies	5.37 Survey [0..10]	42
Female labor force	Percentage of total labor force	23.19 %	58
Health infrastructure	meets the needs of society	4.29 Survey [0..10]	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 [0..10]	34
Worker motivation	in companies is high	5.82 Survey [0..10]	34
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	5.03 Survey [0..10]	31
Quality of life	is high	4.55 Survey [0..10]	54
Foreign highly-skilled personnel	are attracted to your country's business environment	5.02 Survey [0..10]	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 [0..10]	40

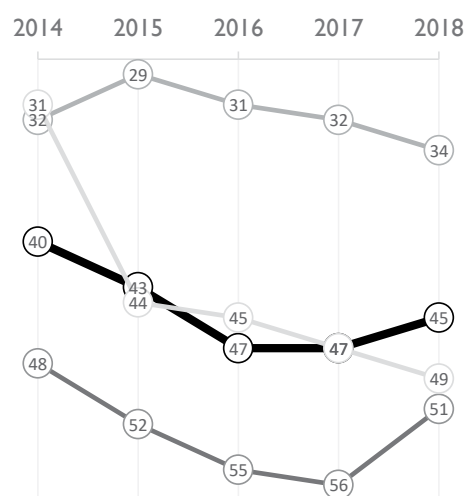
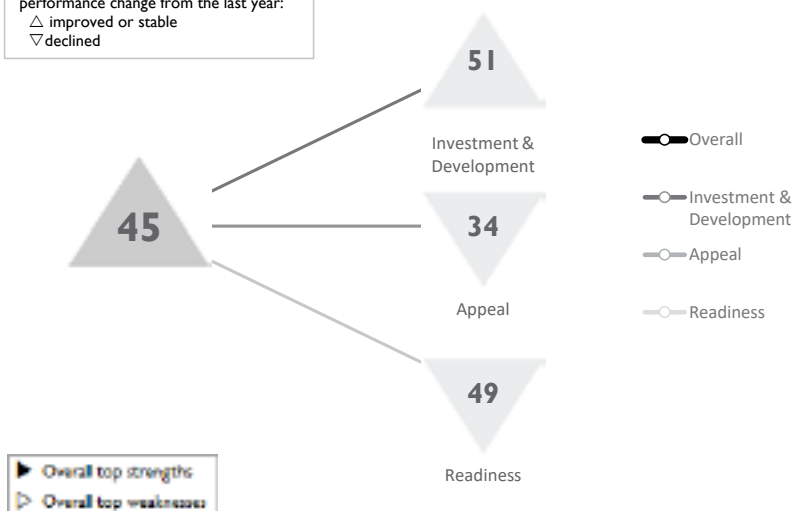
### Readiness

		Value	2018 Rank
▶ Labor force growth	Percentage change	1.82 %	20
▶ Skilled labor	is readily available	6.12 Survey [0..10]	19
Finance skills	are readily available	6.80 Survey [0..10]	22
International experience	of senior managers is generally significant	4.94 Survey [0..10]	46
Competent senior managers	are readily available	5.92 Survey [0..10]	27
Educational system	The educational system meets the needs of a competitive economy	5.63 Survey [0..10]	35
▶ Science in schools	is sufficiently emphasized	6.49 Survey [0..10]	13
University education	meets the needs of a competitive economy	5.88 Survey [0..10]	31
Management education	meets the needs of the business community	6.41 Survey [0..10]	26
Language skills	are meeting the needs of enterprises	6.96 Survey [0..10]	27
▷ Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	0.03 number	59
Educational assessment - PISA	PISA survey of 15-year olds	- Average	-

# INDONESIA

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	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 [0..10]	21
▶ Employee training	is a high priority in companies	5.93 Survey [0..10]	31
▷ Female labor force	Percentage of total labor force	38.22 %	55
Health infrastructure	meets the needs of society	4.95 Survey [0..10]	38

### 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)	73.90 index	30
Attracting and retaining talents	is a priority in companies	6.59 Survey [0..10]	32
Worker motivation	in companies is high	6.11 Survey [0..10]	29
▶ Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	5.45 Survey [0..10]	23
Quality of life	is high	5.20 Survey [0..10]	46
▶ Foreign highly-skilled personnel	are attracted to your country's business environment	6.09 Survey [0..10]	19
▷ Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	4,993 US\$	61
▷ 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 [0..10]	44

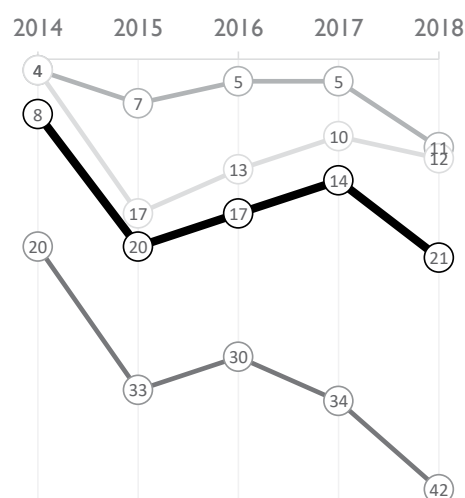
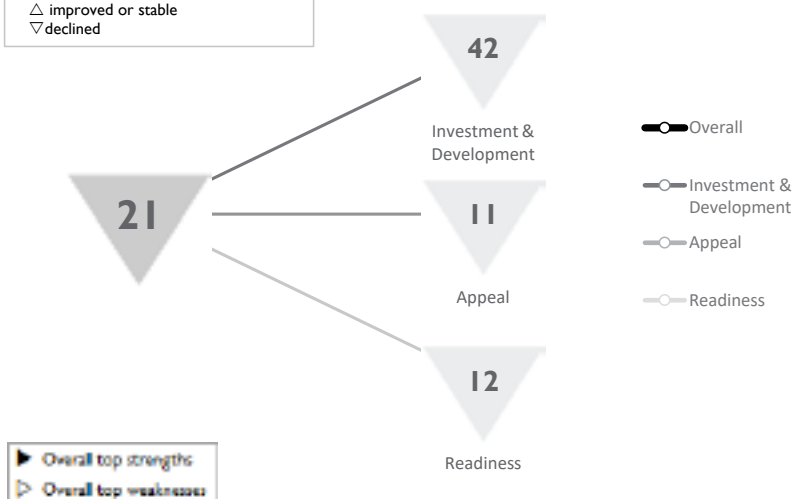
### Readiness

		Value	2018 Rank
▶ Labor force growth	Percentage change	2.09 %	14
Skilled labor	is readily available	4.87 Survey [0..10]	45
Finance skills	are readily available	5.34 Survey [0..10]	49
International experience	of senior managers is generally significant	5.31 Survey [0..10]	33
Competent senior managers	are readily available	5.52 Survey [0..10]	37
Educational system	The educational system meets the needs of a competitive economy	4.82 Survey [0..10]	43
Science in schools	is sufficiently emphasized	5.16 Survey [0..10]	40
University education	meets the needs of a competitive economy	5.16 Survey [0..10]	42
Management education	meets the needs of the business community	5.25 Survey [0..10]	46
Language skills	are meeting the needs of enterprises	5.26 Survey [0..10]	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

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	2018 Rank
▷ 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
▷ Apprenticeships	are sufficiently implemented	4.48 Survey [0..10]	38
Employee training	is a high priority in companies	5.96 Survey [0..10]	29
Female labor force	Percentage of total labor force	45.69 %	33
▷ Health infrastructure	meets the needs of society	4.28 Survey [0..10]	46

### 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)	77.50 index	38
▶ Attracting and retaining talents	is a priority in companies	7.80 Survey [0..10]	5
▶ Worker motivation	in companies is high	7.56 Survey [0..10]	3
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	5.88 Survey [0..10]	20
Quality of life	is high	8.68 Survey [0..10]	17
▶ Foreign highly-skilled personnel	are attracted to your country's business environment	7.48 Survey [0..10]	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
▷ 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 [0..10]	17

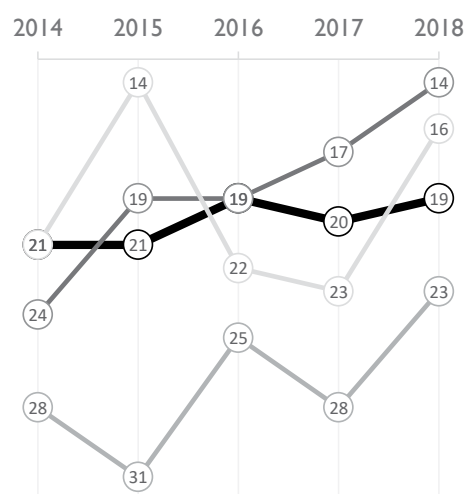
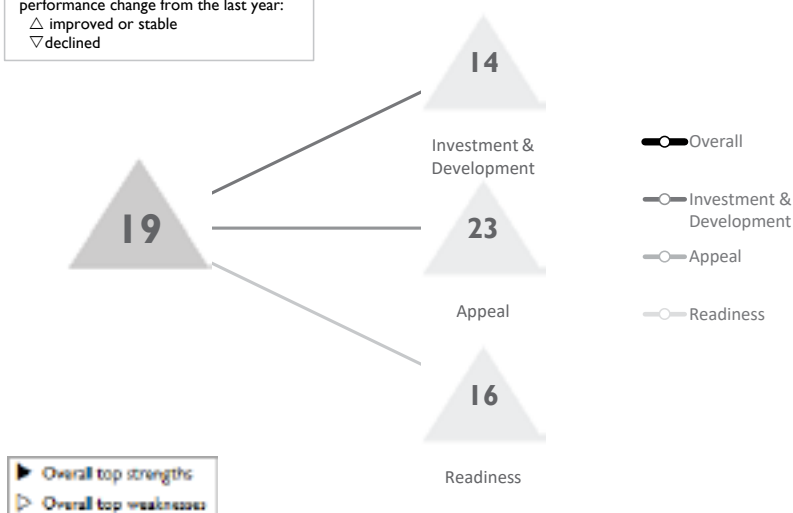
### Readiness

		Value	2018 Rank
Labor force growth	Percentage change	1.87 %	19
Skilled labor	is readily available	6.12 Survey [0..10]	20
▶ Finance skills	are readily available	7.52 Survey [0..10]	7
International experience	of senior managers is generally significant	6.56 Survey [0..10]	13
Competent senior managers	are readily available	6.40 Survey [0..10]	16
Educational system	The educational system meets the needs of a competitive economy	7.55 Survey [0..10]	10
Science in schools	is sufficiently emphasized	6.80 Survey [0..10]	10
▶ University education	meets the needs of a competitive economy	7.92 Survey [0..10]	9
Management education	meets the needs of the business community	7.12 Survey [0..10]	14
▷ Language skills	are meeting the needs of enterprises	4.80 Survey [0..10]	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

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	2018 Rank
▶ Total public expenditure on education	Percentage of GDP	6.8 %	5
▷ 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 [0..10]	8
Employee training	is a high priority in companies	6.00 Survey [0..10]	24
Female labor force	Percentage of total labor force	47.26 %	15
Health infrastructure	meets the needs of society	6.63 Survey [0..10]	27

### 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)	94.70 index	52
Attracting and retaining talents	is a priority in companies	7.41 Survey [0..10]	14
Worker motivation	in companies is high	6.88 Survey [0..10]	12
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	6.15 Survey [0..10]	14
Quality of life	is high	8.25 Survey [0..10]	20
▷ Foreign highly-skilled personnel	are attracted to your country's business environment	5.07 Survey [0..10]	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 [0..10]	23

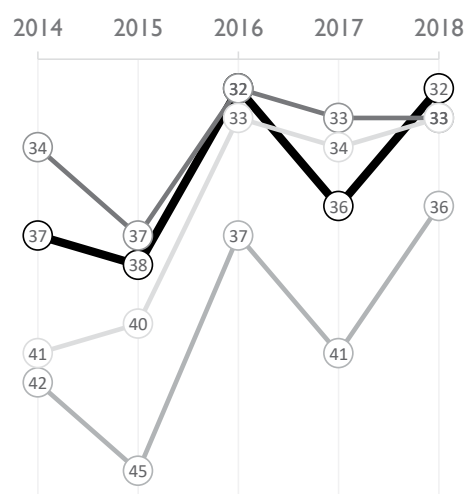
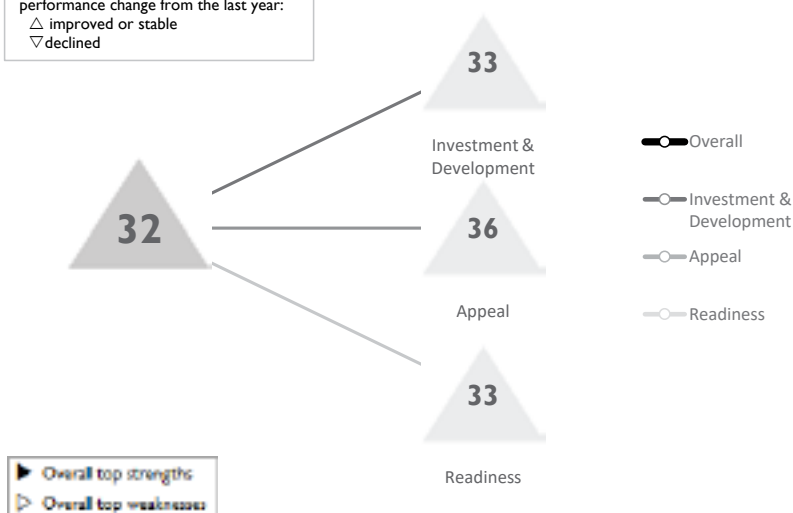
### Readiness

		Value	2018 Rank
Labor force growth	Percentage change	1.73 %	21
Skilled labor	is readily available	6.30 Survey [0..10]	14
Finance skills	are readily available	6.88 Survey [0..10]	18
International experience	of senior managers is generally significant	6.59 Survey [0..10]	12
▶ Competent senior managers	are readily available	6.78 Survey [0..10]	10
Educational system	The educational system meets the needs of a competitive economy	6.83 Survey [0..10]	19
Science in schools	is sufficiently emphasized	6.34 Survey [0..10]	17
▶ University education	meets the needs of a competitive economy	8.20 Survey [0..10]	4
▶ Management education	meets the needs of the business community	7.55 Survey [0..10]	7
Language skills	are meeting the needs of enterprises	7.76 Survey [0..10]	16
▷ Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	1.26 number	42
▷ Educational assessment - PISA	PISA survey of 15-year olds	468 Average	37

# ITALY

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	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 [0..10]	26
▷ Employee training	is a high priority in companies	4.83 Survey [0..10]	55
Female labor force	Percentage of total labor force	42.58 %	47
▶ Health infrastructure	meets the needs of society	6.90 Survey [0..10]	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
▷ Attracting and retaining talents	is a priority in companies	5.84 Survey [0..10]	53
Worker motivation	in companies is high	5.69 Survey [0..10]	35
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	4.50 Survey [0..10]	37
Quality of life	is high	7.63 Survey [0..10]	28
▷ Foreign highly-skilled personnel	are attracted to your country's business environment	3.72 Survey [0..10]	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
▷ 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 [0..10]	38

### Readiness

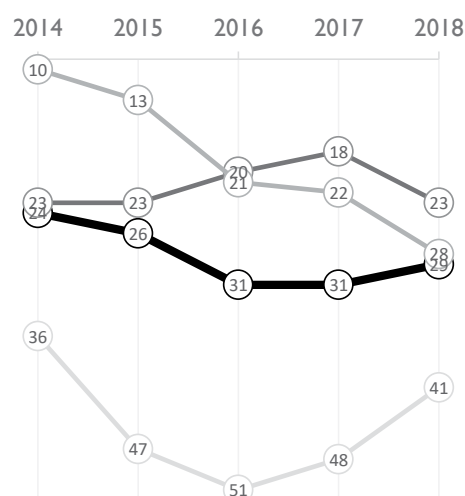
		Value	2018 Rank
Labor force growth	Percentage change	0.62 %	35
▶ Skilled labor	is readily available	6.10 Survey [0..10]	21
Finance skills	are readily available	5.87 Survey [0..10]	43
▷ International experience	of senior managers is generally significant	4.68 Survey [0..10]	52
Competent senior managers	are readily available	5.73 Survey [0..10]	30
Educational system	The educational system meets the needs of a competitive economy	6.33 Survey [0..10]	25
Science in schools	is sufficiently emphasized	5.45 Survey [0..10]	38
University education	meets the needs of a competitive economy	6.26 Survey [0..10]	25
Management education	meets the needs of the business community	6.04 Survey [0..10]	32
Language skills	are meeting the needs of enterprises	4.63 Survey [0..10]	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

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	2018 Rank
▶ 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 [0..10]	10
▶ Employee training	is a high priority in companies	7.09 Survey [0..10]	6
Female labor force	Percentage of total labor force	43.70 %	45
Health infrastructure	meets the needs of society	7.95 Survey [0..10]	12

### 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)	109.60 index	60
▶ Attracting and retaining talents	is a priority in companies	7.65 Survey [0..10]	9
Worker motivation	in companies is high	6.85 Survey [0..10]	15
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	5.20 Survey [0..10]	27
Quality of life	is high	7.92 Survey [0..10]	26
Foreign highly-skilled personnel	are attracted to your country's business environment	3.88 Survey [0..10]	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\$	11
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 [0..10]	24

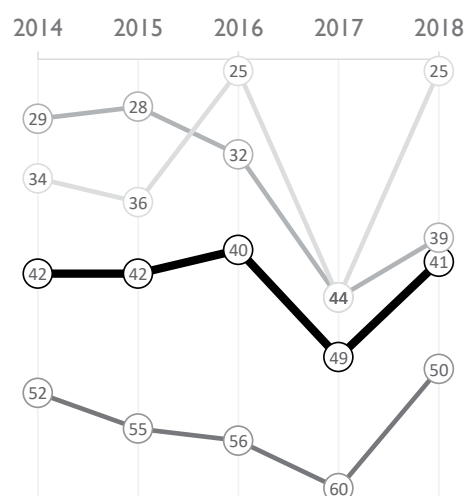
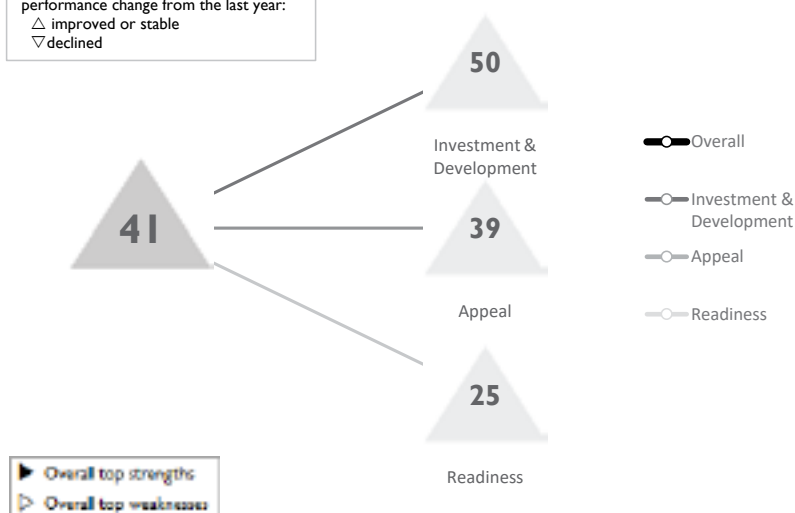
### Readiness

		Value	2018 Rank
Labor force growth	Percentage change	0.70 %	33
Skilled labor	is readily available	5.68 Survey [0..10]	30
Finance skills	are readily available	5.70 Survey [0..10]	45
▶ International experience	of senior managers is generally significant	3.67 Survey [0..10]	62
▶ Competent senior managers	are readily available	4.22 Survey [0..10]	55
Educational system	The educational system meets the needs of a competitive economy	6.25 Survey [0..10]	28
Science in schools	is sufficiently emphasized	6.38 Survey [0..10]	16
University education	meets the needs of a competitive economy	5.10 Survey [0..10]	45
Management education	meets the needs of the business community	4.70 Survey [0..10]	53
▶ Language skills	are meeting the needs of enterprises	3.24 Survey [0..10]	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

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	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
▷ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	14.59 ratio	47
Apprenticeships	are sufficiently implemented	5.24 Survey [0..10]	22
Employee training	is a high priority in companies	6.10 Survey [0..10]	22
▷ Female labor force	Percentage of total labor force	18.21 %	60
Health infrastructure	meets the needs of society	6.27 Survey [0..10]	30

### 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)	78.70 index	41
Attracting and retaining talents	is a priority in companies	6.19 Survey [0..10]	43
Worker motivation	in companies is high	5.26 Survey [0..10]	45
▷ Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	3.62 Survey [0..10]	49
Quality of life	is high	5.66 Survey [0..10]	44
Foreign highly-skilled personnel	are attracted to your country's business environment	4.89 Survey [0..10]	39
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	- US\$	-
▷ Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	52,451 US\$	57
▶ 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 [0..10]	35

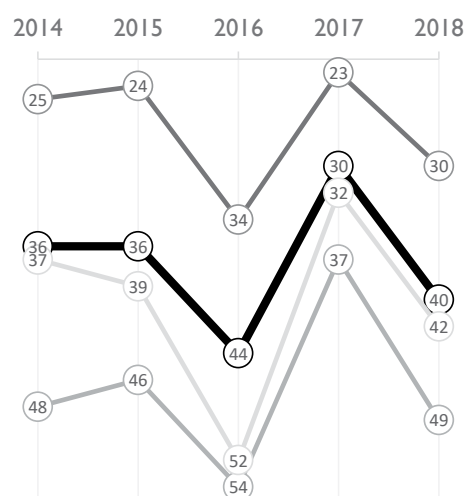
### Readiness

		Value	2018 Rank
▶ Labor force growth	Percentage change	2.86 %	10
▶ Skilled labor	is readily available	6.76 Survey [0..10]	5
Finance skills	are readily available	6.63 Survey [0..10]	27
International experience	of senior managers is generally significant	6.37 Survey [0..10]	15
▶ Competent senior managers	are readily available	6.70 Survey [0..10]	12
Educational system	The educational system meets the needs of a competitive economy	6.29 Survey [0..10]	26
Science in schools	is sufficiently emphasized	6.29 Survey [0..10]	19
University education	meets the needs of a competitive economy	6.25 Survey [0..10]	26
Management education	meets the needs of the business community	6.46 Survey [0..10]	24
Language skills	are meeting the needs of enterprises	6.80 Survey [0..10]	28
▶ Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	4.86 number	15
▷ Educational assessment - PISA	PISA survey of 15-year olds	394 Average	54

# KAZAKHSTAN

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	2018 Rank
▷ 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
▶ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	7.51 ratio	3
▶ Apprenticeships	are sufficiently implemented	5.71 Survey [0..10]	14
Employee training	is a high priority in companies	5.94 Survey [0..10]	30
▶ Female labor force	Percentage of total labor force	48.37 %	7
Health infrastructure	meets the needs of society	4.63 Survey [0..10]	41

### 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)	59.20 index	7
Attracting and retaining talents	is a priority in companies	6.08 Survey [0..10]	46
Worker motivation	in companies is high	5.44 Survey [0..10]	38
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	4.38 Survey [0..10]	38
Quality of life	is high	5.07 Survey [0..10]	48
Foreign highly-skilled personnel	are attracted to your country's business environment	5.69 Survey [0..10]	26
▷ Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	11,593 US\$	54
▷ 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 [0..10]	48

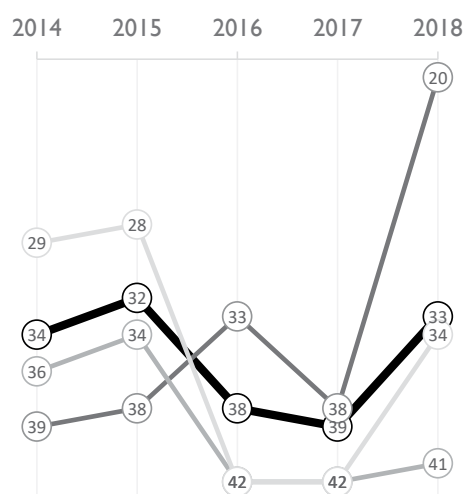
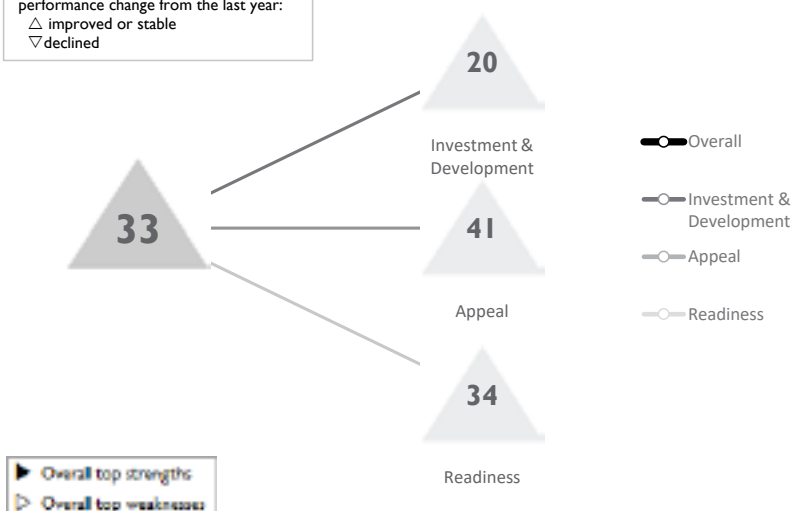
### Readiness

		Value	2018 Rank
▷ Labor force growth	Percentage change	-0.09 %	50
Skilled labor	is readily available	5.81 Survey [0..10]	27
Finance skills	are readily available	6.60 Survey [0..10]	28
International experience	of senior managers is generally significant	5.40 Survey [0..10]	30
Competent senior managers	are readily available	5.85 Survey [0..10]	28
Educational system	The educational system meets the needs of a competitive economy	4.81 Survey [0..10]	45
Science in schools	is sufficiently emphasized	5.50 Survey [0..10]	36
University education	meets the needs of a competitive economy	5.10 Survey [0..10]	44
Management education	meets the needs of the business community	5.41 Survey [0..10]	44
Language skills	are meeting the needs of enterprises	5.33 Survey [0..10]	43
▷ Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	0.71 number	50
Educational assessment - PISA	PISA survey of 15-year olds	458 Average	39

# KOREA REP.

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	2018 Rank
Total public expenditure on education	Percentage of GDP	5.1 %	27
▶ 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 [0..10]	30
Employee training	is a high priority in companies	5.68 Survey [0..10]	35
Female labor force	Percentage of total labor force	42.43 %	48
▶ Health infrastructure	meets the needs of society	7.73 Survey [0..10]	17

### 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)	105.20 index	57
Attracting and retaining talents	is a priority in companies	6.49 Survey [0..10]	36
▷ Worker motivation	in companies is high	3.95 Survey [0..10]	61
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	4.00 Survey [0..10]	43
Quality of life	is high	5.20 Survey [0..10]	47
▷ Foreign highly-skilled personnel	are attracted to your country's business environment	4.10 Survey [0..10]	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 [0..10]	41

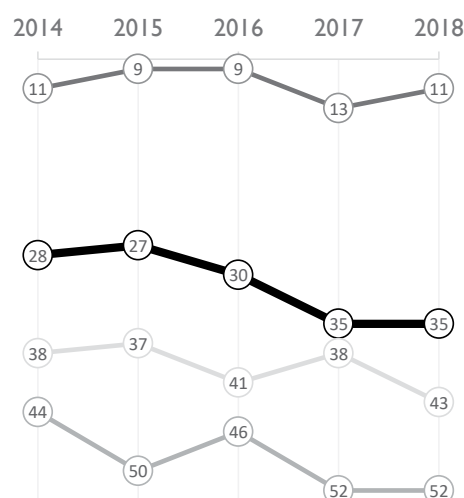
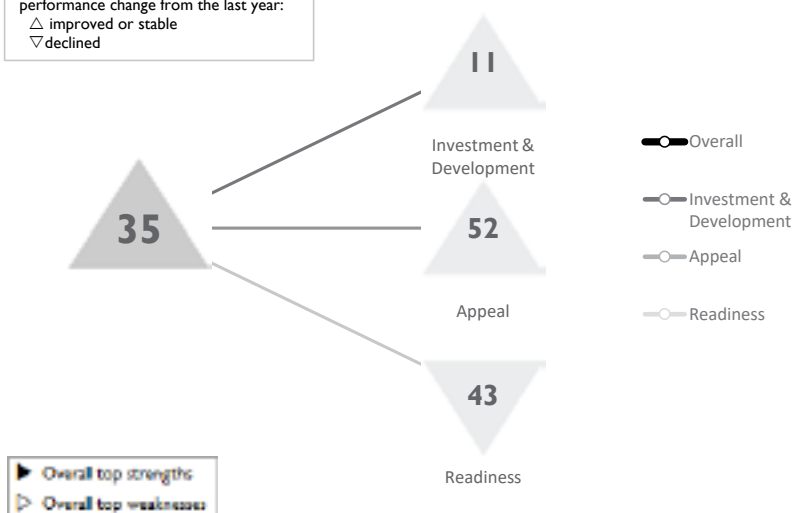
### Readiness

		Value	2018 Rank
Labor force growth	Percentage change	1.20 %	25
Skilled labor	is readily available	5.57 Survey [0..10]	37
Finance skills	are readily available	5.67 Survey [0..10]	47
International experience	of senior managers is generally significant	5.03 Survey [0..10]	45
▷ Competent senior managers	are readily available	4.96 Survey [0..10]	48
Educational system	The educational system meets the needs of a competitive economy	5.16 Survey [0..10]	38
Science in schools	is sufficiently emphasized	5.63 Survey [0..10]	31
▷ University education	meets the needs of a competitive economy	4.84 Survey [0..10]	49
Management education	meets the needs of the business community	5.14 Survey [0..10]	47
Language skills	are meeting the needs of enterprises	6.00 Survey [0..10]	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

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	2018 Rank
Total public expenditure on education	Percentage of GDP	5.3 %	22
▶ Gov. expenditure on education per student	Percentage of GDP per capita (secondary education)	24.1 %	15
▶ Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	11.60 ratio	10
▶ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	8.67 ratio	6
▶ Apprenticeships	are sufficiently implemented	5.58 Survey [0..10]	16
Employee training	is a high priority in companies	5.74 Survey [0..10]	33
▶ Female labor force	Percentage of total labor force	50.15 %	2
▷ Health infrastructure	meets the needs of society	3.53 Survey [0..10]	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 [0..10]	30
Worker motivation	in companies is high	5.67 Survey [0..10]	36
▷ Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	3.29 Survey [0..10]	54
Quality of life	is high	5.88 Survey [0..10]	41
Foreign highly-skilled personnel	are attracted to your country's business environment	4.21 Survey [0..10]	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
▷ 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 [0..10]	39

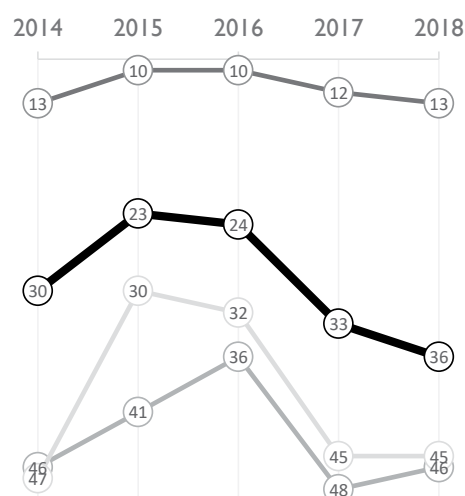
### Readiness

		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

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	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
▶ Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	10.26 ratio	2
▶ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	7.89 ratio	4
▶ Apprenticeships	are sufficiently implemented	5.39 Survey [0..10]	17
Employee training	is a high priority in companies	6.09 Survey [0..10]	23
▶ Female labor force	Percentage of total labor force	50.52 %	1
Health infrastructure	meets the needs of society	5.58 Survey [0..10]	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 [0..10]	39
Worker motivation	in companies is high	5.58 Survey [0..10]	37
▷ Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	3.36 Survey [0..10]	53
Quality of life	is high	6.52 Survey [0..10]	34
Foreign highly-skilled personnel	are attracted to your country's business environment	4.18 Survey [0..10]	47
▷ 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 [0..10]	34

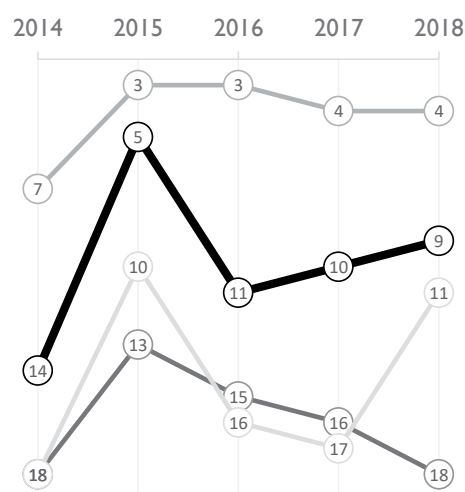
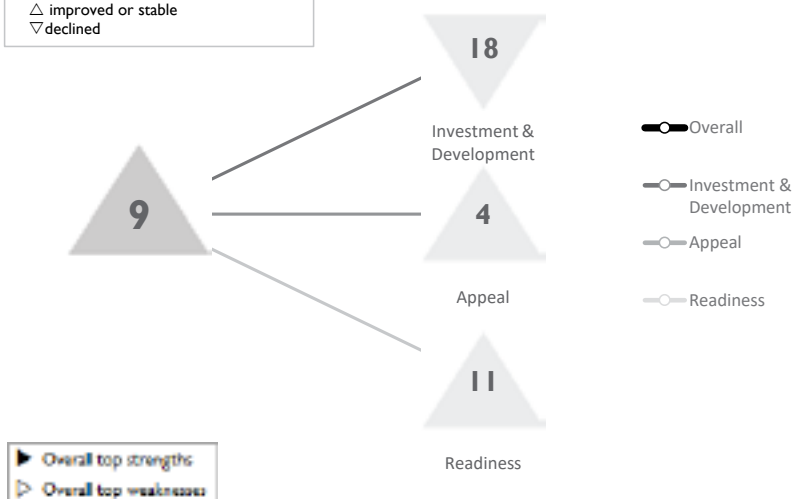
### Readiness

		Value	2018 Rank
▷ Labor force growth	Percentage change	-1.33 %	62
Skilled labor	is readily available	5.51 Survey [0..10]	39
▷ Finance skills	are readily available	5.52 Survey [0..10]	48
International experience	of senior managers is generally significant	5.70 Survey [0..10]	25
Competent senior managers	are readily available	5.61 Survey [0..10]	32
Educational system	The educational system meets the needs of a competitive economy	5.09 Survey [0..10]	39
▷ Science in schools	is sufficiently emphasized	4.21 Survey [0..10]	48
University education	meets the needs of a competitive economy	5.27 Survey [0..10]	39
Management education	meets the needs of the business community	5.82 Survey [0..10]	40
Language skills	are meeting the needs of enterprises	7.48 Survey [0..10]	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

# LUXEMBOURG

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	2018 Rank
▷ Total public expenditure on education	Percentage of GDP	3.9 %	42
▷ Gov. expenditure on education per student	Percentage of GDP per capita (secondary education)	20.0 %	34
► 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 [0..10]	13
Employee training	is a high priority in companies	6.94 Survey [0..10]	7
▷ Female labor force	Percentage of total labor force	40.64 %	50
Health infrastructure	meets the needs of society	7.94 Survey [0..10]	13

### 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
Attracting and retaining talents	is a priority in companies	7.57 Survey [0..10]	11
Worker motivation	in companies is high	6.84 Survey [0..10]	16
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	6.61 Survey [0..10]	7
Quality of life	is high	9.03 Survey [0..10]	11
Foreign highly-skilled personnel	are attracted to your country's business environment	7.91 Survey [0..10]	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 [0..10]	18

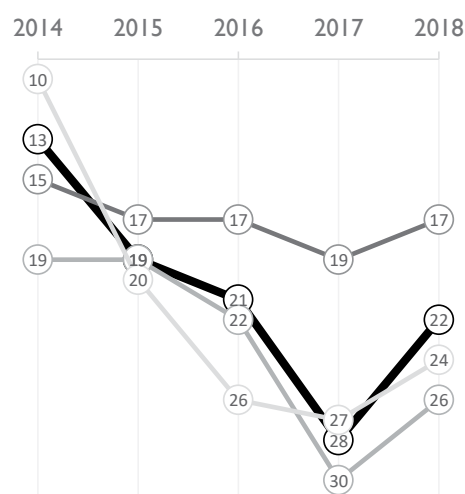
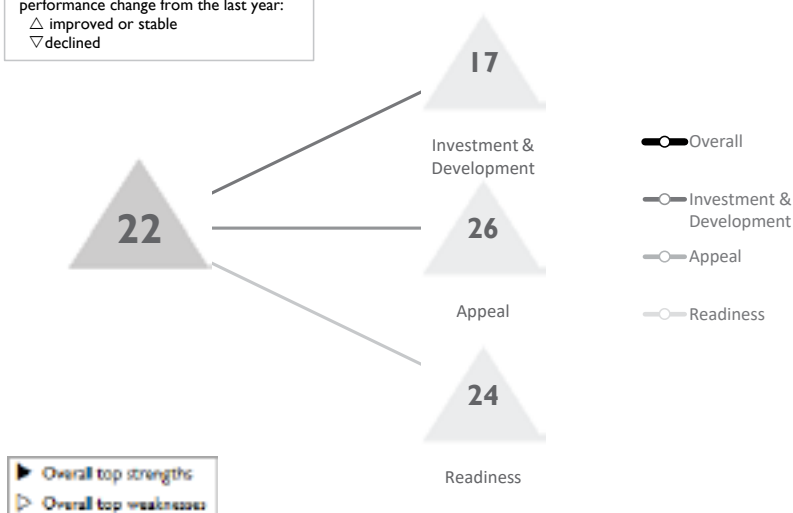
### Readiness

		Value	2018 Rank
► Labor force growth	Percentage change	4.64 %	2
▷ 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	6.51 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

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	2018 Rank
Total public expenditure on education	Percentage of GDP	4.5 %	31
Gov. expenditure on education per student	Percentage of GDP per capita (secondary education)	21.5 %	31
▶ Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	11.50 ratio	9
Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	11.99 ratio	25
▶ Apprenticeships	are sufficiently implemented	6.23 Survey [0..10]	6
▶ Employee training	is a high priority in companies	6.90 Survey [0..10]	8
▷ Female labor force	Percentage of total labor force	38.50 %	53
Health infrastructure	meets the needs of society	6.87 Survey [0..10]	25

### 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 [0..10]	25
Worker motivation	in companies is high	6.72 Survey [0..10]	17
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	5.73 Survey [0..10]	21
Quality of life	is high	6.72 Survey [0..10]	33
Foreign highly-skilled personnel	are attracted to your country's business environment	6.28 Survey [0..10]	17
▷ Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	11,436 US\$	55
▷ 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
▷ Personal security and private property rights	are adequately protected	6.50 Survey [0..10]	37

### Readiness

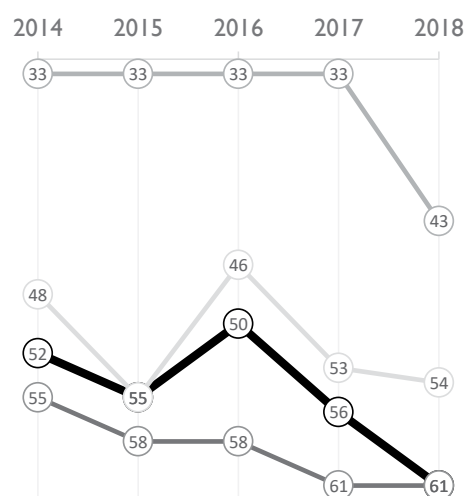
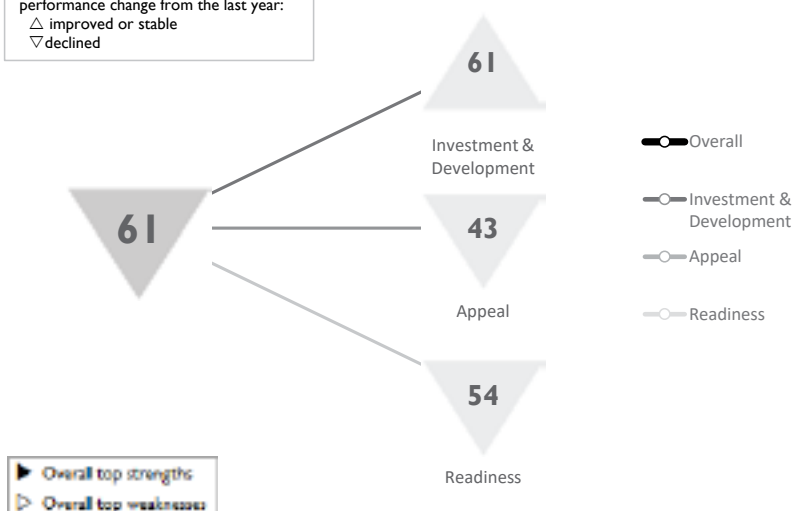
		Value	2018 Rank
Labor force growth	Percentage change	1.94 %	17
Skilled labor	is readily available	6.45 Survey [0..10]	11
Finance skills	are readily available	6.80 Survey [0..10]	21
▶ International experience	of senior managers is generally significant	6.62 Survey [0..10]	11
Competent senior managers	are readily available	6.50 Survey [0..10]	14
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

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	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
▷ Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	26.93 ratio	58
▷ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	26.96 ratio	59
Apprenticeships	are sufficiently implemented	4.28 Survey [0..10]	45
Employee training	is a high priority in companies	4.97 Survey [0..10]	54
Female labor force	Percentage of total labor force	38.26 %	54
Health infrastructure	meets the needs of society	3.41 Survey [0..10]	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
▷ Attracting and retaining talents	is a priority in companies	5.20 Survey [0..10]	60
Worker motivation	in companies is high	5.35 Survey [0..10]	41
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	3.94 Survey [0..10]	44
Quality of life	is high	4.94 Survey [0..10]	49
▶ Foreign highly-skilled personnel	are attracted to your country's business environment	5.49 Survey [0..10]	31
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	11,901 US\$	53
▶ Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	193,556 US\$	22
▶ Effective personal income tax rate	Percentage of an income equal to GDP per capita	14.09 %	24
▷ Personal security and private property rights	are adequately protected	2.99 Survey [0..10]	60

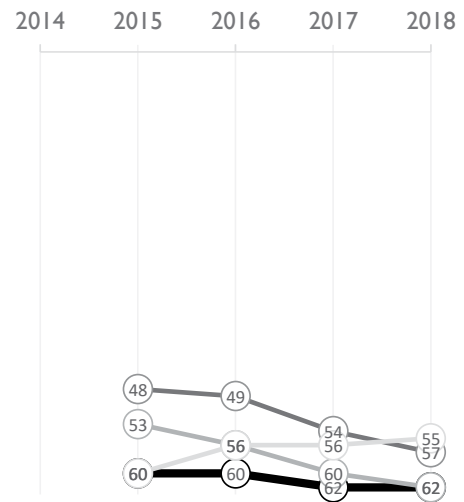
### Readiness

		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
▷ 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

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	2018 Rank
▶ 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 [0..10]	57
▶ Employee training	is a high priority in companies	5.97 Survey [0..10]	28
▶ Female labor force	Percentage of total labor force	47.08 %	18
Health infrastructure	meets the needs of society	2.22 Survey [0..10]	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 [0..10]	26
Worker motivation	in companies is high	4.06 Survey [0..10]	59
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	3.42 Survey [0..10]	52
▷ Quality of life	is high	2.61 Survey [0..10]	62
Foreign highly-skilled personnel	are attracted to your country's business environment	2.91 Survey [0..10]	58
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	5,117 US\$	60
▷ Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	6,084 US\$	63
▷ Effective personal income tax rate	Percentage of an income equal to GDP per capita	30.00 %	63
Personal security and private property rights	are adequately protected	4.12 Survey [0..10]	55

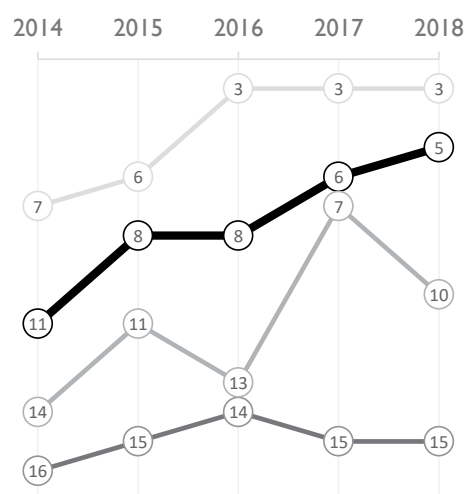
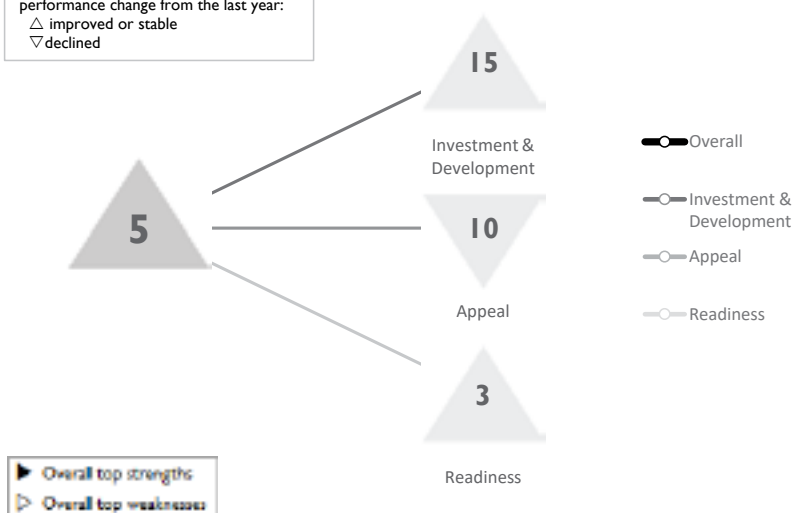
### Readiness

		Value	2018 Rank
▶ Labor force growth	Percentage change	10.28 %	1
Skilled labor	is readily available	3.23 Survey [0..10]	59
▷ Finance skills	are readily available	3.94 Survey [0..10]	61
International experience	of senior managers is generally significant	4.00 Survey [0..10]	57
Competent senior managers	are readily available	3.18 Survey [0..10]	61
Educational system	The educational system meets the needs of a competitive economy	3.08 Survey [0..10]	56
Science in schools	is sufficiently emphasized	3.60 Survey [0..10]	52
▷ University education	meets the needs of a competitive economy	2.56 Survey [0..10]	62
Management education	meets the needs of the business community	3.66 Survey [0..10]	61
Language skills	are meeting the needs of enterprises	4.82 Survey [0..10]	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

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	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)	- %	-
▷ Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	16.55 ratio	37
▷ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	16.97 ratio	53
Apprenticeships	are sufficiently implemented	6.42 Survey [0..10]	5
Employee training	is a high priority in companies	6.87 Survey [0..10]	9
Female labor force	Percentage of total labor force	46.54 %	25
Health infrastructure	meets the needs of society	8.51 Survey [0..10]	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 [0..10]	7
Worker motivation	in companies is high	7.43 Survey [0..10]	6
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	6.95 Survey [0..10]	5
► Quality of life	is high	9.65 Survey [0..10]	4
Foreign highly-skilled personnel	are attracted to your country's business environment	7.83 Survey [0..10]	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
▷ 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 [0..10]	7

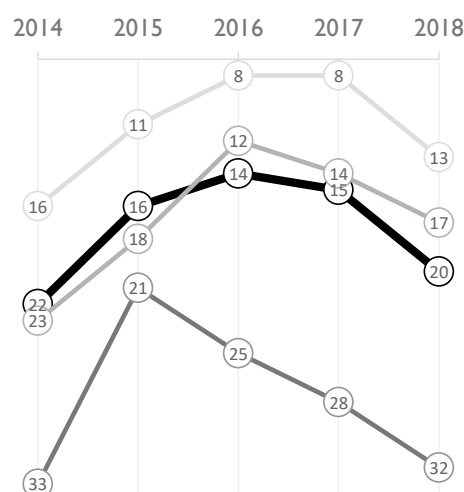
### Readiness

		Value	2018 Rank
Labor force growth	Percentage change	0.86 %	29
Skilled labor	is readily available	6.52 Survey [0..10]	9
Finance skills	are readily available	7.68 Survey [0..10]	5
► International experience	of senior managers is generally significant	7.36 Survey [0..10]	4
Competent senior managers	are readily available	6.99 Survey [0..10]	4
► Educational system	The educational system meets the needs of a competitive economy	8.48 Survey [0..10]	3
Science in schools	is sufficiently emphasized	7.29 Survey [0..10]	6
► University education	meets the needs of a competitive economy	8.36 Survey [0..10]	2
Management education	meets the needs of the business community	7.89 Survey [0..10]	5
► Language skills	are meeting the needs of enterprises	9.07 Survey [0..10]	1
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	5.28 number	11
Educational assessment - PISA	PISA survey of 15-year olds	510 Average	12

# NEW ZEALAND

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	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
▷ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	14.42 ratio	46
Apprenticeships	are sufficiently implemented	4.44 Survey [0..10]	39
▷ Employee training	is a high priority in companies	5.33 Survey [0..10]	44
Female labor force	Percentage of total labor force	47.34 %	14
Health infrastructure	meets the needs of society	5.88 Survey [0..10]	35

### 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)	78.00 index	40
Attracting and retaining talents	is a priority in companies	7.26 Survey [0..10]	19
Worker motivation	in companies is high	6.60 Survey [0..10]	19
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	5.01 Survey [0..10]	32
Quality of life	is high	8.70 Survey [0..10]	15
▶ Foreign highly-skilled personnel	are attracted to your country's business environment	6.99 Survey [0..10]	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 [0..10]	13

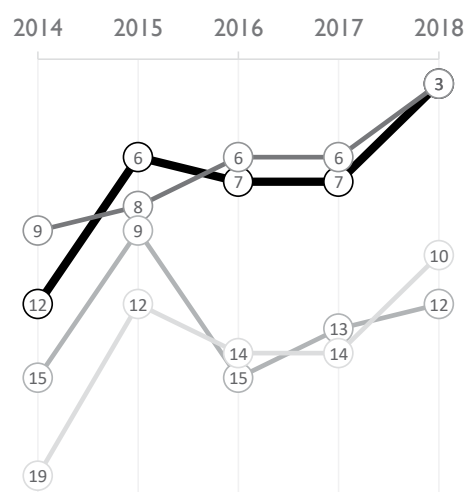
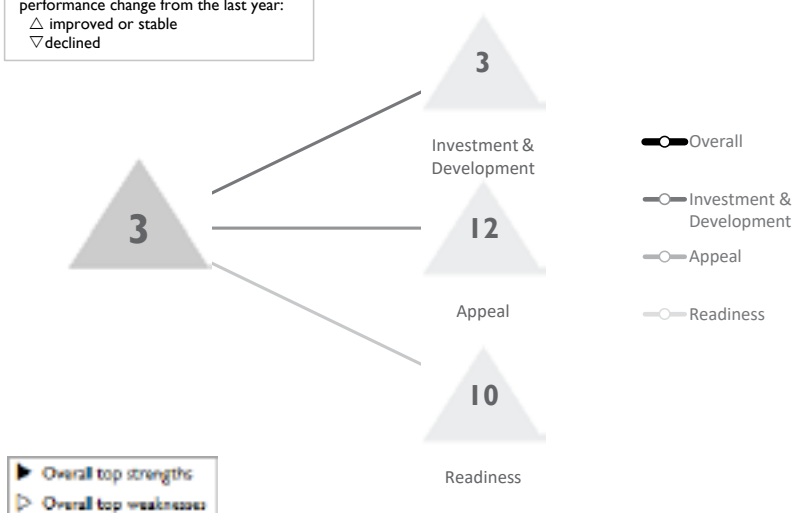
### Readiness

		Value	2018 Rank
▶ Labor force growth	Percentage change	3.71 %	3
▷ Skilled labor	is readily available	4.41 Survey [0..10]	50
Finance skills	are readily available	6.28 Survey [0..10]	32
International experience	of senior managers is generally significant	5.26 Survey [0..10]	35
Competent senior managers	are readily available	5.58 Survey [0..10]	34
Educational system	The educational system meets the needs of a competitive economy	7.01 Survey [0..10]	14
Science in schools	is sufficiently emphasized	5.55 Survey [0..10]	34
University education	meets the needs of a competitive economy	6.72 Survey [0..10]	23
Management education	meets the needs of the business community	6.12 Survey [0..10]	30
▷ Language skills	are meeting the needs of enterprises	5.44 Survey [0..10]	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

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	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	11
Apprenticeships	are sufficiently implemented	6.16 Survey [0..10]	7
Employee training	is a high priority in companies	7.20 Survey [0..10]	5
Female labor force	Percentage of total labor force	47.13 %	17
Health infrastructure	meets the needs of society	8.79 Survey [0..10]	2

### 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)	81.10 index	44
Attracting and retaining talents	is a priority in companies	7.78 Survey [0..10]	6
Worker motivation	in companies is high	7.87 Survey [0..10]	2
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	8.35 Survey [0..10]	1
Quality of life	is high	9.70 Survey [0..10]	2
Foreign highly-skilled personnel	are attracted to your country's business environment	6.08 Survey [0..10]	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 [0..10]	5

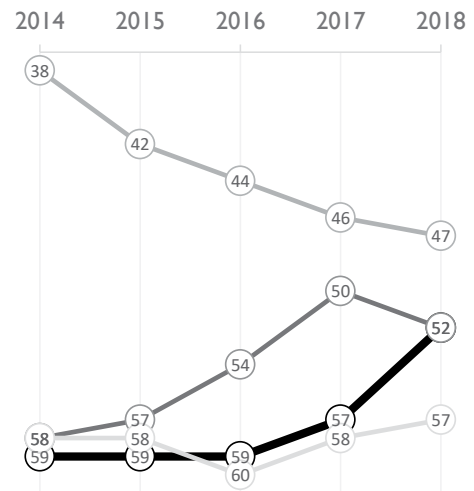
### Readiness

		Value	2018 Rank
Labor force growth	Percentage change	-0.32 %	52
Skilled labor	is readily available	7.49 Survey [0..10]	1
Finance skills	are readily available	8.35 Survey [0..10]	1
International experience	of senior managers is generally significant	5.31 Survey [0..10]	34
Competent senior managers	are readily available	7.01 Survey [0..10]	3
Educational system	The educational system meets the needs of a competitive economy	8.24 Survey [0..10]	6
Science in schools	is sufficiently emphasized	6.83 Survey [0..10]	9
University education	meets the needs of a competitive economy	8.03 Survey [0..10]	8
Management education	meets the needs of the business community	8.08 Survey [0..10]	3
Language skills	are meeting the needs of enterprises	8.35 Survey [0..10]	9
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	2.07 number	32
Educational assessment - PISA	PISA survey of 15-year olds	500 Average	21

# PERU

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	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 [0..10]	49
Employee training	is a high priority in companies	4.42 Survey [0..10]	62
Female labor force	Percentage of total labor force	44.01 %	43
Health infrastructure	meets the needs of society	2.53 Survey [0..10]	55

### 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)	70.70 index	26
Attracting and retaining talents	is a priority in companies	5.25 Survey [0..10]	59
Worker motivation	in companies is high	5.20 Survey [0..10]	47
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	4.59 Survey [0..10]	36
Quality of life	is high	4.50 Survey [0..10]	55
Foreign highly-skilled personnel	are attracted to your country's business environment	5.67 Survey [0..10]	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 [0..10]	54

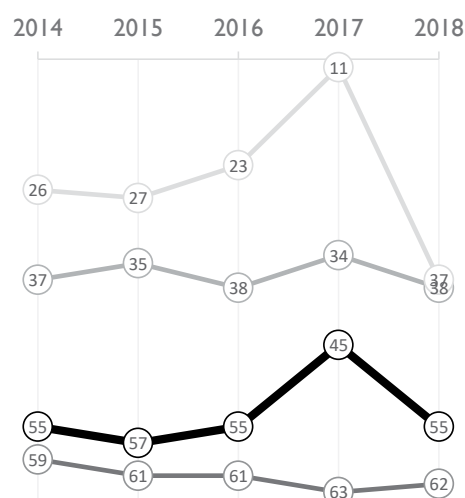
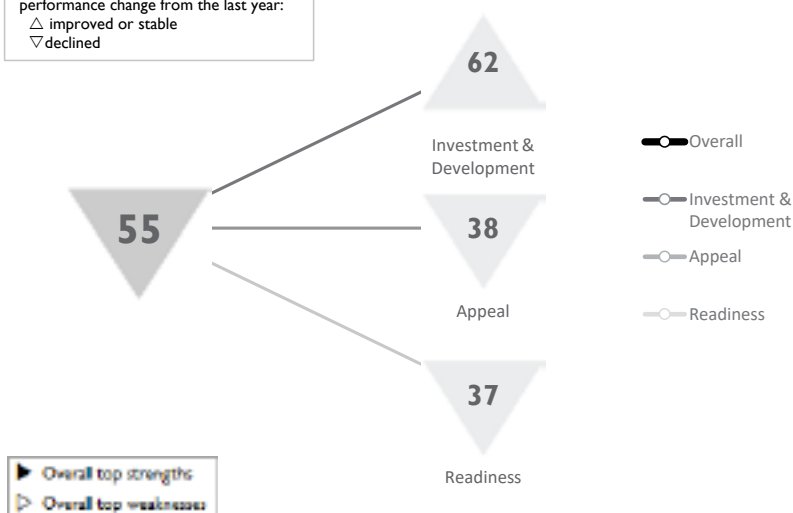
### Readiness

		Value	2018 Rank
Labor force growth	Percentage change	2.11 %	13
Skilled labor	is readily available	3.91 Survey [0..10]	54
Finance skills	are readily available	5.18 Survey [0..10]	51
International experience	of senior managers is generally significant	5.72 Survey [0..10]	24
Competent senior managers	are readily available	5.20 Survey [0..10]	41
Educational system	The educational system meets the needs of a competitive economy	2.88 Survey [0..10]	57
Science in schools	is sufficiently emphasized	2.87 Survey [0..10]	58
University education	meets the needs of a competitive economy	3.72 Survey [0..10]	57
Management education	meets the needs of the business community	4.61 Survey [0..10]	54
Language skills	are meeting the needs of enterprises	3.91 Survey [0..10]	56
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	- number	-
Educational assessment - PISA	PISA survey of 15-year olds	392 Average	55

# PHILIPPINES

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	2018 Rank
▷ 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
▷ Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	31.83 ratio	61
▷ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	26.98 ratio	60
Apprenticeships	are sufficiently implemented	4.40 Survey [0..10]	40
▶ Employee training	is a high priority in companies	6.13 Survey [0..10]	21
Female labor force	Percentage of total labor force	37.66 %	56
Health infrastructure	meets the needs of society	3.81 Survey [0..10]	48

### 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)	72.10 index	29
Attracting and retaining talents	is a priority in companies	6.63 Survey [0..10]	31
Worker motivation	in companies is high	6.11 Survey [0..10]	30
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	3.77 Survey [0..10]	46
Quality of life	is high	4.74 Survey [0..10]	50
Foreign highly-skilled personnel	are attracted to your country's business environment	5.21 Survey [0..10]	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 [0..10]	50

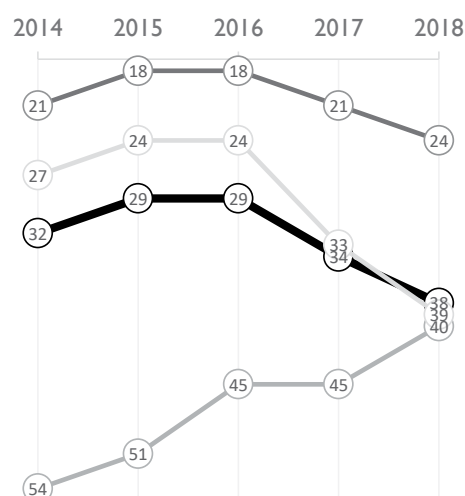
### Readiness

		Value	2018 Rank
▷ Labor force growth	Percentage change	-1.35 %	63
▶ Skilled labor	is readily available	6.70 Survey [0..10]	7
Finance skills	are readily available	6.55 Survey [0..10]	30
International experience	of senior managers is generally significant	5.45 Survey [0..10]	29
▶ Competent senior managers	are readily available	6.02 Survey [0..10]	23
Educational system	The educational system meets the needs of a competitive economy	5.24 Survey [0..10]	37
Science in schools	is sufficiently emphasized	4.74 Survey [0..10]	43
University education	meets the needs of a competitive economy	5.52 Survey [0..10]	37
Management education	meets the needs of the business community	5.79 Survey [0..10]	41
▶ Language skills	are meeting the needs of enterprises	7.41 Survey [0..10]	20
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	- number	-
Educational assessment - PISA	PISA survey of 15-year olds	- Average	-

# POLAND

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	2018 Rank
▶ 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
▶ Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	11.09 ratio	7
▶ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	9.98 ratio	12
Apprenticeships	are sufficiently implemented	4.65 Survey [0..10]	31
Employee training	is a high priority in companies	5.63 Survey [0..10]	36
Female labor force	Percentage of total labor force	45.05 %	38
▷ Health infrastructure	meets the needs of society	3.02 Survey [0..10]	54

### 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)	56.80 index	4
▷ Attracting and retaining talents	is a priority in companies	5.96 Survey [0..10]	51
Worker motivation	in companies is high	6.41 Survey [0..10]	24
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	4.16 Survey [0..10]	42
Quality of life	is high	6.08 Survey [0..10]	39
Foreign highly-skilled personnel	are attracted to your country's business environment	4.29 Survey [0..10]	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
▷ 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 [0..10]	46

### Readiness

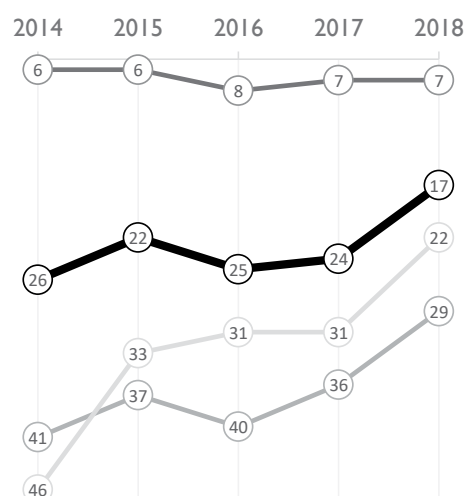
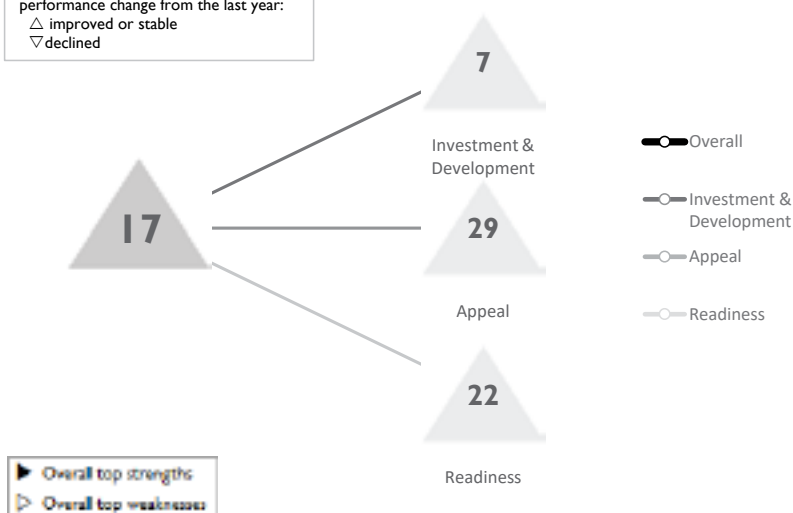
		Value	2018 Rank
▷ Labor force growth	Percentage change	-0.51 %	57
Skilled labor	is readily available	5.00 Survey [0..10]	44
Finance skills	are readily available	6.00 Survey [0..10]	39
▷ International experience	of senior managers is generally significant	4.86 Survey [0..10]	49
Competent senior managers	are readily available	5.10 Survey [0..10]	45
Educational system	The educational system meets the needs of a competitive economy	5.06 Survey [0..10]	40
Science in schools	is sufficiently emphasized	5.29 Survey [0..10]	39
University education	meets the needs of a competitive economy	5.22 Survey [0..10]	40
Management education	meets the needs of the business community	5.76 Survey [0..10]	42
Language skills	are meeting the needs of enterprises	7.06 Survey [0..10]	25
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	1.42 number	39
▶ Educational assessment - PISA	PISA survey of 15-year olds	503 Average	18



# PORTUGAL

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	2018 Rank
Total public expenditure on education	Percentage of GDP	6.0 %	13
▶ 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 [0..10]	24
▷ Employee training	is a high priority in companies	5.16 Survey [0..10]	48
▶ Female labor force	Percentage of total labor force	48.91 %	5
Health infrastructure	meets the needs of society	7.08 Survey [0..10]	22

### 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)	65.30 index	19
Attracting and retaining talents	is a priority in companies	6.58 Survey [0..10]	33
Worker motivation	in companies is high	5.86 Survey [0..10]	33
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	5.14 Survey [0..10]	29
Quality of life	is high	8.25 Survey [0..10]	21
Foreign highly-skilled personnel	are attracted to your country's business environment	6.07 Survey [0..10]	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 [0..10]	16

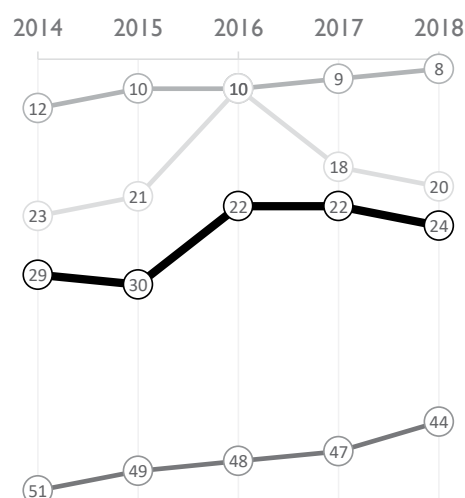
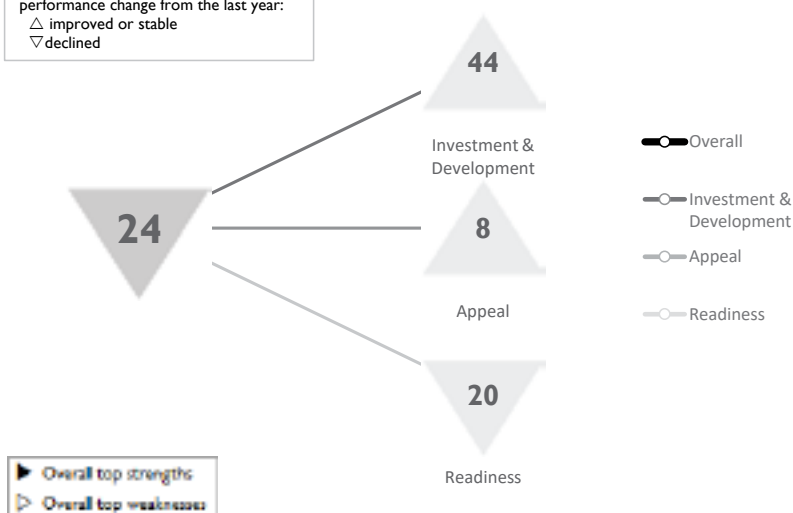
### Readiness

		Value	2018 Rank
Labor force growth	Percentage change	0.79 %	31
▶ Skilled labor	is readily available	6.54 Survey [0..10]	8
Finance skills	are readily available	6.70 Survey [0..10]	25
▷ International experience	of senior managers is generally significant	5.12 Survey [0..10]	38
Competent senior managers	are readily available	5.64 Survey [0..10]	31
Educational system	The educational system meets the needs of a competitive economy	7.07 Survey [0..10]	13
Science in schools	is sufficiently emphasized	6.43 Survey [0..10]	14
University education	meets the needs of a competitive economy	7.45 Survey [0..10]	14
▶ Management education	meets the needs of the business community	7.55 Survey [0..10]	8
▶ Language skills	are meeting the needs of enterprises	8.52 Survey [0..10]	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

# QATAR

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	2018 Rank
▷ 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 [0..10]	12
Employee training	is a high priority in companies	6.28 Survey [0..10]	19
▷ Female labor force	Percentage of total labor force	13.49 %	62
Health infrastructure	meets the needs of society	7.74 Survey [0..10]	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 [0..10]	28
Worker motivation	in companies is high	6.52 Survey [0..10]	22
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	5.94 Survey [0..10]	19
Quality of life	is high	8.20 Survey [0..10]	22
Foreign highly-skilled personnel	are attracted to your country's business environment	7.36 Survey [0..10]	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 %	1
Personal security and private property rights	are adequately protected	8.61 Survey [0..10]	10

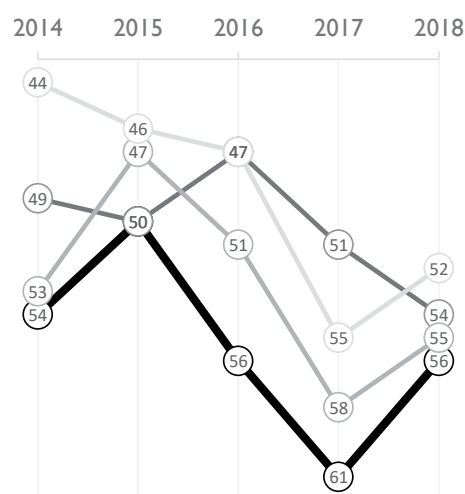
### Readiness

		Value	2018 Rank
▷ Labor force growth	Percentage change	0.10 %	45
Skilled labor	is readily available	5.93 Survey [0..10]	25
Finance skills	are readily available	6.85 Survey [0..10]	19
▶ International experience	of senior managers is generally significant	7.33 Survey [0..10]	5
Competent senior managers	are readily available	6.76 Survey [0..10]	11
▶ Educational system	The educational system meets the needs of a competitive economy	8.03 Survey [0..10]	8
▶ Science in schools	is sufficiently emphasized	7.65 Survey [0..10]	4
▶ University education	meets the needs of a competitive economy	7.80 Survey [0..10]	10
Management education	meets the needs of the business community	7.51 Survey [0..10]	10
Language skills	are meeting the needs of enterprises	7.70 Survey [0..10]	18
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	4.12 number	19
▷ Educational assessment - PISA	PISA survey of 15-year olds	410 Average	51

# ROMANIA

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	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
▶ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	12.10 ratio	27
▷ Apprenticeships	are sufficiently implemented	2.33 Survey [0..10]	63
Employee training	is a high priority in companies	5.00 Survey [0..10]	52
▶ Female labor force	Percentage of total labor force	43.36 %	46
▷ Health infrastructure	meets the needs of society	2.07 Survey [0..10]	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 [0..10]	56
Worker motivation	in companies is high	4.63 Survey [0..10]	54
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	2.83 Survey [0..10]	56
▷ Quality of life	is high	3.70 Survey [0..10]	60
Foreign highly-skilled personnel	are attracted to your country's business environment	4.30 Survey [0..10]	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 [0..10]	45

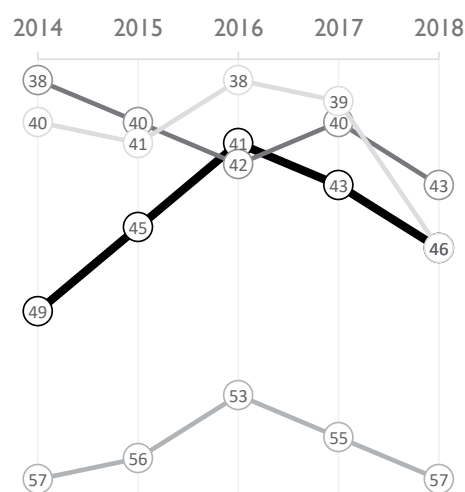
### Readiness

		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
▷ University education	meets the needs of a competitive economy	3.43 Survey [0..10]	59
▷ 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	1.31 number	40
Educational assessment - PISA	PISA survey of 15-year olds	439 Average	43

# RUSSIA

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	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 [0..10]	41
Employee training	is a high priority in companies	5.40 Survey [0..10]	41
▶ Female labor force	Percentage of total labor force	48.92 %	4
Health infrastructure	meets the needs of society	3.74 Survey [0..10]	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 [0..10]	54
Worker motivation	in companies is high	4.75 Survey [0..10]	53
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	3.64 Survey [0..10]	48
▷ Quality of life	is high	3.87 Survey [0..10]	59
Foreign highly-skilled personnel	are attracted to your country's business environment	4.10 Survey [0..10]	48
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	12,950 US\$	45
▷ 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
▷ Personal security and private property rights	are adequately protected	4.03 Survey [0..10]	56

### Readiness

		Value	2018 Rank
▷ Labor force growth	Percentage change	-0.44 %	56
▶ Skilled labor	is readily available	6.13 Survey [0..10]	17
Finance skills	are readily available	6.18 Survey [0..10]	37
▷ International experience	of senior managers is generally significant	3.84 Survey [0..10]	59
Competent senior managers	are readily available	4.84 Survey [0..10]	50
Educational system	The educational system meets the needs of a competitive economy	4.82 Survey [0..10]	44
Science in schools	is sufficiently emphasized	5.58 Survey [0..10]	33
University education	meets the needs of a competitive economy	4.92 Survey [0..10]	48
Management education	meets the needs of the business community	4.88 Survey [0..10]	49
Language skills	are meeting the needs of enterprises	4.26 Survey [0..10]	53
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	1.66 number	36
▶ Educational assessment - PISA	PISA survey of 15-year olds	490 Average	27

# SAUDI ARABIA

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	2018 Rank
▶ Total public expenditure on education	Percentage of GDP	7.9 %	1
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 [0..10]	29
Employee training	is a high priority in companies	5.42 Survey [0..10]	39
▷ Female labor force	Percentage of total labor force	14.65 %	61
Health infrastructure	meets the needs of society	5.93 Survey [0..10]	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 [0..10]	44
Worker motivation	in companies is high	5.23 Survey [0..10]	46
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	5.07 Survey [0..10]	30
Quality of life	is high	5.95 Survey [0..10]	40
Foreign highly-skilled personnel	are attracted to your country's business environment	5.95 Survey [0..10]	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 [0..10]	31

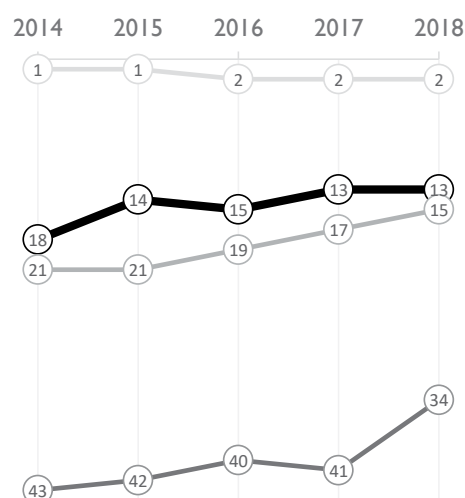
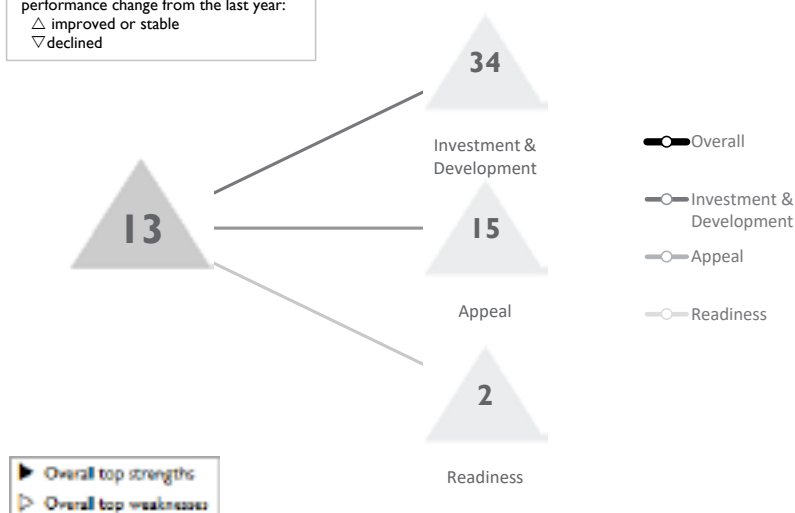
### Readiness

		Value	2018 Rank
▶ Labor force growth	Percentage change	3.12 %	8
▷ Skilled labor	is readily available	4.40 Survey [0..10]	51
▷ Finance skills	are readily available	5.05 Survey [0..10]	54
International experience	of senior managers is generally significant	5.64 Survey [0..10]	26
Competent senior managers	are readily available	5.21 Survey [0..10]	40
▷ Educational system	The educational system meets the needs of a competitive economy	4.12 Survey [0..10]	49
Science in schools	is sufficiently emphasized	4.62 Survey [0..10]	44
▷ University education	meets the needs of a competitive economy	4.77 Survey [0..10]	51
Management education	meets the needs of the business community	5.38 Survey [0..10]	45
Language skills	are meeting the needs of enterprises	5.38 Survey [0..10]	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

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	2018 Rank
▷ 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 [0..10]	25
Employee training	is a high priority in companies	6.24 Survey [0..10]	20
Female labor force	Percentage of total labor force	45.43 %	36
Health infrastructure	meets the needs of society	8.03 Survey [0..10]	11

### 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)	105.80 index	58
Attracting and retaining talents	is a priority in companies	7.13 Survey [0..10]	23
Worker motivation	in companies is high	6.44 Survey [0..10]	23
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	6.18 Survey [0..10]	12
Quality of life	is high	8.62 Survey [0..10]	18
▶ Foreign highly-skilled personnel	are attracted to your country's business environment	8.24 Survey [0..10]	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
▷ 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 [0..10]	6

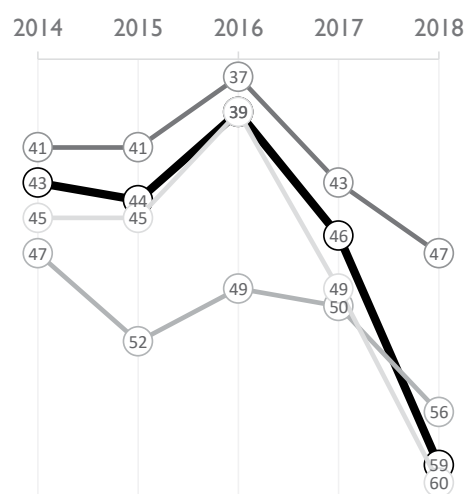
### Readiness

		Value	2018 Rank
▷ 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
▶ Science in schools	is sufficiently emphasized	8.39 Survey [0..10]	1
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	1

# SLOVAK REPUBLIC

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	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
▶ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	12.41 ratio	32
▷ Apprenticeships	are sufficiently implemented	2.54 Survey [0..10]	62
Employee training	is a high priority in companies	5.05 Survey [0..10]	50
▶ Female labor force	Percentage of total labor force	45.23 %	37
Health infrastructure	meets the needs of society	2.32 Survey [0..10]	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 [0..10]	62
Worker motivation	in companies is high	4.22 Survey [0..10]	58
▷ Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	1.66 Survey [0..10]	62
Quality of life	is high	4.56 Survey [0..10]	53
Foreign highly-skilled personnel	are attracted to your country's business environment	2.32 Survey [0..10]	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 [0..10]	61

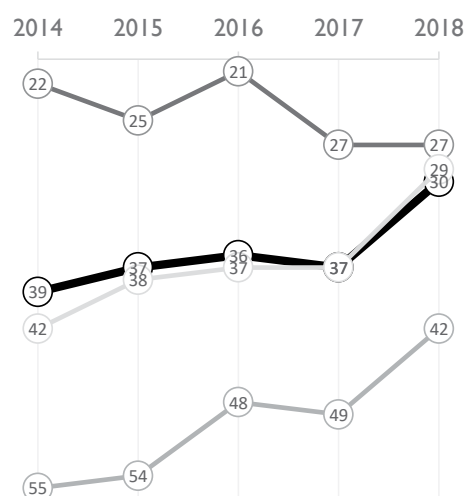
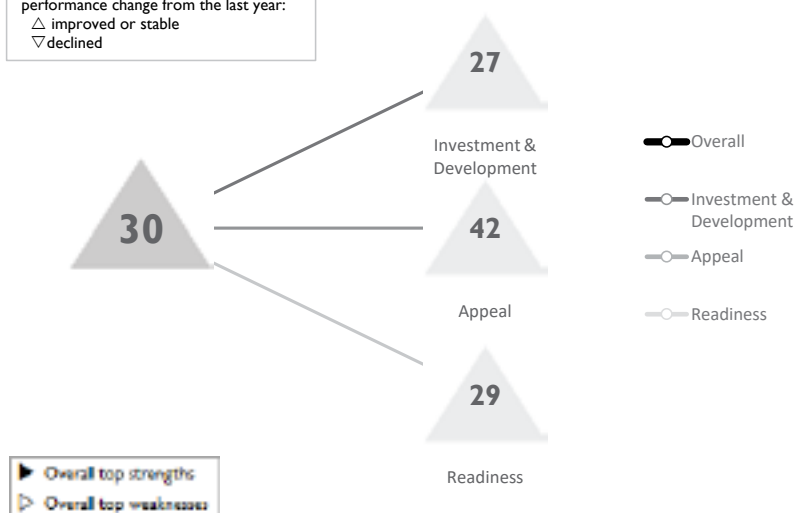
### Readiness

		Value	2018 Rank
Labor force growth	Percentage change	-0.07 %	48
▷ Skilled labor	is readily available	3.05 Survey [0..10]	62
Finance skills	are readily available	4.81 Survey [0..10]	57
International experience	of senior managers is generally significant	4.00 Survey [0..10]	57
▷ Competent senior managers	are readily available	3.17 Survey [0..10]	62
Educational system	The educational system meets the needs of a competitive economy	2.63 Survey [0..10]	60
Science in schools	is sufficiently emphasized	3.17 Survey [0..10]	55
University education	meets the needs of a competitive economy	2.76 Survey [0..10]	61
Management education	meets the needs of the business community	3.68 Survey [0..10]	60
Language skills	are meeting the needs of enterprises	4.34 Survey [0..10]	51
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	2.01 number	33
Educational assessment - PISA	PISA survey of 15-year olds	468 Average	38

# SLOVENIA

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	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
▷ Apprenticeships	are sufficiently implemented	3.29 Survey [0..10]	59
Employee training	is a high priority in companies	6.42 Survey [0..10]	16
Female labor force	Percentage of total labor force	46.66 %	24
Health infrastructure	meets the needs of society	4.57 Survey [0..10]	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 [0..10]	42
Worker motivation	in companies is high	5.31 Survey [0..10]	42
▷ Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	3.65 Survey [0..10]	47
Quality of life	is high	8.14 Survey [0..10]	23
▷ Foreign highly-skilled personnel	are attracted to your country's business environment	3.27 Survey [0..10]	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
▷ 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 [0..10]	33

### Readiness

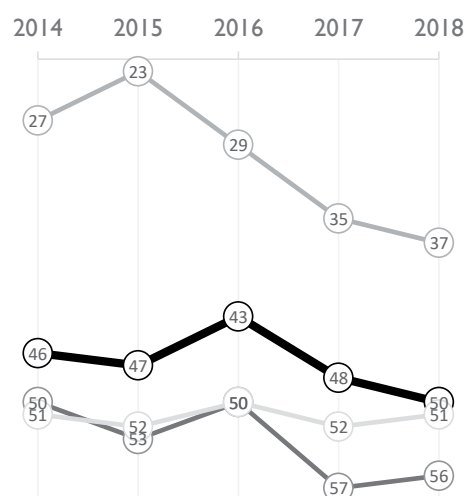
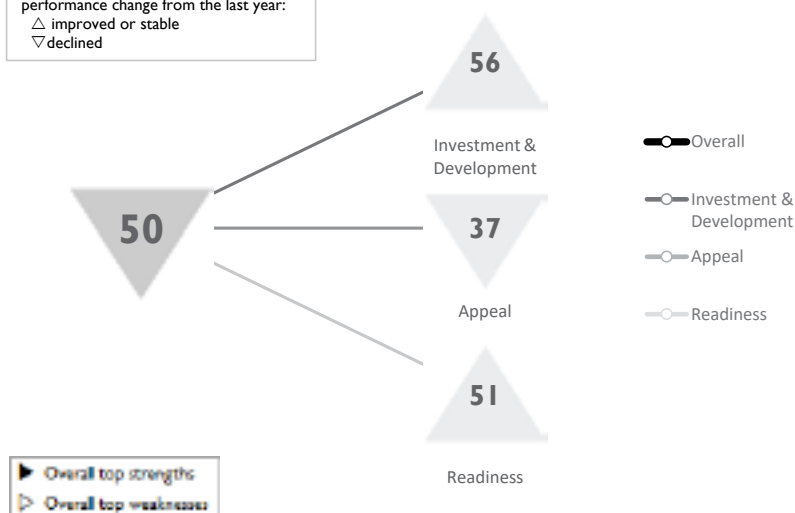
		Value	2018 Rank
▶ Labor force growth	Percentage change	3.19 %	7
Skilled labor	is readily available	5.55 Survey [0..10]	38
Finance skills	are readily available	5.80 Survey [0..10]	44
International experience	of senior managers is generally significant	5.25 Survey [0..10]	36
▷ Competent senior managers	are readily available	5.06 Survey [0..10]	47
Educational system	The educational system meets the needs of a competitive economy	5.80 Survey [0..10]	32
Science in schools	is sufficiently emphasized	5.78 Survey [0..10]	30
University education	meets the needs of a competitive economy	5.57 Survey [0..10]	35
Management education	meets the needs of the business community	5.86 Survey [0..10]	37
▶ Language skills	are meeting the needs of enterprises	7.86 Survey [0..10]	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

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	2018 Rank
► 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
▷ Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	32.77 ratio	62
▷ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	27.51 ratio	61
▷ Apprenticeships	are sufficiently implemented	3.00 Survey [0..10]	61
Employee training	is a high priority in companies	5.77 Survey [0..10]	32
► Female labor force	Percentage of total labor force	46.69 %	23
Health infrastructure	meets the needs of society	3.70 Survey [0..10]	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	1
Attracting and retaining talents	is a priority in companies	6.33 Survey [0..10]	38
▷ Worker motivation	in companies is high	4.03 Survey [0..10]	60
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	3.06 Survey [0..10]	55
Quality of life	is high	6.32 Survey [0..10]	36
Foreign highly-skilled personnel	are attracted to your country's business environment	4.20 Survey [0..10]	46
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	19,087 US\$	34
▷ 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 [0..10]	52

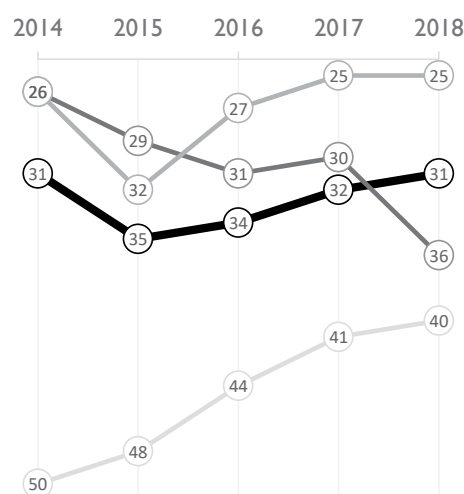
### Readiness

		Value	2018 Rank
► Labor force growth	Percentage change	1.68 %	22
Skilled labor	is readily available	3.43 Survey [0..10]	58
Finance skills	are readily available	5.68 Survey [0..10]	46
International experience	of senior managers is generally significant	4.03 Survey [0..10]	56
Competent senior managers	are readily available	4.33 Survey [0..10]	53
Educational system	The educational system meets the needs of a competitive economy	3.44 Survey [0..10]	52
Science in schools	is sufficiently emphasized	3.28 Survey [0..10]	53
University education	meets the needs of a competitive economy	5.16 Survey [0..10]	41
Management education	meets the needs of the business community	5.84 Survey [0..10]	38
Language skills	are meeting the needs of enterprises	5.94 Survey [0..10]	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

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	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
▶ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	11.50 ratio	23
▷ Apprenticeships	are sufficiently implemented	3.59 Survey [0..10]	55
▷ Employee training	is a high priority in companies	4.49 Survey [0..10]	58
Female labor force	Percentage of total labor force	46.48 %	28
▶ Health infrastructure	meets the needs of society	8.19 Survey [0..10]	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
▷ Attracting and retaining talents	is a priority in companies	5.48 Survey [0..10]	58
Worker motivation	in companies is high	5.29 Survey [0..10]	43
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	4.95 Survey [0..10]	34
▶ Quality of life	is high	8.41 Survey [0..10]	19
Foreign highly-skilled personnel	are attracted to your country's business environment	6.04 Survey [0..10]	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 [0..10]	26

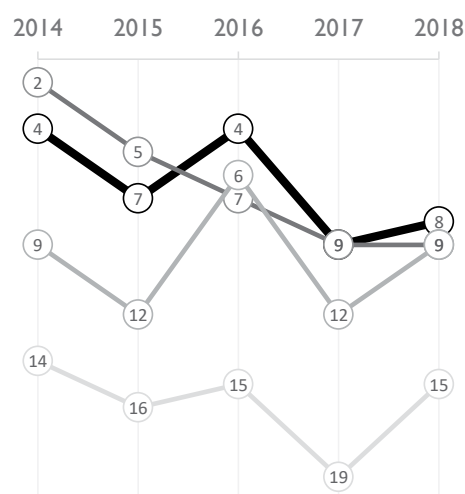
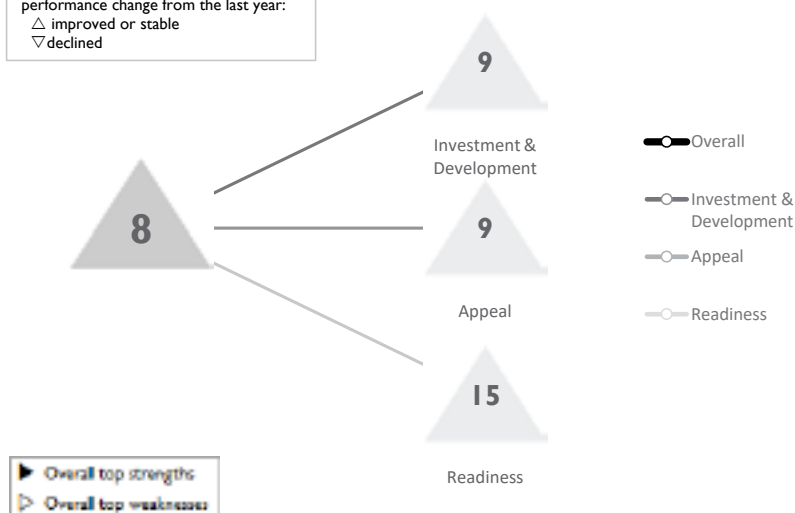
### Readiness

		Value	2018 Rank
▷ Labor force growth	Percentage change	-0.36 %	53
Skilled labor	is readily available	5.93 Survey [0..10]	24
Finance skills	are readily available	6.00 Survey [0..10]	39
International experience	of senior managers is generally significant	5.08 Survey [0..10]	40
Competent senior managers	are readily available	5.59 Survey [0..10]	33
Educational system	The educational system meets the needs of a competitive economy	5.59 Survey [0..10]	36
Science in schools	is sufficiently emphasized	4.84 Survey [0..10]	42
University education	meets the needs of a competitive economy	5.43 Survey [0..10]	38
Management education	meets the needs of the business community	6.31 Survey [0..10]	27
▷ Language skills	are meeting the needs of enterprises	4.33 Survey [0..10]	52
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	1.15 number	44
Educational assessment - PISA	PISA survey of 15-year olds	489 Average	28

# SWEDEN

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	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
▷ Apprenticeships	are sufficiently implemented	4.56 Survey [0..10]	33
Employee training	is a high priority in companies	6.72 Survey [0..10]	10
Female labor force	Percentage of total labor force	47.50 %	12
Health infrastructure	meets the needs of society	6.88 Survey [0..10]	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 [0..10]	2
▶ Worker motivation	in companies is high	7.19 Survey [0..10]	8
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	6.60 Survey [0..10]	8
Quality of life	is high	8.95 Survey [0..10]	12
Foreign highly-skilled personnel	are attracted to your country's business environment	6.41 Survey [0..10]	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 [0..10]	25

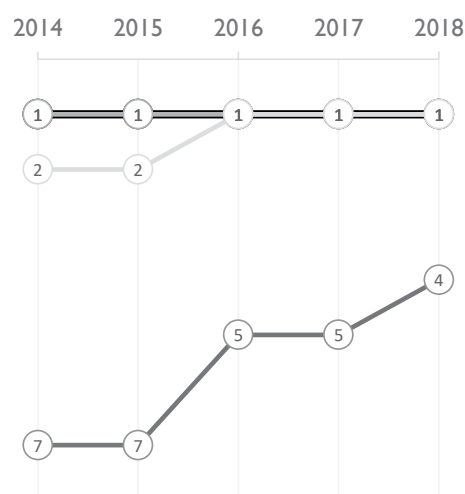
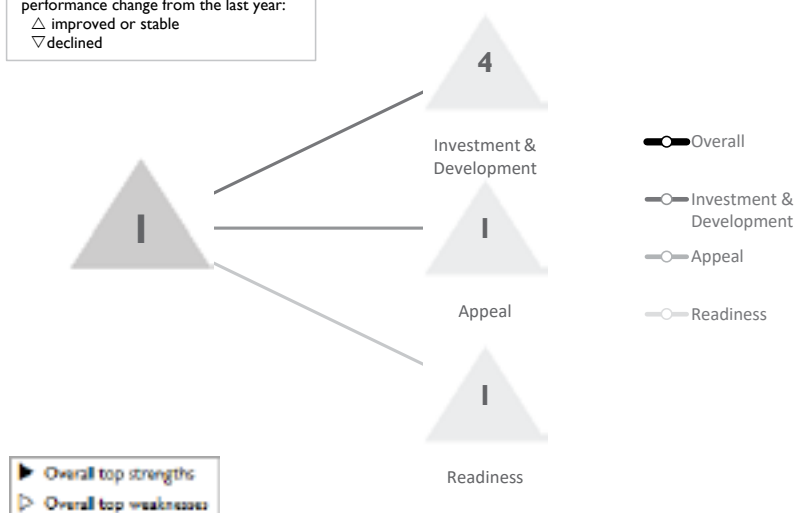
### Readiness

		Value	2018 Rank
Labor force growth	Percentage change	1.98 %	15
Skilled labor	is readily available	5.48 Survey [0..10]	40
Finance skills	are readily available	7.09 Survey [0..10]	15
▶ International experience	of senior managers is generally significant	7.08 Survey [0..10]	7
Competent senior managers	are readily available	6.50 Survey [0..10]	14
Educational system	The educational system meets the needs of a competitive economy	6.25 Survey [0..10]	29
Science in schools	is sufficiently emphasized	5.46 Survey [0..10]	37
University education	meets the needs of a competitive economy	6.91 Survey [0..10]	20
Management education	meets the needs of the business community	7.06 Survey [0..10]	15
Language skills	are meeting the needs of enterprises	8.28 Survey [0..10]	10
▷ 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

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	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
▶ Apprenticeships	are sufficiently implemented	8.64 Survey [0..10]	1
Employee training	is a high priority in companies	7.23 Survey [0..10]	4
Female labor force	Percentage of total labor force	46.50 %	26
Health infrastructure	meets the needs of society	8.97 Survey [0..10]	1

### 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)	106.70 index	59
Attracting and retaining talents	is a priority in companies	7.51 Survey [0..10]	12
Worker motivation	in companies is high	7.56 Survey [0..10]	4
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	7.51 Survey [0..10]	2
Quality of life	is high	9.66 Survey [0..10]	3
▶ Foreign highly-skilled personnel	are attracted to your country's business environment	8.55 Survey [0..10]	1
▶ Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	92,625 US\$	1
▶ Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	448,322 US\$	1
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 [0..10]	4

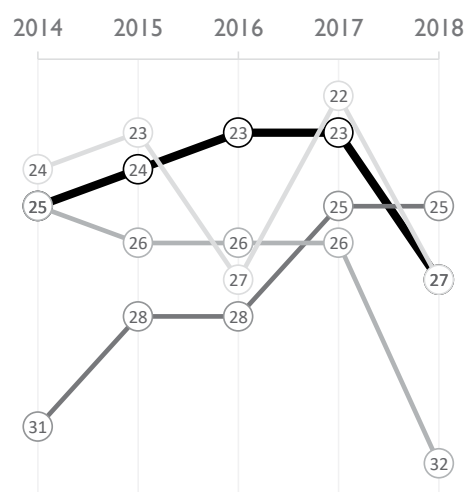
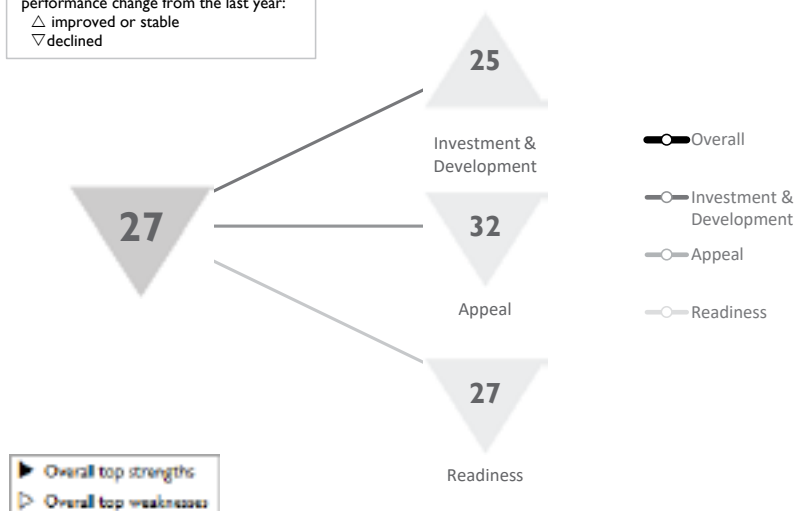
### Readiness

		Value	2018 Rank
▷ Labor force growth	Percentage change	0.57 %	38
Skilled labor	is readily available	7.03 Survey [0..10]	3
Finance skills	are readily available	8.06 Survey [0..10]	2
International experience	of senior managers is generally significant	7.80 Survey [0..10]	2
Competent senior managers	are readily available	7.15 Survey [0..10]	2
Educational system	The educational system meets the needs of a competitive economy	8.80 Survey [0..10]	1
Science in schools	is sufficiently emphasized	7.96 Survey [0..10]	2
University education	meets the needs of a competitive economy	8.75 Survey [0..10]	1
▶ Management education	meets the needs of the business community	8.35 Survey [0..10]	1
Language skills	are meeting the needs of enterprises	8.66 Survey [0..10]	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

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	2018 Rank
▶ 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 [0..10]	19
Employee training	is a high priority in companies	6.38 Survey [0..10]	18
Female labor force	Percentage of total labor force	44.32 %	41
▶ Health infrastructure	meets the needs of society	7.93 Survey [0..10]	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 [0..10]	45
Worker motivation	in companies is high	6.56 Survey [0..10]	20
▶ Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	3.44 Survey [0..10]	51
Quality of life	is high	6.97 Survey [0..10]	31
▶ Foreign highly-skilled personnel	are attracted to your country's business environment	3.62 Survey [0..10]	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 [0..10]	28

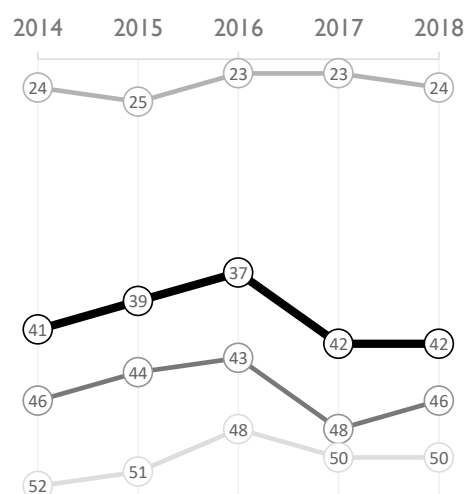
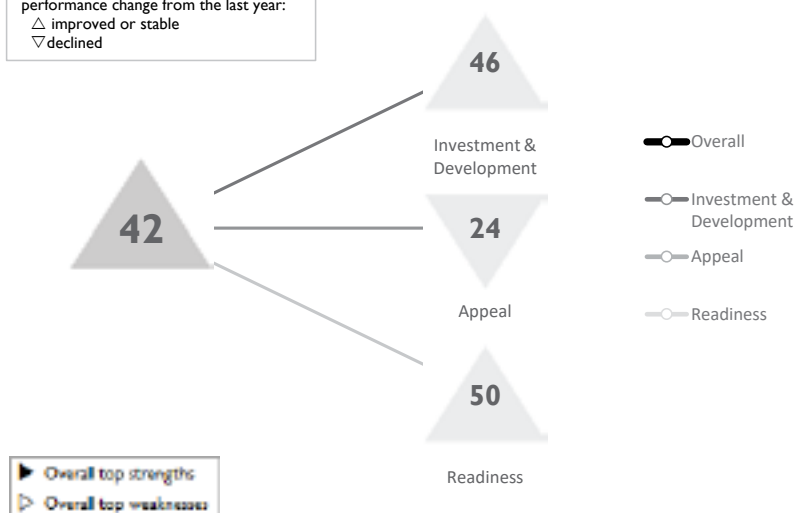
### Readiness

		Value	2018 Rank
Labor force growth	Percentage change	0.58 %	37
Skilled labor	is readily available	5.62 Survey [0..10]	33
Finance skills	are readily available	6.19 Survey [0..10]	36
International experience	of senior managers is generally significant	5.03 Survey [0..10]	44
Competent senior managers	are readily available	5.31 Survey [0..10]	39
Educational system	The educational system meets the needs of a competitive economy	6.27 Survey [0..10]	27
▶ Science in schools	is sufficiently emphasized	6.57 Survey [0..10]	12
University education	meets the needs of a competitive economy	5.60 Survey [0..10]	34
Management education	meets the needs of the business community	6.09 Survey [0..10]	31
Language skills	are meeting the needs of enterprises	5.69 Survey [0..10]	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

## OVERALL PERFORMANCE (63 countries)

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



### 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
▷ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	28.15 ratio	62
▶ Apprenticeships	are sufficiently implemented	5.61 Survey [0..10]	15
▶ Employee training	is a high priority in companies	6.59 Survey [0..10]	12
Female labor force	Percentage of total labor force	45.44 %	35
Health infrastructure	meets the needs of society	6.20 Survey [0..10]	31

### 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	7.03 Survey [0..10]	24
Worker motivation	in companies is high	6.14 Survey [0..10]	27
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	5.42 Survey [0..10]	24
Quality of life	is high	6.29 Survey [0..10]	37
Foreign highly-skilled personnel	are attracted to your country's business environment	6.00 Survey [0..10]	24
Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	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 [0..10]	36

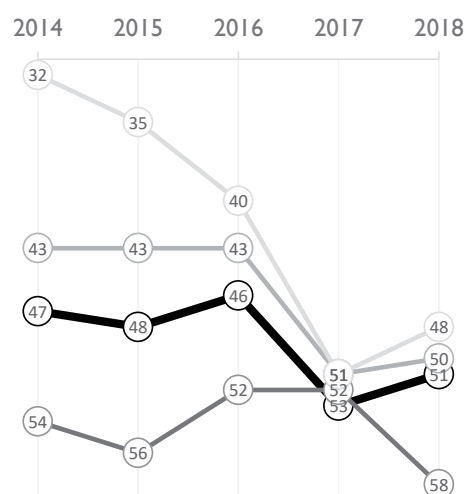
### Readiness

		Value	2018 Rank
▷ Labor force growth	Percentage change	-0.44 %	55
▶ Skilled labor	is readily available	5.93 Survey [0..10]	23
Finance skills	are readily available	6.27 Survey [0..10]	33
▶ International experience	of senior managers is generally significant	5.97 Survey [0..10]	20
Competent senior managers	are readily available	5.98 Survey [0..10]	25
Educational system	The educational system meets the needs of a competitive economy	4.51 Survey [0..10]	46
Science in schools	is sufficiently emphasized	4.60 Survey [0..10]	45
University education	meets the needs of a competitive economy	4.99 Survey [0..10]	46
Management education	meets the needs of the business community	5.56 Survey [0..10]	43
▷ Language skills	are meeting the needs of enterprises	4.58 Survey [0..10]	49
▷ Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	0.19 number	53
▷ Educational assessment - PISA	PISA survey of 15-year olds	418 Average	49

# TURKEY

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	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 [0..10]	44
Employee training	is a high priority in companies	5.00 Survey [0..10]	52
Female labor force	Percentage of total labor force	32.11 %	57
Health infrastructure	meets the needs of society	6.58 Survey [0..10]	28

### 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)	64.60 index	18
Attracting and retaining talents	is a priority in companies	6.27 Survey [0..10]	40
Worker motivation	in companies is high	5.19 Survey [0..10]	48
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	3.92 Survey [0..10]	45
Quality of life	is high	4.59 Survey [0..10]	51
Foreign highly-skilled personnel	are attracted to your country's business environment	3.85 Survey [0..10]	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 [0..10]	43

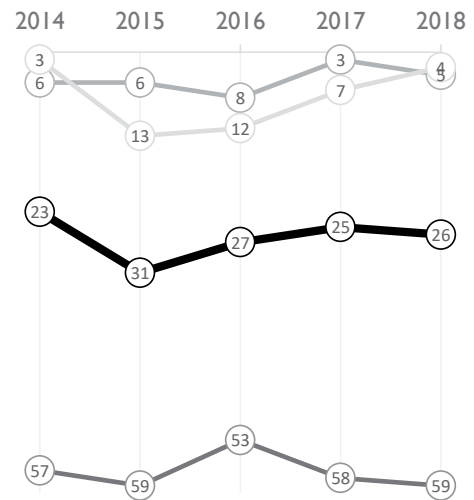
### Readiness

		Value	2018 Rank
Labor force growth	Percentage change	3.63 %	4
Skilled labor	is readily available	5.58 Survey [0..10]	36
Finance skills	are readily available	6.54 Survey [0..10]	31
International experience	of senior managers is generally significant	5.25 Survey [0..10]	36
Competent senior managers	are readily available	5.85 Survey [0..10]	29
Educational system	The educational system meets the needs of a competitive economy	2.65 Survey [0..10]	59
Science in schools	is sufficiently emphasized	2.86 Survey [0..10]	59
University education	meets the needs of a competitive economy	4.04 Survey [0..10]	56
Management education	meets the needs of the business community	4.81 Survey [0..10]	50
Language skills	are meeting the needs of enterprises	4.38 Survey [0..10]	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

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	2018 Rank
▷ Total public expenditure on education	Percentage of GDP	1.3 %	61
Gov. expenditure on education per student	Percentage of GDP per capita (secondary education)	- %	-
▷ 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 [0..10]	9
Employee training	is a high priority in companies	6.52 Survey [0..10]	13
▷ Female labor force	Percentage of total labor force	19.14 %	59
Health infrastructure	meets the needs of society	7.87 Survey [0..10]	15

### 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)	90.80 index	51
Attracting and retaining talents	is a priority in companies	7.35 Survey [0..10]	18
Worker motivation	in companies is high	6.98 Survey [0..10]	10
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	7.27 Survey [0..10]	4
Quality of life	is high	8.78 Survey [0..10]	14
▶ Foreign highly-skilled personnel	are attracted to your country's business environment	8.40 Survey [0..10]	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 [0..10]	14

### Readiness

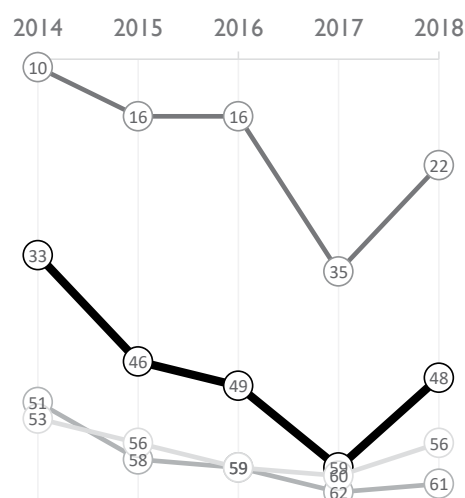
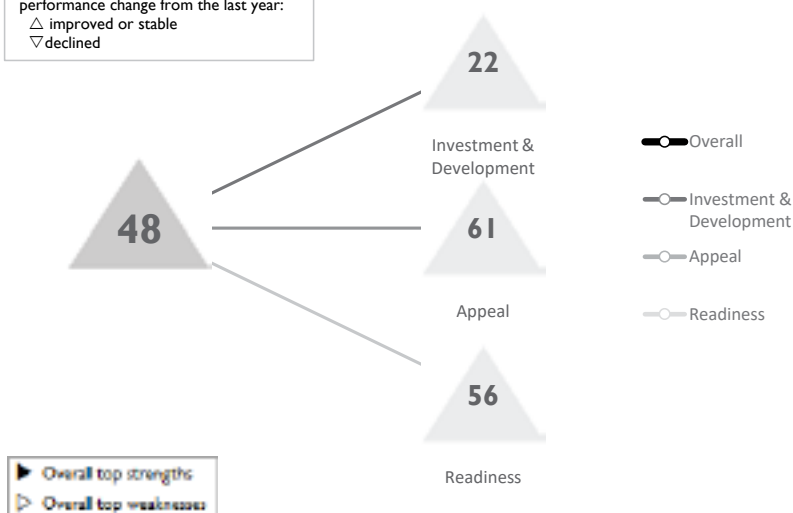
		Value	2018 Rank
Labor force growth	Percentage change	1.90 %	18
▶ Skilled labor	is readily available	7.06 Survey [0..10]	2
Finance skills	are readily available	7.47 Survey [0..10]	8
▶ International experience	of senior managers is generally significant	8.27 Survey [0..10]	1
▶ Competent senior managers	are readily available	7.60 Survey [0..10]	1
Educational system	The educational system meets the needs of a competitive economy	7.60 Survey [0..10]	9
Science in schools	is sufficiently emphasized	7.20 Survey [0..10]	7
University education	meets the needs of a competitive economy	7.02 Survey [0..10]	18
Management education	meets the needs of the business community	7.06 Survey [0..10]	16
Language skills	are meeting the needs of enterprises	8.36 Survey [0..10]	7
▶ Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	8.36 number	4
▷ Educational assessment - PISA	PISA survey of 15-year olds	432 Average	46



# UKRAINE

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	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 [0..10]	32
Employee training	is a high priority in companies	5.06 Survey [0..10]	49
▶ Female labor force	Percentage of total labor force	47.18 %	16
Health infrastructure	meets the needs of society	2.30 Survey [0..10]	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 [0..10]	55
Worker motivation	in companies is high	4.79 Survey [0..10]	52
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	2.07 Survey [0..10]	60
▷ Quality of life	is high	2.83 Survey [0..10]	61
Foreign highly-skilled personnel	are attracted to your country's business environment	2.86 Survey [0..10]	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 [0..10]	62

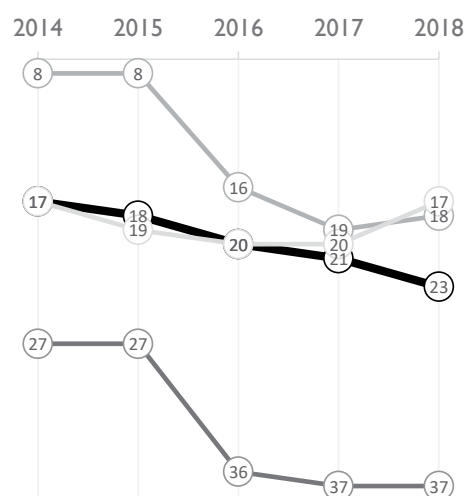
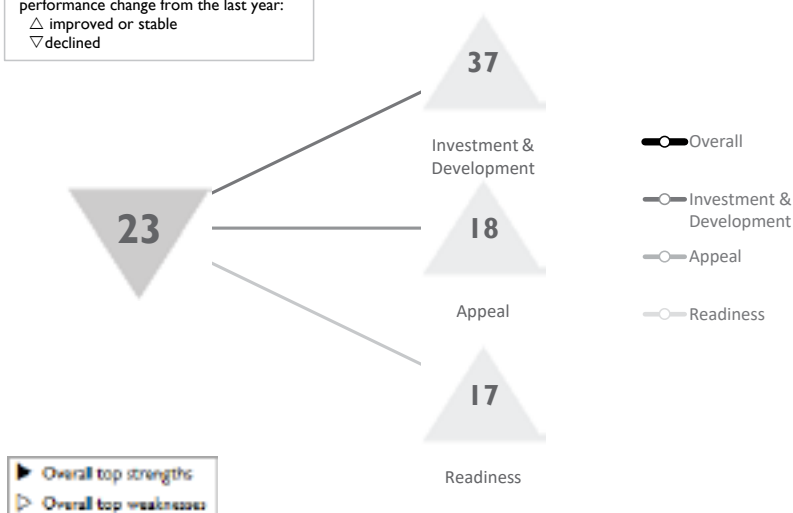
### Readiness

		Value	2018 Rank
Labor force growth	Percentage change	-0.56 %	58
Skilled labor	is readily available	5.36 Survey [0..10]	42
Finance skills	are readily available	5.88 Survey [0..10]	42
▷ International experience	of senior managers is generally significant	3.80 Survey [0..10]	61
Competent senior managers	are readily available	4.77 Survey [0..10]	51
Educational system	The educational system meets the needs of a competitive economy	3.56 Survey [0..10]	51
Science in schools	is sufficiently emphasized	4.17 Survey [0..10]	49
University education	meets the needs of a competitive economy	4.07 Survey [0..10]	55
Management education	meets the needs of the business community	4.57 Survey [0..10]	55
Language skills	are meeting the needs of enterprises	3.90 Survey [0..10]	57
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	1.27 number	41
Educational assessment - PISA	PISA survey of 15-year olds	- Average	-

# UNITED KINGDOM

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	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
▷ Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	18.36 ratio	48
▷ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	16.28 ratio	52
Apprenticeships	are sufficiently implemented	4.34 Survey [0..10]	42
▷ Employee training	is a high priority in companies	5.23 Survey [0..10]	47
Female labor force	Percentage of total labor force	46.90 %	20
Health infrastructure	meets the needs of society	6.06 Survey [0..10]	33

### 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)	85.50 index	46
Attracting and retaining talents	is a priority in companies	7.21 Survey [0..10]	20
Worker motivation	in companies is high	6.24 Survey [0..10]	26
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	6.09 Survey [0..10]	17
Quality of life	is high	7.57 Survey [0..10]	29
▶ Foreign highly-skilled personnel	are attracted to your country's business environment	6.62 Survey [0..10]	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 [0..10]	18

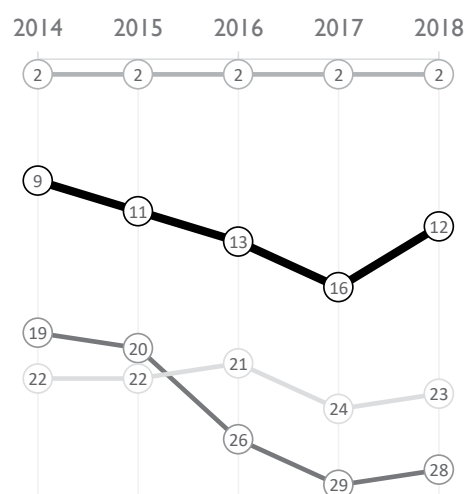
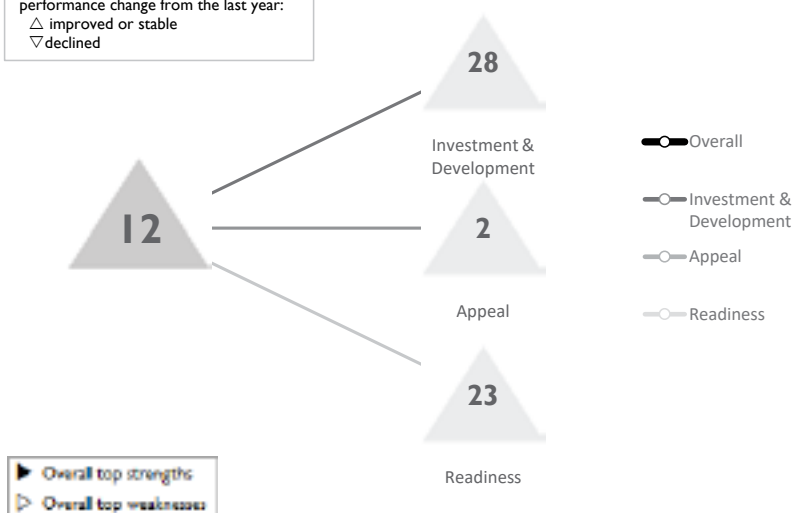
### Readiness

		Value	2018 Rank
Labor force growth	Percentage change	0.56 %	40
Skilled labor	is readily available	5.70 Survey [0..10]	28
▶ Finance skills	are readily available	7.87 Survey [0..10]	4
International experience	of senior managers is generally significant	6.26 Survey [0..10]	17
Competent senior managers	are readily available	6.34 Survey [0..10]	18
Educational system	The educational system meets the needs of a competitive economy	6.81 Survey [0..10]	20
Science in schools	is sufficiently emphasized	5.83 Survey [0..10]	29
University education	meets the needs of a competitive economy	7.23 Survey [0..10]	16
Management education	meets the needs of the business community	6.82 Survey [0..10]	19
▷ Language skills	are meeting the needs of enterprises	4.60 Survey [0..10]	48
▶ 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

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	2018 Rank
Total public expenditure on education	Percentage of GDP	6.1 %	11
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
▷ Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	15.38 ratio	49
▷ Apprenticeships	are sufficiently implemented	3.96 Survey [0..10]	51
▷ Employee training	is a high priority in companies	5.71 Survey [0..10]	34
Female labor force	Percentage of total labor force	46.89 %	21
Health infrastructure	meets the needs of society	6.38 Survey [0..10]	29

### 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)	100.00 index	54
Attracting and retaining talents	is a priority in companies	7.40 Survey [0..10]	15
Worker motivation	in companies is high	6.85 Survey [0..10]	14
▶ Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	6.83 Survey [0..10]	6
Quality of life	is high	8.13 Survey [0..10]	24
▶ Foreign highly-skilled personnel	are attracted to your country's business environment	8.05 Survey [0..10]	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 [0..10]	21

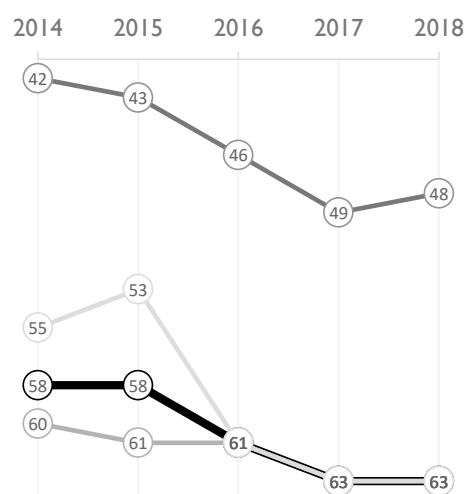
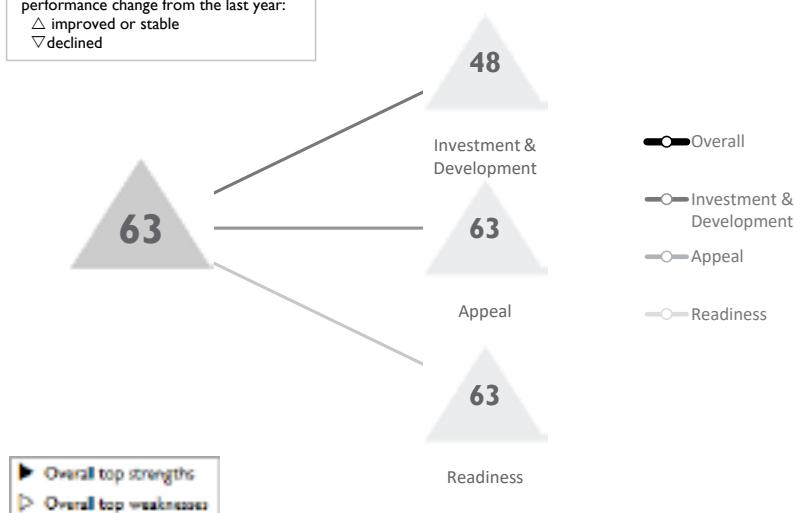
### Readiness

		Value	2018 Rank
Labor force growth	Percentage change	0.71 %	32
Skilled labor	is readily available	6.26 Survey [0..10]	15
Finance skills	are readily available	7.34 Survey [0..10]	12
International experience	of senior managers is generally significant	5.78 Survey [0..10]	22
▶ Competent senior managers	are readily available	6.90 Survey [0..10]	7
Educational system	The educational system meets the needs of a competitive economy	6.86 Survey [0..10]	17
Science in schools	is sufficiently emphasized	6.22 Survey [0..10]	21
University education	meets the needs of a competitive economy	7.50 Survey [0..10]	13
Management education	meets the needs of the business community	7.38 Survey [0..10]	11
▷ Language skills	are meeting the needs of enterprises	5.35 Survey [0..10]	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

## OVERALL PERFORMANCE (63 countries)

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



### Investment & Development

		Value	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 [0..10]	53
Employee training	is a high priority in companies	4.47 Survey [0..10]	60
Female labor force	Percentage of total labor force	38.85 %	52
▷ Health infrastructure	meets the needs of society	0.72 Survey [0..10]	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 [0..10]	47
▷ Worker motivation	in companies is high	2.52 Survey [0..10]	63
Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	1.54 Survey [0..10]	63
▷ Quality of life	is high	0.98 Survey [0..10]	63
▷ Foreign highly-skilled personnel	are attracted to your country's business environment	0.80 Survey [0..10]	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
▶ Effective personal income tax rate	Percentage of an income equal to GDP per capita	0.98 %	2
▷ Personal security and private property rights	are adequately protected	0.60 Survey [0..10]	63

### Readiness

		Value	2018 Rank
Labor force growth	Percentage change	0.00 %	46
Skilled labor	is readily available	3.66 Survey [0..10]	55
Finance skills	are readily available	4.36 Survey [0..10]	60
International experience	of senior managers is generally significant	3.84 Survey [0..10]	60
Competent senior managers	are readily available	3.28 Survey [0..10]	60
Educational system	The educational system meets the needs of a competitive economy	2.36 Survey [0..10]	61
Science in schools	is sufficiently emphasized	2.43 Survey [0..10]	62
University education	meets the needs of a competitive economy	4.56 Survey [0..10]	53
Management education	meets the needs of the business community	4.43 Survey [0..10]	57
Language skills	are meeting the needs of enterprises	3.64 Survey [0..10]	58
Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	- number	-
Educational assessment - PISA	PISA survey of 15-year olds	- Average	-



# The IMD World Talent Ranking methodology

## I. The structure of the IMD World Talent Ranking

The ranking is structured according to three factors:

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

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

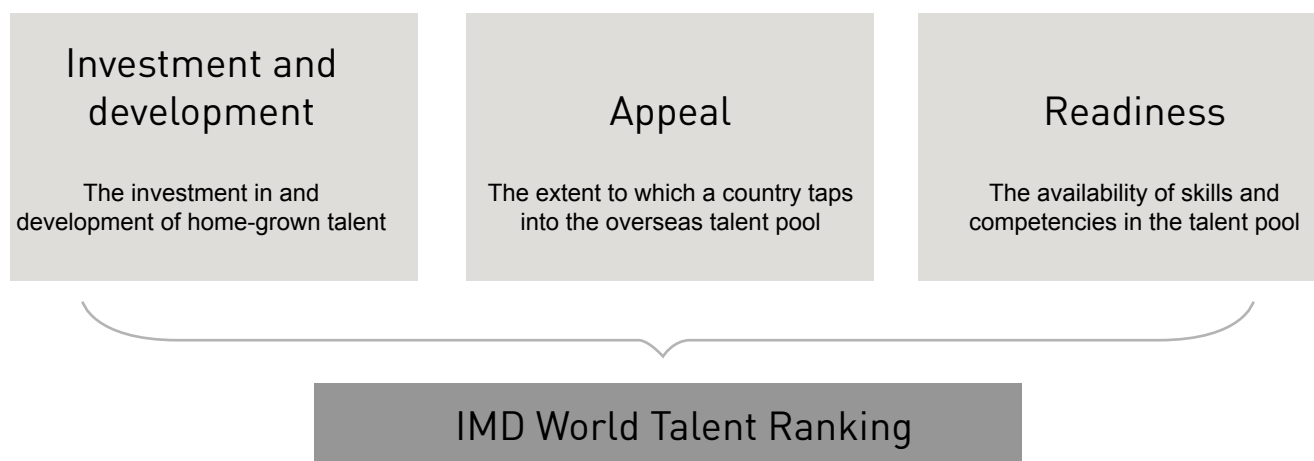
The appeal factor goes beyond the focus on the local labor force to incorporate the ability of a country to tap into the overseas talent pool. It does so by including indicators such as the cost of living and quality of life in a particular economy. Specifically, it examines the ability of a country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

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

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

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

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



**Table 1:** Components of the talent factors

Investment and development factor	Appeal factor	Readiness factor
Total public expenditure on education	Cost of living	Labor force growth
Public expenditure on education (per pupil)	Attracting and retaining	Skilled labor
Pupil-teacher ratio (primary)	Worker motivation	Finance skills
Pupil-teacher ratio (secondary)	Brain drain	International experience
Apprenticeship	Quality of life	Competent senior managers
Employee training	Foreign skilled people	Educational system
Female labor force	Remuneration in services professions	Sciences in schools
Health infrastructure	Remuneration of management	University education
	Effective personal income tax rate	Management education
	Personal security and private property rights	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 (%)

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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

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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)

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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)

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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 personnel. Teaching staff refers to professional personnel directly involved in teaching students. The classification includes classroom teachers; special education teacher; and other teachers who work with students as a whole class in a classroom, in small groups in a resource room, or in one-to-one teaching

inside a regular classroom. Teaching staff also includes chairpersons of departments whose duties include some amount of teaching, but it does not include non-professional personnel who support teachers in providing instructions to students, such as teacher's aides and other paraprofessional personnel. Data are UNESCO or OECD estimates and from national statistics. Bulgaria, Cyprus, 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 (%)

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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

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MERCER Cost of Living survey  
[www.mercer.com](http://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

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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

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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

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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

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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

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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

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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

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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 top- and 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.